Taxonomía Sostenible De México

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MESSAGE FROM THE SECRETARY OF ENVIRONMENT AND NATURAL RESOURCES OF MEXICO (SEMARNAT)

MA. María Luisa Albores González

Through a new vision of environmental policy, the Government of Mexico has encouraged the promotion and support of actions that allow the conservation, the sustainable use, and the recovery of our natural ecosystems with their biodiversity, in both the continental and marine areas, throughout the Mexican territory.

The development of tools such as the Sustainable Taxonomy of Mexico is necessary to contribute to the implementation of this environmental policy. The Ministry of Finance and Public Credit of Mexico coordinated this unprecedented document for more than two and a half years, through an ample and participatory process, working hand in hand with various institutions from the public, private, academic, and civil society sectors, as well as international organizations, marking a milestone in our country.

This tool consists of a classification system with criteria and indicators that allows us to classify various economic activities according to their contribution to climate change mitigation and adaptation, or to the country's sustainable development. This will provide elements that will allow investments to be channeled towards a different development, one that can move away from the exploitation of natural resources without ignoring the immediate and future consequences of the impacts on the environment.

The participation of the environmental sector in the creation of this classification system accomplished through technical groups that validated metrics and thresholds for each economic activity related to the climate change mitigation and adaptation goals. This contributes to the fulfillment of the commitments that we have established as a country, for instance, the Nationally Determined Contributions (NDC).

Climate emergency cannot wait, it is imminent to have the necessary public and private financing to implement actions that help mitigate the adverse effects of climate change, as well as to promote and favor the sustainable development. This will only be achieved working together with everyone; the challenge is significant and thus we must commit ourselves to achieve a better present and future for Mexico and for our planet.

MESSAGE FROM THE UNDERSECRETARY OF FINANCE AND PUBLIC CREDIT

MA. GABRIEL YORIO GONZÁLEZ

At present, Mexico and the world are facing a double challenge. On the one hand, the effects of climate change are intensifying and affecting developing countries and the most vulnerable populations to a greater extent. On the other, in addition to fighting the climate crisis, we must confront existing inequalities and social gaps, such as poverty. Since climate and social inequalities are closely related, it is urgent to prioritize sustainable development on the public agenda.

This problem is especially relevant for Mexico due to its geographic and socioeconomic conditions. Our country is vulnerable to the climate change effects. With more than half of the population exposed to these effects, it is essential to implement sustainable development policies to increase resilience, reduce socioeconomic inequalities and fight climate change.

Preliminary analyses estimate that to achieve the Sustainable Development Goals from 2022 to 2030, Mexico needs an annual financing between $74 and $92 billion dollars, which is equivalent to mobilizing between 6.8% and 8% of the Gross Domestic Product. Faced with a funding gap of this magnitude, we need to accelerate the efforts beyond government budget constraints and mobilize financial resources on a large scale.

To achieve this, it is crucial to create a sustainable and inclusive financial ecosystem in the coming years. This can be possible through the implementation of different mechanisms that promote the mobilization of resources towards activities that contribute to both: the social welfare and the environmental care.

The Ministry of Finance and Public Credit of Mexico has created a Sustainable Financing Mobilization Strategy with the objective of greening the financial system. To achieve this we took various measures, such as aligning the Expenditure Budget of the Federation with the SDGs and designing an SDG Sovereign Bond Framework that allowed us to develop four sustainable debt markets, and to create the Sustainable Taxonomy of Mexico.

Mexico's Sustainable Taxonomy is a crucial financial policy tool to achieve a sustainable development in our country, since it makes it possible to effectively identify sustainable activities. In addition, it will be key to mobilizing and redirecting both public and private capital flows, towards actions that promote environmental care and the well-being of people in the coming years.

ACKNOWLEDGMENTS

This document was directed and prepared by the Ministry of Finance and Public Credit of Mexico (SHCP) with the valuable collaboration and contributions of different actors.

We thank international cooperation agencies, international organizations and technical consultancies that supported us during the creation of the Sustainable Taxonomy of Mexico. In this regard, we appreciate the support provided by the Global Green Growth Institute (GGGI) during the identification of the sectors and economic activities included in this Taxonomy, as well as the coordination efforts in socialization of this framework's significant developments, which was done thanks to the financing of the UK PACT Program (of the United Kingdom).

In the same way, we acknowledge the collaboration of the French Development Agency (AFD) and the Frankfurt School in the identification of potential users and the definition of the reporting guidelines of this Taxonomy, and the support of the German Agency for International Cooperation (GIZ) and Planisphera in the development of the methodology to create the Technical Evaluation Criteria (TEC) that will guarantee the scientific soundness and operability of this classification.

We also appreciate the support provided by the United Nations Environment Program (UNEP) and Planisphera in coordinating the consultation addressed to financial authorities, trade associations of the financial system, and other types of actors, in order to obtain their informed opinion on the elaboration of this framework and its future application.

Additionally, we also highlight the participation of the International Finance Corporation (IFC) and the World Bank in the coordination of the Sectoral and Thematic Technical Groups of the Sustainable Taxonomy of Mexico, through which the TEC and the economic activities included in this Taxonomy were discussed and defined, with the leading advisers.

Similarly, we extend a special recognition to the representatives of institutions from the public, private, financial, academic, civil society, and international organizations sectors, for their valuable contributions during the creation and socialization process of the Mexico Sustainable Taxonomy; particularly, to those professionals who were part of the Sectoral and Thematic Technical Working Groups (GTSyT), the socialization process and the consultation with representatives of the financial system.

Likewise, we appreciate the technical contributions made by the environmental sector authorities, such as the Mexican Ministry of Environment and Natural Resources (SEMARNAT), the National Institute of Ecology and Climate Change (INECC), the National Water Commission (CONAGUA), the National Forestry Commission (CONAFOR) and the National Commission for the Knowledge and Use of Biodiversity (CONABIO).

INDEX

ACRONYMS

AAAQ	Availability, Accessibility, Acceptability, and Quality
ABM	Banking Association of Mexico (Asociación de Bancos de México)
AD	Anaerobic Digestion
AFD	French Agency for Development (Agence Française de Développement)
AIR	American Institute of Research
AMAFORE	Mexican Association of Retirement Funds Managers (Asociación Mexicana de Administradores de Fondos de Ahorro para el Retiro)
AMAI	Mexican Association of Investment Advisors (Asociación Mexicana de Asesores de Inversión)
AMDEE	Mexican Association of Wind Energy (Asociación Mexicana de Energía Eólica)
AMIB	Mexican Association of Securities Institutions (Asociación Mexicana de Instituciones Bursátiles)
AMIS	Mexican Association of Insurance Institutions (Asociación Mexicana de Instituciones de Seguros
ANPACT	National Association of Producers of Buses, Trucks and Tractors (Asociación Nacional de Productores de Autobuses, Camiones y Tractocamiones)
ANVCC	National Atlas of Vulnerability to Climate Change (Atlas Nacional de Vulnerabilidad al Cambio Climático)
ASEAN	Mexican Association of Solar Energy (Asociación de México Energía Solar Fotovoltaica, A.C.)
ASG	Environmental, Social, and Corporate Governance Criteria
ASOLMEX	Mexican Association of Solar Energy (Asociación de México Energía Solar Fotovoltaica, A.C.)
BANCOMEXT	National Bank of Foreign Trade of Mexico (Banco Nacional de Comercio Exterior)
BANOBRAS	National Bank of Public Works and Services of Mexico (Banco Nacional de Obras y Servicios Públicos)
BANORTE	Banorte Financial Group (Grupo Financiero Banorte)
BANXICO	Central Bank of Mexico (Banco de México)
BAU	Business As Usual
BIOFIN	Biodiversity Financial Initiative (Iniciativa Financiera para la Biodiversidad)
CABGF	Forest Germplasm Collection and Processing Centers (Centros de Acopio y Beneficio de Germoplasma Forestal)
CANACEM	Cement National Chamber of Mexico (Cámara Nacional del Cemento)
CANACERO	National Chamber of the Iron and Steel Industry of Mexico (Cámara Nacional de la Industria del Hierro y del Acero)
CANALUM	National Chamber of the Aluminium Industry of Mexico (Cámara Nacional de la Industria del Aluminio)
CAPEX	Capital Expenditure
CBI	Climate Bonds Initiative
CDP	Carbon Disclosure Project
CESF	Financial System Stability Council of Mexico (Consejo de Estabilidad del Sistema Financiero)
CFE	Mexican Federal Electricity Commission (Comisión Federal de Electricidad)
CFS	Sustainable Finance Committee (Comité de Finanzas Sostenible in Spanish)

CICETE	China International Centre for Economic and Technical Exchange
CINTERFOR	Inter-American Centre for Knowledge Development on Vocational Training
CMFS	Mexican Council for Sustainable Finances (Consejo Mexicano de Finanzas Sostenibles)
CNBV	National Banking and Securities Commission of Mexico (Comisión Nacional Bancaria y de Valores)
CNSF	National Bonding and Insurance Commission of Mexico (Comisión Nacional de Seguros y Fianzas)
COFEPRIS	Mexican Federal Commission for the Protection Against Health Risks (Comisión Federal para la Protección contra Riesgos Sanitarios)
CONAFOR	National Forestry Commission of Mexico (Comisión Nacional Forestal)
CONAGUA	National Water Commission of Mexico (Comisión Nacional del Agua)
CONEVAL	National Council for Social Development Policy Evaluation of Mexico (Consejo Nacional de Evaluación de la Política de Desarrollo Social)
CONSAR	National Retirement Savings System Commission of Mexico (Comisión Nacional del Sistema de Ahorro para el Retiro)
COP	Conference of the Parties
CO_2e	Carbon Dioxide Equivalent (Dióxido de Carbono equivalente)
CSRD	Corporate Sustainability Reporting Directive
DGPPP	General Directorate of Projects and Productivity Policies (Dirección General de Proyectos y Políticas de Productividad)
DEEV	Energy-Efficient Home Design (Diseño Energéticamente Eficiente de la Vivienda)
DEP	Spectral Power Density (Densidad Espectral de Potencia)
DESC	Economic, Social and Cultural Rights (Derechos Económicos, Sociales y Culturales)
ENBioMex	National Biodiversity Strategy of Mexico (Estrategia Nacional sobre Biodiversidad de México)
ENCUSP	National Strategy for the Conservation and Sustainable use of Pollinators (Estrategia Nacional para la Conservación y Aprovechamiento Sustentable de Polinizadores)
EPE	Productive Companies of the State (Empresas Productivas del Estado)
EU	European Union
FDI	Foreign Direct Investment
FIDE	Electric Energy Savings Trust Fund of Mexico (Fideicomiso para el Ahorro de la Energía Eléctrica)
FIRA	Trust Funds for Rural Development of Mexico (Fideicomisos Instituidos en Relación con la Agricultura)
FND	National Finance for Rural Development of Mexico (Financiera Nacional de Desarrollo Rural)
FONADIN	National Infrastructure Fund (Fondo Nacional de Infraestructura)
FORSU	Organic Fraction of Urban Solid Waste (Fracción Orgánica de los Residuos Sólidos Urbanos in Spanish)
FOVISSSTE	Housing Fund of the Institute of Social Security and Social Services for State Employees (Fondo de la Vivienda del Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado)
GAR	Green Asset Ratio
GDP	Gross Domestic Product
GGGI	Global Green Growth Institute
GHG	Greenhouse Gases and Compounds
GIR	Global Reporting Initiative

GIZ	German Agency for International Cooperation (Agencia Alemana de Cooperación Internacional)
GRI	Global Reporting Initiative
GTGs	Gender Equality Technical Theme Group (Grupo Técnico Temático de Igualdad de Género)
GTSA	Agricultural Sectoral Technical Group of Mexico (Grupo Técnico Sectorial Agropecuario)
GTSyT	Sectoral and Thematic Technical Working Groups (Grupos Técnicos Sectoriales y Temático)
GTT	Sustainable Taxonomy Working Group (Grupo de Trabajo de Taxonomía Sostenible) s
ICCC	Interministerial Commission on Climate Change
IDB	Inversión Extranjera Directa
IEA	International Energy Agency
IFC	International Finance Corporation
IIG	Gender Equality Index (Índice de Igualdad de Género)
ILI	Infrastructure Leakage Index
ILO	International Labour Organisation
IMSS	Mexican Social Security Institute (Instituto Mexicano del Seguro Social)
IMT	Mexican Institute of Transport (Instituto Mexicano del Transporte)
INECC	Mexican Institute of Ecology and Climate Change (Instituto Nacional de Ecología y Cambio Climático)
INECOL	National Institute of Ecology (Instituto Nacional de Ecología, A.C.)
INEGI	National Institute of Statistics and Geography of Mexico (Instituto Nacional de Estadística y Geografía)
INFONAVIT	Institute of the National Fund for Workers' Housing of Mexico (Instituto del Fondo Nacional de la Vivienda para los Trabajadores)
INMUJERES	National Women's Institute of Mexico (Instituto Nacional de las Mujeres)
IPAB	Bank Savings Protection Institute of Mexico (Instituto para la Protección al Ahorro Bancario)
IPCC	Intergovernmental Panel on Climate Change
ISSB	International Sustainability Standards Board
ISSSTE	Mexican Security and Social Services Institute for State Workers (Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado)
KPI	Key Performance Indicators
LAN	National Waters Law of Mexico (Ley de Aguas Nacionales)
LFT	Federal Labor Law of Mexico (Ley Federal del Trabajo)
LGCC	General Climate Change Act of Mexico (Ley General de Cambio Climático)
LGDFS	General Act for Sustainable Forestry Development of Mexico (Ley General de Desarrollo Forestal Sustentable)
LGEEPA	General Ecological Balance and Environmental Protection Act of Mexico (Ley General del Equilibrio Ecológico y la Protección al Ambiente)
LGPGIR	General Prevention and Integrated Waste Management Act of Mexico (Ley General para la Prevención y Gestión Integral de los Residuos)
LGVS	General Wildlife Act of Mexico (Ley General de Vida Silvestre)
MS	Minimum Safeguards (SM for Salvaguardas Mínimas in Spanish)
MHCP	Ministry of Finance and Public Credit of Colombia (Ministerio de Hacienda y Crédito
NADBank	North American Development Bank (Banco de Desarrollo del América del Norte)

NAFIN	Nacional Financiera, development banking institution of Mexico (Nacional Financiera S.N.C.)
NAMA	Nationally Appropriate Mitigation Action
NDC	Nationally Determined Contributions
NDP	National Development Plan (Plan Nacional de Desarrollo)
NFRD	Non-Financial Reporting Directive
NOM	Mexican Official Standard (Norma Oficial Mexicana)
OCDE	Organisation for Economic Cooperation and Development
OPEX	Gastos operativos (*Operating expenses*)
PDU	Urban Development Plan (Plan de Desarrollo Urbano)
PECC	Mexico Climate Change Special Program (Programa Especial de Cambio Climático)
PFC	Commercial Forest Plantation (Plantación Forestal Comercial)
PMF	Forest Management Program (Programa de Manejo Forestal)
POET	Mexican Ecological Land Use Planning Program (Programa de Ordenamiento Ecológico del Territorio)
PROIGUALDAD	National Program for Equality between Men and Women of Mexico
PRONAFIDE	National Development Financing Program of Mexico (Programa Nacional de Financiamiento del Desarrollo)
PSF	Platform on Sustainable Finance (Plataforma de Financiamiento Sostenible)
RME	Special Management Waste (Residuos de Manejo Especial)
RNT	National Electicity Transmition Network, Mexico (Red Nacional de Transmisión)
RSU	Urban Solid Waste (Residuos Sólidos Urbanos)
SADER	Ministry of Agriculture and Rural Development of Mexico (Secretaría de Agricultura y Desarrollo Rural)
SDGs	Sustainable Development Goals
SE	Ministry of Economy of Mexico (Secretaría de Economía)
SEMARNAT	Ministry of Environment and Natural Resources of Mexico (Secretaría de Medio Ambiente y Recursos Naturales)
SFC	Financial Superintendence of Colombia (Superintendencia Financiera de Colombia)
SFM	Sustainable Forest Management (Manejo Forestal Sustentable)
SHCP	Ministry of Finance and Public Credit of Mexico (Secretaría de Hacienda y Crédito Público)
SMEs	Small and Medium-Sized Enterprises
TCFD	Task Force on Climate-Related Financial Disclosures
TEC	Technical Evaluation Criteria
TEG	Technical Expert Group
UBVA	Banking, Securities and Savings Unit of the SHCP (Unidad de Banca, Valores y Ahorro de la Secretaría de Hacienda y Crédito Público)
UK PACT	UK Partnering for Accelerated Climate Transitions
UN	United Nations
UN Women	Principios de Naciones Unidas para la Inversión Responsable (*UN Principles for Responsible Investment*)
UPGF	Unidad Protectora de Germoplasma Forestal
WEPs	Principios para el Empoderamiento de las Mujeres (*Women's Empowerment Principles)*
WRI	Siglas en inglés para el Instituto de Recursos Mundiales

EXECUTIVE SUMMARY

A sustainable taxonomy is a system that allows the identification and definition of activities, assets, or investment projects with positive environmental and social impacts, based on established goals and criteria. The purpose of a taxonomy is to provide certainty and transparency, to encourage investment in sustainable activities, and to better track financing flows for sustainability, providing greater clarity, certainty and security to markets with precise and consistent definitions.

The Sustainable Taxonomy of Mexico was created with the objective of generating a reliable, legitimate, unified, and science-based classification system that allows defining which economic activities can be considered sustainable. It seeks to increase investment in projects and economic activities that promote compliance with Mexico's environmental and social objectives, as well as the country's international commitments in terms of sustainability. This Taxonomy will also facilitate access to timely and reliable information to encourage the mobilization of capital towards sustainable activities and decrease the risk of greenwashing[1].

During its first stage, the Taxonomy focuses on developing three main goals: climate change mitigation, climate change adaptation, and gender equality. Additionally, work began on the objective of sustainable cities, which will continue under analysis and will seek to promote access to basic services. In this sense, the Sustainable Taxonomy of Mexico is pioneering and innovative worldwide since it directly addresses both the care and protection of the environment and benefits for society. In addition, the Mexican Taxonomy generates contributions to design metrics for measuring the substantial contribution to the achievement of social objectives, which could serve as a reference for the development of social taxonomies in other jurisdictions.

To guarantee the relevance and operability of the Sustainable Taxonomy of Mexico in the long term, it will be periodically updated and adjusted to the economic, social and technological conditions and needs of the country. A constant review and update of this instrument will be performed.

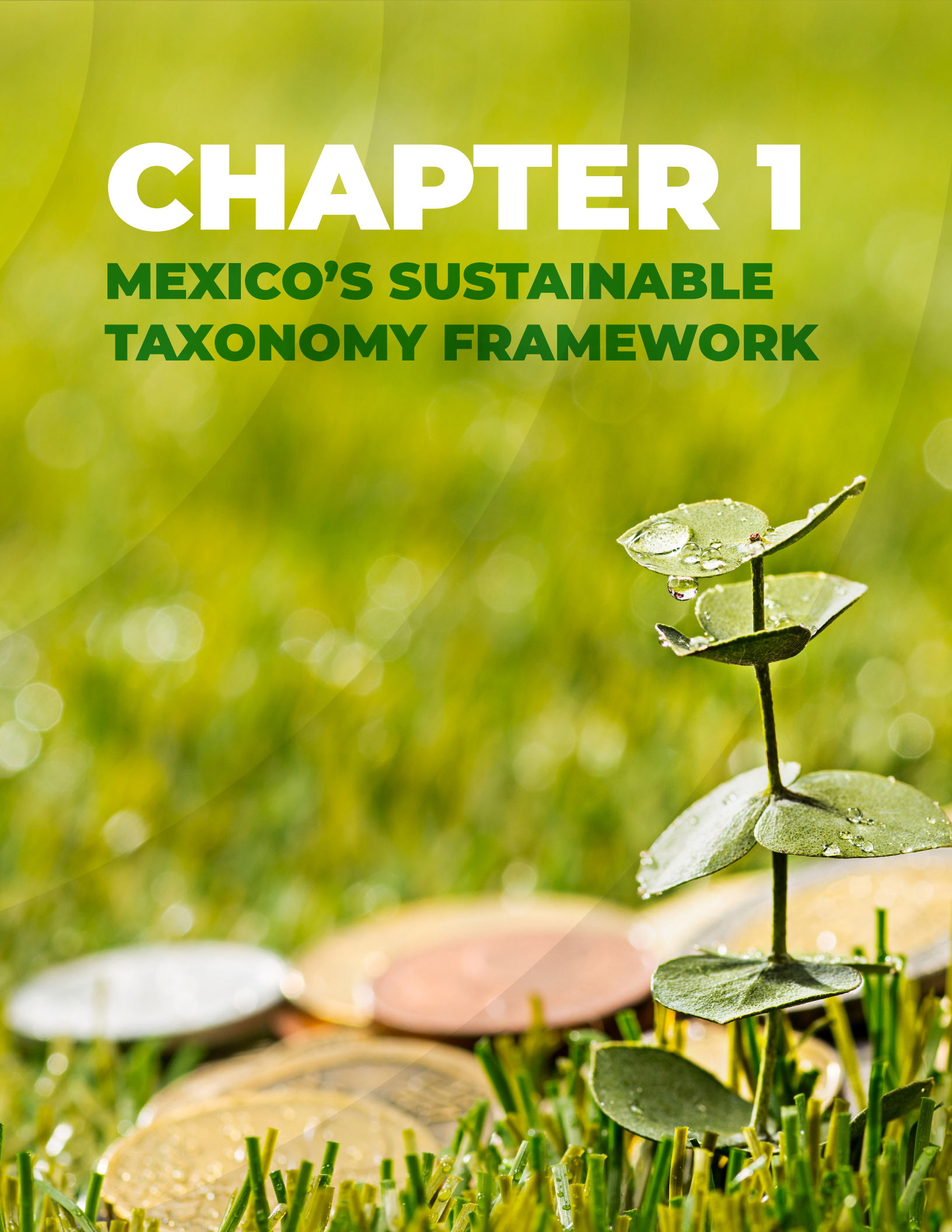
The purpose of this document is to show the process of creation and development of the Sustainable Taxonomy of Mexico, as well as the Technical Evaluation Criteria for the climate and gender equality objectives of this first stage. Chapter 1 includes a review of the national and international contexts of sustainable finance, the conceptual and methodological framework of the Sustainable Taxonomy of Mexico, important considerations for its implementation by different users, and the next steps around this instrument.

Chapter 2 presents the Technical Evaluation Criteria for activities related to climate change adaptation and mitigation objectives. There are 124 eligible activities included in six economic sectors, with their corresponding metrics, thresholds, and criteria of No Significant Harm (DNSH). Lastly, Chapter 3 presents the proposal of the Sustainable Taxonomy of Mexico for the social objective of Gender Equality. This proposal consists of the design of a Gender Equality Index built through guiding questions based on three pillars: Decent Work, Well-being and Social Inclusion.

[1]Greenwashing is understood as the activities, behaviors or strategies of a company or institution to make society believe that it is carrying out more actions to protect the environment than it actually does.

CHAPTER 1

MEXICO'S SUSTAINABLE TAXONOMY FRAMEWORK



1 SUSTAINABLE FINANCE AND DEVELOMENT IN MEXICO

Currently, all countries face important social and environmental challenges that require urgent attention. Overcoming these challenges requires the mobilization of large investments from public and private sources that favor the transformation towards an economic development with a focus on sustainability, placing the well-being of people at the center of investment decisions, while generating benefits for ecosystems and biodiversity.

As the leading institution of the sustainable finance agenda in Mexico, the Ministry of Finance and Public Credit (SHCP) is in charge of promoting and carrying out actions to support the mainstreaming of a sustainability approach and incorporating the potential impacts associated with climate change in the short and long-term decisions of the Mexican financial system, to guarantee that financial services, products, processes, as well as the institutional and market arrangements directly and indirectly contribute to the fulfillment of the Sustainable Development Goals (SDGs) of the 2030 Agenda and the Paris Agreement.

As part of the sustainable finance agenda, the SHCP has undertaken different efforts, such as the alignment of the Federation's Expenditure Budget with the SDGs, as well as the design of the SDG Sovereign Bond Framework, with which Mexico became the first country to issue this type of instrument. These initiatives, along with the development of the Sustainable Taxonomy of Mexico, are part of the set of actions that constitute the strategy of this Ministry to mobilize and redirect investment flows towards sustainable actions and projects.

1.1 INTERNATIONAL COMMITMENTS ON SUSTAINABLE DEVELOPMENT

Climate change represents one of the greatest challenges that humanity faces today, as it exacerbates various environmental, social, and economic problems around the world. In this context, the year 2015 was decisive for the international community, since it marked the birth of two international agreements of high relevance and impact: the 2030 Agenda for Sustainable Development and the Paris Agreement, of which Mexico is a signatory.

These agreements emphasize the need to build a path towards solving global problems associated with development, considering the participation of all sectors and actors both national and international. Similarly, these agreements stress the need to redirect public and private resources towards actions aimed at fighting climate change, closing social gaps, and transforming economies.

2030 Agenda

On September 25, 2015, the United Nations (UN) General Assembly approved the 2030 Agenda for Sustainable Development. This action plan in favor of the planet, its people, and prosperity, had a transformative vision towards environmental, economic, and social sustainability, becoming the main reference framework for the UN and the 193 countries that signed it.

The 2030 Agenda was the result of a multilateral and participatory process in which national governments and various actors such as the civil society, the private sector and academia were present. Its adoption represented a universal commitment made by all countries to modify their development models by placing people at the center of the debate and addressing critical problems for humanity and the planet, through 17 SDGs and their

169 goals. These reflect the international challenges while considering that national realities are different in terms of capacities, development level, public policies and priority issues.

The 17 SDGs are interrelated, as they recognize that simultaneously solving the current problems of the population and ensuring a sustainable and better future for all, requires a balance between economic development, social well-being, and environmental care. For this reason, the SDGs seek to eradicate poverty, hunger, and inequalities, while addressing the climate emergency, the protection of terrestrial and marine ecosystems, and the sustainability of cities without neglecting the economic development of the world.

Considering this, the Government of Mexico adopted the 2030 Agenda as a State commitment that strengthens national public policy and makes it possible to face both the historical challenges of the country and the new challenges of the planet. The National Development Plan (PND) 2019-2024 incorporates this commitment and specifically mentions the promotion of sustainable development as an essential paradigm for well-being (Government of Mexico, 2019a).

The Paris Agreement

In 2015, in Paris, France, the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 21) was held, where the adoption of an instrument that had the objective of "accelerating and intensifying the actions and investments needed for a sustainable future with low carbon emissions" was agreed (UNFCCC, 2021).

This instrument was named the Paris Agreement and its adoption meant one of the greatest milestones in terms of climate change in the history of humanity, since 195 countries and the European Union signed it, committing to implementing measures in the short, medium, and long term, to keep the global temperature increase below 2°C regarding pre-industrial levels. The Nationally Determined Contributions (NDC) emerged from the Paris Agreement as tools to measure the actions of each country in terms of climate change. Through them, each country establishes its commitments, efforts, and national goals in terms of climate change mitigation and adaptation.

In November 2022, during the Climate Change COP 27 in Sharm El Sheikh, Egypt, the Government of Mexico presented the Mexican NDC update, through which the country commits, in an unconditional manner, to carry out comprehensive actions to reduce the vulnerability of the population to climate change and implement adaptation processes. The 2022 updated NDC raises the level of ambition on mitigation commitments and endorses adaptation commitments.

In terms of mitigation, Mexico increased its unconditional target for Greenhouse Gases (GHG) reduction from 22% to 35%[2] by 2030, regarding its baseline, while the conditional reduction target could be increased up to 40%. Likewise, the target of reducing Black Carbon emissions was ratified (51% unconditionally and 70% conditionally by 2030). Regarding adaptation, Mexico maintains 27 lines of action articulated around five thematic axes[3], integrating crosscutting elements such as nature-based solutions and community-based adaptation, among others.

For the elaboration of these commitments, the Government of Mexico considered the high mitigation potential of the country and the adverse effects of climate change on human rights and society, including the negative impacts on the environment, health, food security, and development. This shows the close relationship that exists between safeguarding the fundamental rights of people, sustainable development, and climate action.

[2]There will be a reduction of at least 30% of GHG with national resources, while the remaining 5% will be obtained through international cooperation and financing provided for clean energy.

[3]Thematic axes of adaptation in the Mexican NDCs:

1) Prevention and care of negative impacts on the human population and the territory.
2) Resilient production systems and food security.
3) Conservation, restoration, and sustainable use of biodiversity and ecosystem services.
4) Integrated management of water resources with a climate change approach.
5) Protection of strategic infrastructure and tangible cultural heritage

1.2 NATIONAL CONTEXT

Environmental and Social Vulnerabilities of Mexico

Mexico is one of the countries with the widest biological and cultural diversity worldwide due to the great physiographic complexity of its territory, as well as its geological and climatic history. The close interactions that arise between territory, biodiversity, and culture offer the country great development opportunities (CONABIO, 2017). However, due to its geographical position and different socio-environmental conditions, Mexico is highly vulnerable to the potential impacts of climate change, such as climate variability and extreme hydrometeorological events (INECC, 2021a).

The National Atlas of Vulnerability to Climate Change (ANVCC) of the National Institute of Ecology and Climate Change (INECC) identifies six types of specific vulnerabilities of the country[4], calculated through the components of exposure, sensitivity, and adaptive capacity. According to these analyses, 1,448 of 2,471 municipalities are classified as vulnerable to climate change (INECC, 2021a; INEGI, 2020). This level of exposure requires carrying out adaptation actions that consider the diversity of biophysical and cultural factors that contribute to it.

On the other hand, Mexico continues to face high levels of poverty and inequality. Studies by the Economic Commission for Latin America and the Caribbean (ECLAC) and the National Council for the Evaluation of Social Development Policy (CONEVAL) have identified that in recent decades the levels of poverty and inequality in Mexico have remained above the levels of other Latin American countries and the rest of the world. These inequalities are highly related to socioeconomic gaps of a structural nature, generating significant challenges to guarantee access to education, gender equality, and income distribution, among others.

Similarly, it has been identified that many of the structural gaps have a crosscutting nature, such is the case of gender, which is related to other gaps in a wide variety of fields. ECLAC identifies that both in rural and urban areas, a lower proportion of women have their own income and opportunities for economic participation, while their level of access to goods and services, such as education or health, is lower than that of men (Rivas Valdivia, 2021).

The Global Gender Gap Index, whose objective is to measure the existing disparities between men and women in four key areas (economic participation, education, health and political empowerment) points out that in Mexico it is necessary to carry out actions to reduce gender inequalities in aspects such as the participation of women in the labor force, equal pay, and the difference in income between men and women (World Economic Forum, 2022).

Institutional Framework for Sustainability

To promote sustainability in our country, the Government of Mexico has implemented a regulatory and programmatic framework that considers the socio-environmental conditions of the country and seeks to address the main national priorities, such as:

- The National Development Plan (2019-2024).
- The National Strategy for the Implementation of the 2030 Agenda (2019).
- The National Development Financing Program (PRONAFIDE, 2020-2024).

[4]Types of specific climate vulnerability identified by INECC: cooperation and financing provided for clean energy.

1) Vulnerability of human settlements to landslides.
2) Vulnerability of human settlements to floods.
3) Vulnerability of the population to the potential increase of vector-borne diseases (dengue).
4) Vulnerability of livestock production to water stress.
5) Vulnerability of livestock production to flooding.
6) Vulnerability of forage production to water stress.

- The Special Climate Change Program (PECC, 2021-2024).
- The National Program for Equality between Women and Men (PROIGUALDAD, 2020-2024).

These public policy guiding instruments reflect the need to balance the three dimensions of sustainability, and recognize the importance of addressing the climate emergency, protecting, and conserving ecosystems, and ensuring the well-being of the population by eliminating the existing social and gender inequities. These also highlight the importance of implementing financial policies in favor of resource mobilization and financial inclusion to achieve the SDGs.

1.3 SUSTAINABLE FINANCE COMMITTEE

In March 2020, the Council for the Stability of the Financial System of Mexico (CESF) created the Sustainable Finance Committee (CFS) with the purpose of supporting the Council in the exercise of its functions by preparing analyses, evaluations, proposals, and recommendations on sustainable finances that contribute to the stability of the financial system and the mobilization of capital towards activities with positive environmental and social effects.

The Committee is chaired by the Ministry of Finance and Public Credit (SHCP) and integrated by the Central Bank of Mexico (Banxico), the National Banking and Securities Commission (CNBV), the National Insurance and Bonding Commission (CNSF), the National Commission of the Retirement Savings System (CONSAR), and the Institute for the Protection of Bank Savings (IPAB). Additionally, the CFS has a permanent guest from the Coordination of the 2030 Agenda in the Government of Mexico (Ministry of Economy), and six permanent observers from private sector associations: the Banking Association of Mexico (ABM), the Mexican Association of Insurance Institutions (AMIS), the Mexican Association of Retirement Savings Fund Managers (AMAFORE), the Mexican Association of Stock Market Institutions (AMIB), the Mexican Association of Investment Advisors (AMAI) and the Mexican Council of Sustainable Finance (CMFS).

In November 2020, during its first session, the CFS created four working groups in charge of carrying out analyses, evaluations, proposals, and recommendations to develop a sustainable finance agenda for Mexico. These working groups are dedicated to four main themes: (i) better use of opportunities for capital mobilization, (ii) sustainable taxonomy, (iii) measurement and assessment of environmental, social and governance risks (ESG), and (iv) disclosure of ESG information.

The Sustainable Taxonomy Working Group (GTT) is coordinated by the SHCP and integrated by financial system authorities, private sector representatives, international organizations and agencies, and experts in the field. This working group aims to contribute to the establishment of a national reference framework that allows characterizing the economic activities considered sustainable in Mexico, based on the development of principles and methodologies for their identification, classification, measurement, and monitoring.

The creation of a Sustainable Taxonomy for Mexico aims to lay the foundations to promote the mobilization of capital towards activities with positive environmental and social impacts, providing better information, certainty, and transparency to the Mexican financial system, contributing to closing social gaps, and reducing polluting emissions and vulnerabilities to climate change.

2. TOWARDS A SUSTAINABLE TAXONOMY FOR MEXICO

Sustainable taxonomies are born as a financing tool and constitute a classification system that allows the identification of economic activities or investment projects that contribute to the achievement of the sustainable objectives of a country (ICMA, 2021). In this way, a taxonomy is a framework for the classification of financial assets, sectors, and economic activities based on a set of environmental and social criteria.

This chapter reviews the international efforts in the development of taxonomies, as well as the advances achieved at the national level in terms of sustainable finance, which have shaped the necessary conditions for the creation of the Sustainable Taxonomy of Mexico.

2.1 INTERNATIONAL BENCHMARKS

In recent years, various taxonomies have been developed in different latitudes of the world. The review of a wide spectrum of national and regional taxonomies, both from public and private initiatives, has made it possible to guarantee the soundness in the construction of the Sustainable Taxonomy for Mexico.

Likewise, the revised references make it possible to guarantee comparability and interoperability between the Mexican Taxonomy and the rest of the taxonomies, as well as alignment with international financial markets. In addition, methodological elements of other taxonomies are taken up, allowing their adaptation for the identification and selection of economic activities with positive environmental and social effects in the Mexican context.

The main reference for the development of national taxonomies was carried out by the European Union (EU), which established a Technical Expert Group (TEG) on sustainable finance in 2018, dedicated to creating a classification system to determine whether an economic activity is environmentally sustainable. The final report of the TEG on the European Union Taxonomy was published in 2020 and considers six environmental objectives (Table 1.1). Based on this publication, other taxonomies have been developed and existing ones began to align to this framework. Subsequently, the EU undertook the task of developing a proposal for methodological criteria for the construction of a social taxonomy with emphasis on the protection of human rights and the social impact on the main interest groups: employees, clients, and communities.

Table 1.1. Elements of the Taxonomy and Social Section of the European Union

Elements	UE Taxonomy	Social Taxonomy
Objectives	Six environmental objectives: 1. Climate change mitigation 2. Climate change adaptation 3. Sustainable use and protection of water and marine resources 4. Transition to a circular economy 5. Pollution prevention and control 6. Protection and restoration of biodiversity and ecosystems	Three social objectives: 1. Decent work (including workers at different points in the value chain) 2. Adequate living standards and well-being for end users 3. Inclusive and sustainable communities and societies
Sectors	1. Forestry 2. Environmental protection and restoration activities 3. Manufacturing 4. Energy 5. Water supply, sewerage, waste management and remediation 6. Transportation 7. Construction and real estate 8. Information and communication 9. Professional, scientific, and technical activities 10. Financial and insurance activities	1. Decent work (including workers at different points in the value chain)
Activities	70 climate change mitigation activities and 68 climate change adaptation activities.	2. Adequate living standards and well-being for end users

Source: Own elaboration with data from the European Commission[5]

In 2021, the first draft of the EU Social Taxonomy proposal was published, which considered a scheme of horizontal and vertical dimensions for the objectives included at the time. In 2022, the EU Platform for Sustainable Finance (PSF) published the final report of the Social Taxonomy proposal, where the previous scheme was replaced by one based on three social objectives: Decent Work; Adequate Standards of Living and Well-being; and Inclusive and Sustainable Communities and Societies (see Table 1.1). Under this new proposal, it is possible to make a substantial contribution to several goals and sub-goals, simultaneously.

On the other hand, in 2020, China published its SDG financing taxonomy, developed by the Ministry of Commerce of the People's Republic of China, with the support of the United Nations Development Program (UNDP). The thematic areas and economic activities were selected considering their contribution to the SDGs (Table 1.2). Among the international references reviewed, this effort is the only one that maps the economic activities that directly contribute to the SDGs.

[5]Technical report. Taxonomy: Final Report of the Technical Group of Experts on Sustainable Finance. Available at: https://finance. ec.europa.eu/system/files/2020-03/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf
Social Taxonomy Final Report (European Commission: Available at: https://finance.ec.europa.eu/system/files/2022-08/220228-sustainable-finance-platform-finance-report-social-taxonomy_en.pdf

Table 1.2. Elements of the China SDG Financing Taxonomy

Elements	Description
Objectives	17 SDGs
Sectors /Thematic Areas	1. Basic infrastructure 2. Affordable housing 3. Health 4. Education, technology and culture 5. Food safety 6. Financial services
Activities	106 economic activities

Source: Own elaboration with data from CICETE[6]

From the private sector perspective, the Climate Bonds Initiative (CBI) is an international reference in terms of taxonomies for the identification of assets and projects to achieve a low carbon economy (Table 1.3). This taxonomy was developed based on research from the Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA) and has benefited from the input of hundreds of technical experts from all over the world (CBI, 2021). Since its publication, it is regularly updated according to advances in climate science, the appearance of new technologies, and sector-specific criteria.

Table 1.3. Elements of the CBI Green Bond Taxonomy

Elements	Description
Objectives	Classify assets and projects considered automatically compatible with a decarbonization trajectory of 2°C.
Thematic Areas	1. Energy 2. Transportation 3. Water 4. Construction 5. Use of land and marine resources 6. Industry 7. Waste and pollution control 8. Information and communications technology.
Asset Types	103 asset types

Source: Elaborated with date from CBII[7]

[6]Technical Report on SDG Finance Taxonomy. China (CICETE-UNDP). Available at: ffile:///C:/Users/maryd/Downloads/EN_Technical-Report-on-SDG-Finance-Taxonomy.pdf

[7]Taxonomía de Climate Bonds (CBI). Available at: https://www.climatebonds.net/files/page/files/cbi_taxonomy_tables-01_sp_1c.pdf

In 2022, the Ministry of Finance and Public Credit (MHCP) and the Financial Superintendence of Colombia (SFC) led the process of developing the Green Taxonomy of Colombia, the first taxonomy of a Latin American country. The purpose of the Colombian taxonomy is to have a common language to identify, classify, and differentiate the assets and economic activities that contribute substantially to the achievement of the country's environmental objectives. This taxonomy is dynamic in nature, recognizing the need to periodically complement and update the assets and economic activities established in it.

Table 1.4. Elements of the Green Taxonomy of Colombia

Elements	Description
Objectives	Seven environmental goals: 1. Climate change mitigation 2. Climate change adaptation 3. Conservation of ecosystems and biodiversity 4. Water management 5. Land management 6. Circular economy 7. Pollution prevention and control
Economic Sectors	1. Energy 2. Construction 3. Waste management and emissions capture 4. Water supply and treatment 5. Transportation 6. Information and Communications Technologies (ICT) 7. Manufacturing 8. Livestock 9. Agriculture 10. Forest exploitation
Assets and activities	47 assets and economic activities for climate change mitigation

Source: Own elaboration with data from the Government of Colombia[8]

2.2 NATIONAL BENCHMARKS

In recent years, progress has been made in the promotion of sustainable financing in Mexico. Different national financial institutions have developed definitions and classifications of sustainable assets that have been used to obtain financing under labeled instruments.

During the COVID-19 pandemic, Mexico's sustainable finances were resilient despite the global economic situation, due to the record numbers reached in the placement of thematic bonds in 2021, compared to 2020 (CCFV, 2022). In 2021, bonds with green, social, or sustainable labels added 41 placements for a total amount of 185.45 billion MXN, exceeding the placements of 2020 by more than three times (12 issues for an amount of 66.71 billion MXN). Likewise, in 2022, 41 bonds were issued for a total amount of 245.37 billion MXN.

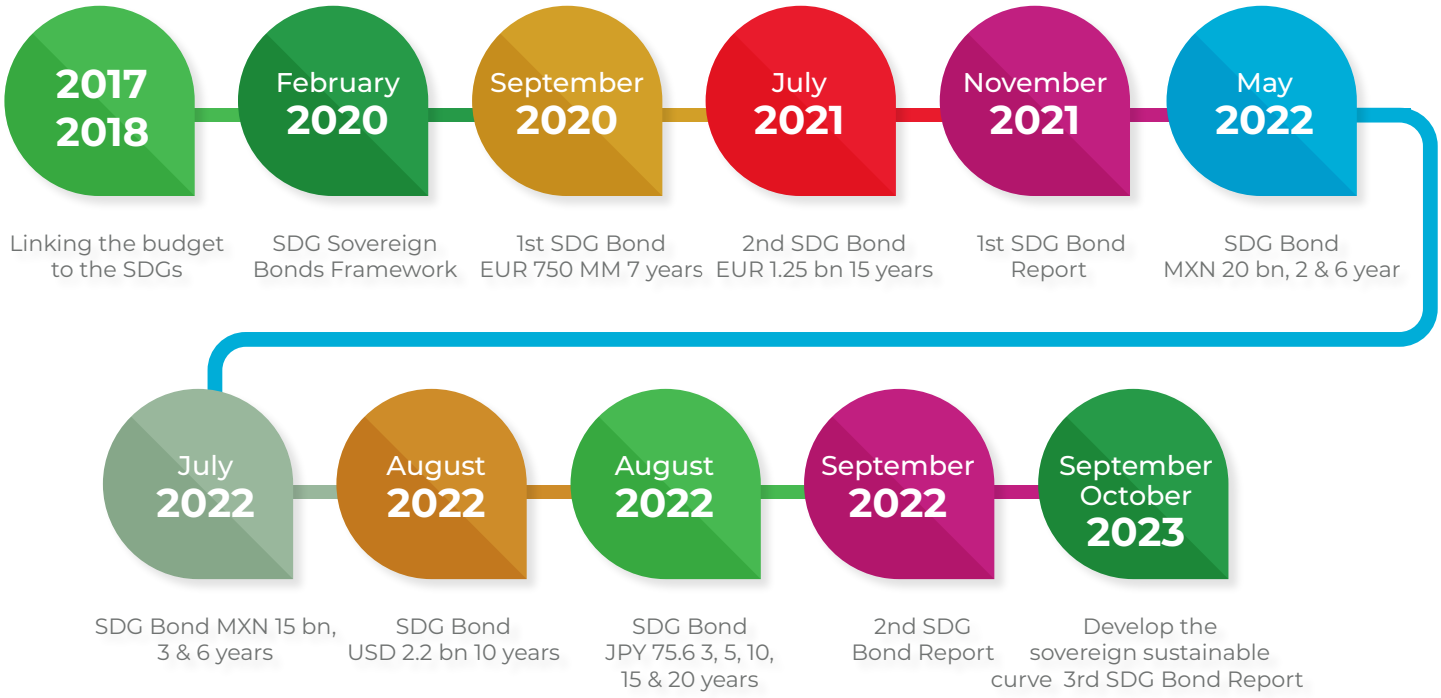
[8]Green Taxonomy of Colombia (Government of Colombia). Available at: https://www.taxonomiaverde.gov.co/webcenter/ShowProperty?nodeId=/ConexionContent/WCC_CLUSTER-191401

On the supply side, sustainable financing in Mexico has focused mainly on the issuance of thematic bonds and their respective frameworks[9], including Mexico's SDG Sovereign Bonds Framework of the SHCP; the Social Bonds Framework with Gender Focus and the Social Bond Framework for Financial Inclusion of the Trust Funds for Rural Development (FIRA); the Sustainable Bonds Framework of the National Bank of Public Works and Services (BANOBRAS), which was updated in 2022 to incorporate the gender perspective, and the Sustainable Bonds Framework developed by Nacional Financiera (NAFIN). On the demand side, there has been a greater investment in green and sustainable bonds by Retirement Fund Managers (AFORES), which has encouraged new issuances.

In 2020, the SHCP published the first Framework for SDG Linked Sovereign Bonds in the world. This framework allows combining the eligibility of the budget program and the geospatial criteria to guarantee that the funds are channeled to the regions of Mexico with the greatest SDG gaps, considering 11 of the 17 objectives of the 2030 Agenda.

Since the publication of the Framework until August 2022, eight sustainable sovereign bonds have been issued in the international market, representing a total of 2,000 million EUR and over 2,700 million USD. The first bond was issued in September 2020, for 750 million EUR, with a term of 7 years; the second in July 2021, for 1,250 million EUR with a term of 15 years; the third and the rest of the issuances in August 2022, for an amount of 2.2 billion USD at a term of 10 years and 75.6 billion JPY (about 554 million dollars) at terms of 3, 5, 10, 15 and 20 years (Figure 1.1).

Figure 1.1. Issuance of Sovereign Bonds



Source: Own elaboration.

[9]A framework is a document that integrates the guiding criteria for issuances of labeled bonds. It also defines the procedure before and after the bonds issuance, it identifies eligible expenses and determines the elements of impact and reporting on which the official results will be given.

In line with these efforts, in May 2022, the SHCP issued the BONDESG, the first sustainable sovereign bond in Mexican pesos in the local market. The first placement of BONDESG was at 2-years for 14,520 million MXN; and at 6-years for 5,480 million MXN. In July 2022, a second placement of BONDESG was made, at a 3 year tenor for an amount of 10,230 million MXN, and a 6 tenor for an amount of 4,770 million MXN.

FIRA, on its part, published the Social Bonds Framework with Gender Focus in 2020, which responds to women's conditions in the Mexican countryside and their participation in the productive and financial sectors. Two issuances have been made under this framework. The first was in October 2020, for 3,000 million MXN on a 3-year term, with the objective of granting exclusive financing to women who needed working capital and resources for productive infrastructure (GFLAC, 2020). The second was in April 2021, for 3,500 million MXN, to give continuity to the strategies in favor of women, thereby promoting greater financial inclusion.

Additionally, BANOBRAS has developed a Sustainable Bonds Framework to finance infrastructure projects that show benefits for the environment and society. As of December 2022, BANOBRAS has issued 15 sustainable bonds for 47,498 million MXN, two of which have a gender perspective, positioning itself as the main issuer of thematic and sustainable bonds in Mexico (Government of Mexico, 2021). This framework has served as a reference for the Sustainable Taxonomy of Mexico, not only for its proven success and leadership in the placement of this type of bonds in the region, but also for the use of evaluation indicators to determine the eligibility of the projects to be financed.

Also, the efforts to include sustainability aspects in private financial activities have increased. As part of the development of sustainable finance in Mexico, in 2019-2020, the ABM developed a pilot project for the classification, identification and reporting of green activities in banks. In this project, a green finance taxonomy was created, setting a precedent of taxonomy in Mexico.

In the same manner, in 2019, CONSAR issued a mandatory regulation, effective by 2022, for AFORES to disclose information on the consideration of ESG principles in terms of investments, risks, transparency and use of corporate rights. This sector became the first referent of the financial system in terms of compliance with regulatory obligations of ESG factors (CONSAR, 2019).

In 2022, the CNBV launched a self-diagnosis tool for ESG factors and climate-related risks for issuers and financial entities to raise awareness of the integration and disclosure of ESG information, looking ahead to future regulation on the matter.

The existence of a thematic bonds market and various sustainable asset classification initiatives strengthen the potential of the financial system in Mexico to mobilize sustainable financing. However, it is necessary to channel more resources to close social gaps and reduce greenhouse gas emissions and vulnerabilities related to climate change. In this regard, it is estimated that only the cost of the implementation of climate change mitigation measures to comply with Mexico's NDC was 137.6 billion USD in 2018, including the accumulated investment until 2030 (INECC, 2021b).

2.3 AN APPROACH TO A SUSTAINABLE TAXONOMY IN MEXICO

Mexico's international commitments and the advances in sustainable financing of different institutions in Mexico constitute general references that have enabled the creation of a Sustainable Taxonomy. In addition, the design of the Sustainable Taxonomy of Mexico considers the recommendations of the World Bank (World Bank, 2020) for the elaboration of taxonomies and the development of national taxonomies.

The Sustainable Taxonomy of Mexico aims to reflect the national priorities in terms of sustainability, considering the state of technological development and productive capacities of the country, while seeking to contribute to the achievement of Mexico's international commitments in terms of sustainability, including the NDC and the SDGs of the 2030 Agenda.

In this sense, the Sustainable Taxonomy of Mexico is a framework for identifying and classifying economic activities that start from a broad approach to sustainability, seeking to contribute to the achievement of environmental and social objectives, while complying with the following strategic objectives:

- Mobilize and redirect public and private financing towards economic activities with positive environmental and social impacts.
- Provide better information to the markets and contribute to the mitigation of the risk of greenwashing.
- Generate information on sustainable financing Flows.
- Create a basis for the development of public policies on sustainable finance in Mexico.

3. MEXICO'S SUSTAINABLE TAXONOMY METHODOLOGY

The process of designing the Sustainable Taxonomy of Mexico began with the definition of general objectives and specific environmental and social objectives. Subsequently, the sectors and economic activities that would be part of the first stage of the Taxonomy were analyzed and selected. Three priority environmental and social objectives were identified with which the Taxonomy would begin its construction. Afterwards, a methodological development process for the creation of Technical Evaluation Criteria (TEC) followed, which are the technical elements that will allow the evaluation of economic activities and determine if they are sustainable. These criteria have been discussed by Sectoral and Thematic Technical Working Groups (GTSyT), whose mandate is the creation of TEC. Finally, the potential users of the taxonomy were identified and characterized, and a proposal for reporting guidelines for financial institutions was designed.

Additionally, at the end of 2022, two consultation processes were carried out to obtain feedback from relevant stakeholders. For each process, a series of guiding questions was designed on the following topics:

- Objectives and sectors included in the Taxonomy
- Characteristics of reporting guidelines
- Design of regulations associated with the Taxonomy
- Comparability with other taxonomies
- Operability, training needs and implementation costs

The first process was a directed consultation to make the conceptual and methodological elements of the Sustainable Taxonomy of Mexico available to the financial authorities, associations of the financial system and other types of actors. The aim was to consider their opinions on the elaboration process of the Taxonomy and its future implementation. For this purpose, a methodological consultation plan was developed and a battery of 60 questions was integrated into a digital survey addressed to CFS members, with the participation of AMIB, BANXICO, CNBV, CONSAR, CNSF, IPAB and the CMFS. The second process consisted of the socialization of the advances in the development of the Sustainable Taxonomy of Mexico, through five dialogue tables with participants from the Mexican financial system, and an attendance of over 300 representatives of the financial system associations and Stock Markets issuers.

3.1 MEXICO'S SUSTAINABLE TAXONOMY OBJECTIVES

The Sustainable Taxonomy of Mexico seeks to establish a national framework that allows classifying in a clear, reliable, legitimate, and science-based manner, investment activities and projects that meet solid sustainability criteria, for which general objectives and environmental and social objectives were identified to define its purpose and scope.

General objectives

The Sustainable Taxonomy of Mexico has as main objectives to facilitate financing flows and the mobilization of capital towards investments in activities that contribute positively to environmental and social objectives, and to generate reliable information for the market to help mitigate the risk of greenwashing and provide greater certainty and transparency to the markets.

Environmental and social objectives

The purpose of the Sustainable Taxonomy of Mexico is to respond to the most relevant environmental and social problems of the country, as well as to endorse the global commitments that Mexico has assumed in this matter, taking as a framework the Paris Agreement, the SDGs of the 2030 UN Agenda and the NDC.

Unlike other jurisdictions that have focused their taxonomies on climate and environmental objectives, the Mexican Taxonomy has also included social objectives, recognizing the importance of addressing social gaps and vulnerabilities for developing and emerging economies. Table 1.5 lists the environmental and social objectives of the Sustainable Taxonomy of Mexico.

Table 1.5. Environmental and Social Objectives of the Sustainable Taxonomy of Mexico

Environmental	Social
• Climate change mitigation • Climate change adaptation • Management of water and marine resources • Conservation of ecosystems and biodiversity • Promotion of the circular economy • Pollution prevention and control	• Contribution to gender equality • Access to basic services related to sustainable cities • Health • Education • Financial inclusion

Source: Own elaboration

In this way, the Sustainable Taxonomy of Mexico seeks to innovate and contribute to the development of social taxonomies in the world, through objectives inspired by the SDGs of the 2030 Agenda. At the same time, the environmental objectives of the Taxonomy align with the objectives of green taxonomies in other jurisdictions, including the EU and Colombia, thus guaranteeing comparability and interoperability between the Mexican Taxonomy and the rest.

3.2 SECTORAL ANALYSIS AND ECONOMIC ACTIVITIES IDENTIFICATION

Once the environmental and social objectives of the taxonomy are defined, it is necessary to identify the sectors and economic activities that will be part of this classification tool, according to their contribution or association with the achievement of the defined objectives and the country's commitments in terms of sustainability.

For this, a sectoral analysis was carried out under the 2018 North American Industry Classification System (NAICS), which provides a single, consistent, and updated framework for the collection, analysis, and presentation of economic statistics, which reflects the structure of the Mexican economy. Based on NAICS information, the importance of economic sectors for national development was evaluated, as well as their relevance in terms of financing flows through different channels of the financial system.

First, the linkages between the economic sectors under NAICS and the environmental and social objectives of the Taxonomy (Table 1.5) were examined, through their impact on the NDCs and the SDGs targets. Subsequently, the behavior of the economic sectors was analyzed considering environmental, socioeconomic, and financial indicators. In a timely manner, GHG emissions, the contribution to the Gross Domestic Product (GDP), Foreign Direct Investment (FDI) flows, the composition of the labor force by gender, and finance flows through different channels were reviewed.

As a result of this analysis, it was determined that the specific objectives of climate change and sustainable cities had the highest number of links to economic sectors, identifying six especially relevant economic sectors for these objectives:

1. Agriculture, animal ranching and farming, and forestry.
2. Generation, transmission, distribution, and commercialization of electrical energy and water supply.
3. Construction.
4. Manufacturing industries.
5. Transportation.
6. Waste management and remediation services.

In the same manner, it was observed that to fully address the objective of gender equality, it was necessary to consider it across the 20 economic sectors of the Mexican economy, resulting in one of the most important objectives, based on its implications regarding the working conditions in Mexico. In this way, it is recognized that in all economic activities there are areas of opportunity to carry out affirmative actions in favor of gender equality and for the reduction of the existing gaps in the country.

On the other hand, the importance of the economic sectors and the climate objectives and of the sustainable cities linked to these was validated through the analysis of indicators. GHG emissions analysis, with data as of 2017, shows that the selected sectors contribute to around 90% of GHG emissions. In accordance with the targets established in the NDC of Mexico, these sectors would contribute to over 94% of the total mitigation goal for 2030. Additionally, it was identified that the sectors with the greatest mitigation potential are the agricultural sector (32.6%), energy (26.6%), transportation (20.6%) and waste management (7.3%).

Economic analyses of the GDP and FDI show that the manufacturing sector is of special relevance. Considering the contribution to the GDP of the different sectors in the Mexican economy, the manufacturing sector is the one that has contributed the most to the economy in recent years, with an average participation of 16.6% in the 2010-2020 period. Other strategic sectors with relevant contribution to the GDP are the construction and transportation sectors, with an average contribution of 7.4% and 6.0% respectively. Similarly, FDI has been heavily concentrated in the manufacturing sector, with an average contribution of 50.6%. Other strategic sectors with significant FDI are the transportation, construction, and energy sectors, with an average participation in FDI of 5.5%, 4.4%, and 4.1% respectively.

Regarding the information on the composition of the labor force and wage gaps by gender, a great disparity is identified in all sectors. However, in 2020, the sectors that presented the greatest disparity were construction and transportation, with a workforce of over 85% made up of men.

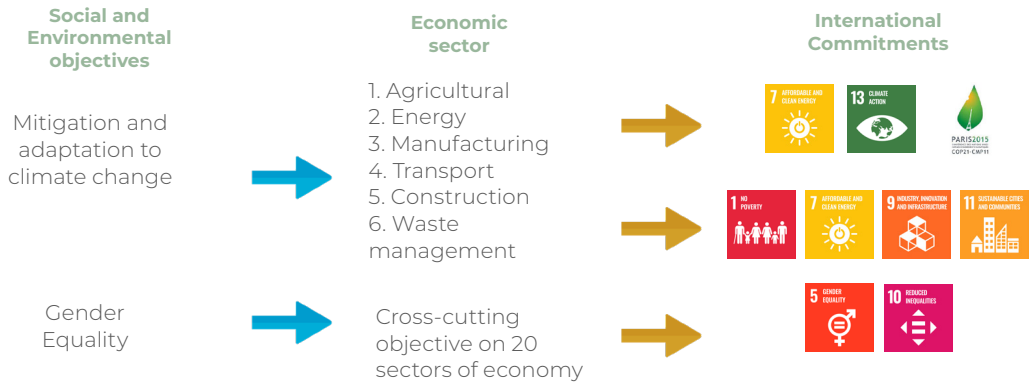
Finally, the analysis of financial flows shows great differences according to the analyzed market. For commercial banks, an important participation was found in the credit portfolio of the professional services sector and the manufacturing industry; while in development banking, the financial, legislative and governmental, construction, energy, and manufacturing sectors stand out. By market capitalization, the manufacturing and mass media sectors stood out. Finally, in corporate debt issuances, the energy, financial and manufacturing sectors stood out.

In this way, based on the number of links with economic sectors and the relevance of these sectors in terms of GHG emissions and socioeconomic and financial indicators, it was determined that, in a first stage of the Taxonomy, the following objectives would be developed:

- Climate change mitigation and adaptation
- Sustainable cities
- Gender equality

Figure 1.2 summarizes the relation of the three objectives selected to be initially developed with their respective economic sectors. In addition, potential contributions to the main international commitments on sustainability are shown.

Figure 1.2. Associating the economic sectors with the objectives of the Taxonomy and international commitments.



Source: Own elaboration

Once the economic sectors were identified, the economic activities that could be included in the Taxonomy due to their potential contribution to the first three environmental and social objectives were selected. For the selection of the economic activities linked to the climate change mitigation and adaptation objective, the main international references that had classified activities by their contribution to this matter, including the EU Taxonomy and CBI, were analyzed. Additionally, experiences of classification of sustainable assets in Mexico, like the ABM's Green Taxonomy and the sustainable investment categories of FIRA, were reviewed, and the potential alignment with international benchmarks was analyzed seeking to incorporate activities relevant to the national economy.

For the sustainable cities objective, the selection was a result of research in various academic and official documents on the contribution of the sectors and economic activities to the reduction of inequities and an increased access to basic services, among other elements that promote a better quality of life in cities and communities. From this process, five topics were identified in which positive impacts can be obtained through the Taxonomy, linked to the previously identified economic sectors and that significantly contribute to the access of services related to sustainable cities.

- Adequate, safe, affordable, and resilient housing
- Safe, affordable, accessible, and sustainable public transportation
- Waste management
- Land use and pollution
- Water management

Finally, the entire analysis process allowed to obtain a set of economic activities by sector, with which it was possible to begin the development of the Sustainable Taxonomy of Mexico through the creation of the Technical Evaluation Criteria to determine the degree of sustainability of those activities. 171 activities were preliminary identified to be analyzed by the GTSyT experts, who also identified the relevant activities to be definitely included in the Taxonomy.

3.3 METHODOLOGY TO CREATE TECHNICAL EVALUATION CRITERIA (TEC)

One of the fundamental elements of the Taxonomy are the TEC, which are a set of guidelines that allow for evaluating and identifying economic activities that are considered sustainable. To provide certainty to the users and beneficiaries of the Taxonomy, the TEC must have a solid scientific basis and incorporate best practices on the subject. These characteristics will contribute to the transition of the economy towards sustainability, through the adoption of new technologies and new work and production models.

The development of the methodology to create the TEC recognizes previous national classification exercises, as the ABM taxonomy (2019-2020), and takes as a reference the conceptual and methodological structure of the EU Taxonomy, the main reference worldwide for its solid scientific basis. Additionally, the metrics and thresholds of the Taxonomy of Colombia were considered as a relevant reference for Latin American countries.

TEC elements

The main elements of the TEC are the main parameter, the substantial contribution of an activity to sustainability (based on metrics and thresholds), criteria of DNSH and minimum safeguards (Figure 1.3). The design, preparation, development, and establishment of these elements required the collective work of

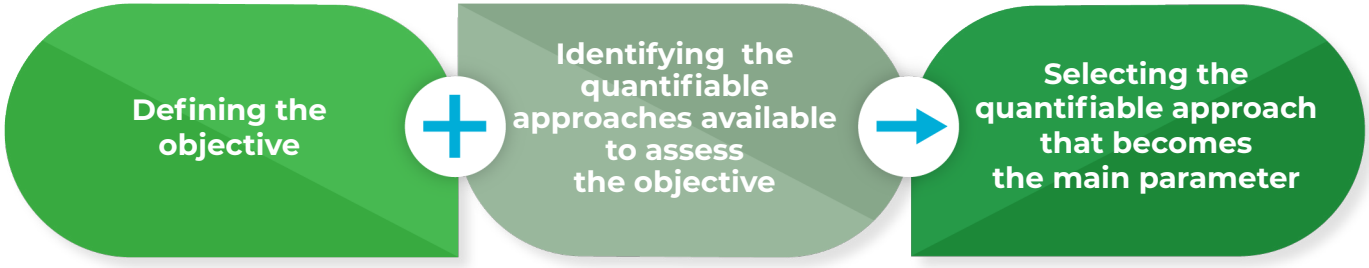
experts in Sectoral and Thematic Technical Groups, guaranteeing the scientific soundness and operability of the Taxonomy, in accordance with the productive and technological capacities of the country.

Figure 1.3. TEC Elements

Source: Own elaboration.

The main parameter is the element or thematic criterion from which the sustainability of an economic activity is evaluated. From it, the metrics and thresholds that will be used to assess the substantial contribution of an economic activity to the objective of the taxonomy and to be considered sustainable are defined. The main parameter should be measurable, comparable, and, preferably, quantifiable, since it will be used to assess the contribution of an economic activity to sustainability. Figure 1.4 shows the selection process to follow.

Figure 1.4 Process for the Selection of the Main Parameter.



Source: Own elaboration.

The substantial contribution is the condition by which the environmental or social performance of the economic activity is demonstrated. It makes it possible to identify and measure how an economic activity generates a significant impact based on its own performance, through established metrics and thresholds. In this context, the metrics are the unit of measurement with which the substantial contribution made by the economic activity to the main parameter is evaluated, while the thresholds constitute quantitative or qualitative data ranges given in relation to the metric to determine the degree of sustainability of an economic activity.

The principle of Do No Significant Harm (DNSH) is made up of a series of environmental criteria that make it possible to ensure that an economic activity, with a substantial contribution, does not have negative effects on any of the other objectives of the Taxonomy, other than the main parameter. In this way, it is ensured that progress on some objectives is not made at the expense of other environmental objectives. The DNSH principles are defined for each economic activity and are based on existing legislation, regulations, norms, or standards applicable to the sectors.

Finally, the minimum safeguards seek to cover issues related to human rights, as well as good international practices in labor and governance matters. They define the minimum elements required for the development of an economic activity aligned with the Taxonomy. These mandatory elements are defined by current Mexican laws and regulations, and international conventions and guidelines[10]. Due to the crosscutting nature of the social objectives of the taxonomy, safeguards are essential to prevent and mitigate undue harm that an activity could cause in the population. In this sense, safeguards are useful during the design and execution of projects to identify and evaluate possible social risks, as well as the positive and negative impacts associated with an activity. Its application will allow the development of measures to reduce, mitigate and/or compensate adverse impacts and enhance positive impacts.

TEC elements for the first three goals s

Climate Change

In the international context, taxonomies have focused mainly on the development of climate change objectives, particularly on mitigation of GHG emissions. By considering climate change mitigation and adaptation as the main objectives of the Sustainable Taxonomy, Mexico aligns itself with the main international and regional benchmarks, guaranteeing its comparability and interoperability with taxonomies from other jurisdictions. Another important aspect is that considering scientific advances, the mitigation and decarbonization parameters are measurable and have established metrics. In this way, it is expected that the Taxonomy contributes to the achievement of Mexico's commitments acquired on climate change.

For climate change mitigation, the metrics relate to GHG emissions. In this sense, some of the most common types of metrics from which one can choose to establish the level of sustainability of an economic activity are:

- Amount of carbon dioxide equivalent (CO_2e) emitted
- Reduction percentage of CO_2e emitted
- Savings in CO_2e emissions

The establishment of the thresholds associated with each of the metrics was one of the results of the discussions within the corresponding GTSyT. As the main reference for the discussion of thresholds, the GTSyT started from the criteria of the taxonomies of the EU and Colombia, which were adjusted to the Mexican case to consider productive and technological capacities of the country, seeking to guarantee the use and operability of the Taxonomy by Mexican users.

In terms of climate change adaptation, this Taxonomy is based on a qualitative approach to determine the substantial contribution of economic activities with an impact on adaptation. This approach will make it

[10]These are:
- Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Companies.
- United Nations Principles for Responsible Investment (UNPRI).
- United Nations Global Pact Principles.

possible to identify those activities that reduce or mitigate the impacts associated with physical climate risks, either on the same or on other activities.

Considering the above, the objective of climate change mitigation and adaptation, in addition to generating impacts on the reduction of emissions and the creation of resilience in the population, ecosystems and infrastructure, will also contribute to the achievement of SDG 1 "No Poverty", SDG 7 "Affordable and Clean Energy", SDG 9 "Industry, Innovation and Infrastructure", SDG 11 "Sustainable Cities and Communities" and SDG 13 "Climate Action".

Gender Equality

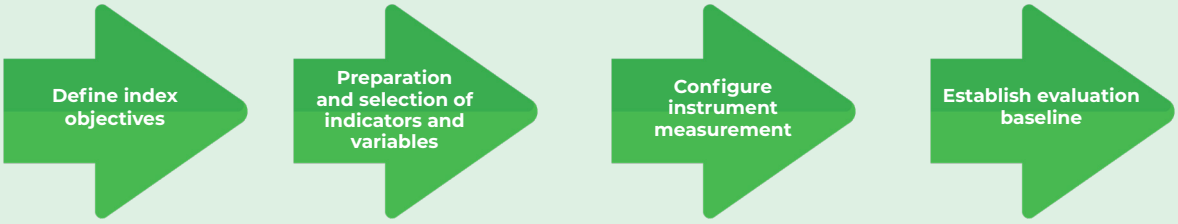
One of the most important aspects of the Sustainable Taxonomy of Mexico is the incorporation of priority social objectives, such as gender equality. By including this objective across all economic sectors and activities, they all can be assessed through the Sustainable Taxonomy in terms of gender equality. In this way, economic activities that contribute to the reduction of gender gaps and the elimination of discrimination against women are promoted, while at the same time, the adoption of best practices in favor of gender equality within the users of this Taxonomy is encouraged.

For the Gender Equality objective, the Taxonomy proposes to generate metrics through the creation of a gender index, built through information on the implementation of guidelines, mechanisms, strategies, and policies that contribute to closing gender gaps in the labor environment of companies or investment projects (Box 1). The applicable threshold and gender index components of the Taxonomy were discussed and determined by the Gender Equality Thematic Group.

BOX 1
Gender Index

A standardized way to identify, measure, and report the impact of companies, institutions and countries in social and development aspects is the design of indices. Most of these instruments have been prepared by international organizations such as the World Bank and the United Nations (UN).

The methodological steps proposed for the construction of the gender index are summarized in the following figure



Source: Legal Research Institute, UNAM.

Process for the creation of a gender equality index

Based on the above, it is necessary to identify social and gender indicators to be measured within the entity that seeks to access financing under the Taxonomy. There is already a very important advance in the measurement and financing of projects in favor of gender equality in Mexico and through international organizations, including:

- The guide to good business practices aimed at gender diversity (OIT, 2017).
- The principles of women's empowerment (UN WOMEN, 2021).
- The gender equality index (Bloomberg, 2019).
- The Social Bond with Gender Focus (FIRA, 2020).
- The Mexican Standard on Labor Equality and Non-Discrimination: NMX-R-025-SCFI-2015. (Government of Mexico, 2021).
- The system of gender indicators (INMUJERES, s.f.).
- Global Reporting Initiative (GRI) standards, for example, GRI 405: Diversity and equal opportunities[11].

Source: Own elaboration

Sustainable Cities

Currently, cities concentrate more than half of the world's population (expected to be 80% by 2050), produce 80% of the world's GDP, consume 75% of natural resources, and generate 50% of global waste. The objective of Sustainable Cities is focused on promoting access to basic services related to human settlements in a comprehensive manner, which is why it is considered a social objective. This objective is aligned with SDG 11 "Sustainable Cities" of the 2030 Agenda and has the potential to impact multiple objectives, including SDG 1 "No Poverty", SDG 7 "Affordable and Clean Energy" and SDG 9 "Industry, Innovation and Infrastructure".

Considering this comprehensive approach, the development of this objective combines goals of a diverse nature, in different sectors and topics, such as construction, transportation, energy and water supply, waste management, and pollution. By including access to basic services related to sustainable cities as a specific objective, the Sustainable Taxonomy of Mexico paves the way for innovation, since this objective has not been developed in other taxonomies.

In this regard, the objective seeks to evaluate whether the investment activity or project contributes to achieving access to five basic themes related to sustainable cities (Table 1.6), highlighting their social nature, by contributing to closing access gaps and tackling poverty, since it is not only approached from an environmental perspective.

Table 1.6. Themes to evaluate access to basic services related to sustainable cities

1. Adequate, safe, affordable and resilient housing
2. Safe, affordable, accessible and sustainable public transportation
3. Waste management
4. Land use and pollution
5. Comprehensive water management

Source: Own elaboration

[11]The GRI 405 standard addresses the organization's approach to diversity and equal opportunity at work, assuming that when organizations actively encourage diversity and equality at work, it can generate significant benefits both for the organization itself and for other workers.

For the development of metrics and thresholds, it was proposed to use the AAAQ (Availability, Accessibility, Acceptability, and Quality) analysis framework within the Sustainable Cities Thematic Group, since its usefulness to assess social elements such as accessibility to basic services has been proven (Box 2).

Box 2
AAAQ (Availability, Accessibility, Acceptability, and Quality) Framework

This approach is a framework designed to reflect the achievement of Human Rights, especially Economic, Social and Cultural Rights (DESC), translating these international commitments into standards, indicators and benchmarks. The purpose of this methodology is to provide explicit guidance on how to properly use the criteria of Availability, Accessibility, Acceptability, and Quality in relation to certain activities, projects or basic services that contribute to compliance with DESC rights (The Danish Institute for Human Rights, 2017). The four pillars of this approach are:

Availability: Refers to the existence and availability (in quantity and continuous supply) of establishments, goods, and services. It is a criterion quantitatively evaluated.
Accessibility: Identifies the level and population with access to goods and services. This criterion is composed by several elements:

- Physical access
- Economic access (affordability)
- Social access (non-discrimination)
- Access to information
- Bureaucratic-administrative access

Acceptability: Acceptability is measured qualitatively and is closely related to the user's (or consumer's) perception of the good or service provided. In this sense, the provider of the product or service must know the context in which its activity will be carried out.
Quality: It is measured through quality standards and norms applicable to services at an international level.

The European Union proposed this approach in the discussions on its Social Taxonomy, to identify the substantial contribution of economic activities to the generation and facilitation of access to goods, products, services and basic infrastructure, beginning with the design of criteria on health and later those on housing (EC, 2021).

Source: Own elaboration

Methodological framework for the elaboration of the TEC

The methodological framework for the elaboration of the TEC for the objectives of the first phase of the Taxonomy is summarized in Table 1.7. Each objective is based on a main parameter, from which various metrics are selected, and thresholds are established to assess its degree of sustainability.

This methodological framework is aligned with the main international references, while introducing novel elements for the evaluation of social objectives, thus guaranteeing the comparability of the Sustainable Taxonomy of Mexico with other taxonomies and promoting the mobilization of capital that contributes to closing social gaps.

To date, no international reference has developed TEC for social objectives, so this proposal is an innovation of the Mexican Sustainable Taxonomy, representing one of its main contributions to the development of other taxonomies around the world.

Table 1.7. TEC Methodological Framework

Specific Objectives	I) Main Parameter	Substantial Contribution		IV) Do No Significant Harm	V) Minimum Safeguards
		II) Metrics	III) Threshold		
Climate Change Mitigation	GHG Mitigation	CO_2e Amount CO_2e reduction percentage Savings in CO_2e emissions	The thresholds were established by the GTSyT for each of the economic activities in the Taxonomy	Water Climate change adaptation Biodiversity Pollution Circular Economy	1. Laws and regulations in force in Mexico 2. International documents such as: 4. OECD Guidelines for multinational companies. 5. Guiding principles for Companies and 6. UN Human Rights. 7. ILO Declaration on Fundamental Principles and Rights at Work.
Climate Change Adaptation	Climate change adaptation (qualitative approach)	Adapted activities Activities that enable adaptation	Climate risk reduction Support for the adaptation of economic activity Support for the adaptation of other economic activities	Water Climate Change Mitigation Biodiversity Pollution Circular Economy	
Sustainable Cities	AAAQ (Availability, Accessibility, Acceptability, and Quality)	AAAQ approach Social benefits/ sector	The thresholds were established by the GTSyT for each of the economic activities in the Taxonomy	Water Climate change adaptation and mitigation Biodiversity Pollution Circular economy	
Gender Equality	Inclusion and reduction of gender gaps	Gender Index	The thresholds were established by the GTSyT for each of the economic activities in the Taxonomy	Water Climate change adaptation and mitigation Biodiversity Pollution Circular economy	

Source: Own elaboration.

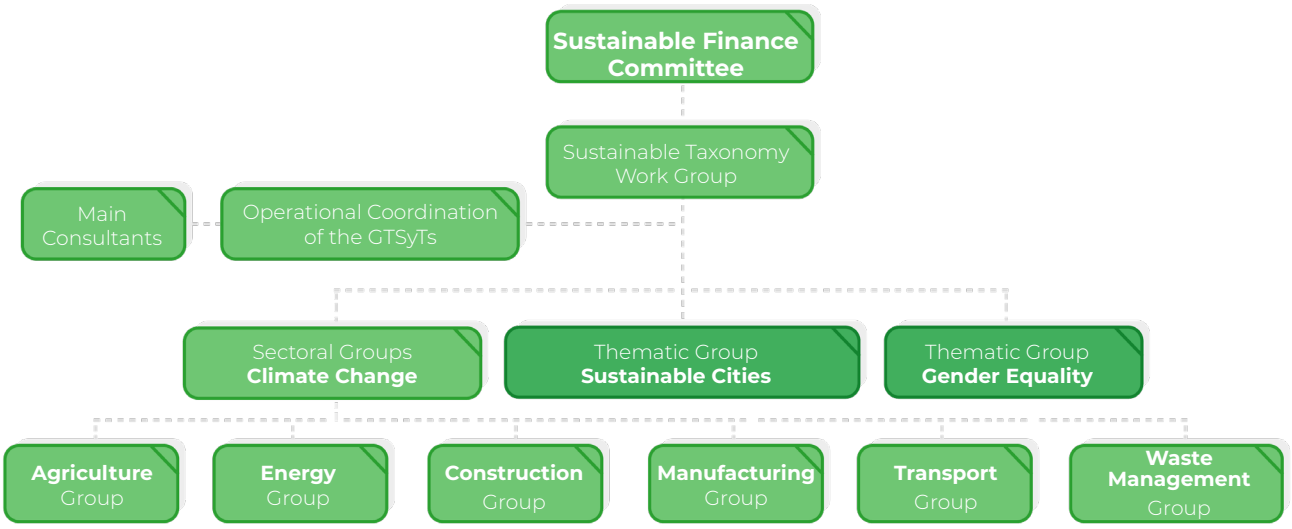
3.4 SECTORAL AND THEMATIC TECHNICAL WORKING GROUPS (GTSYT)

The strength of a taxonomy lies in having a solid scientific base that establishes ambitious and executable performance metrics and thresholds that reflect the national economic context and allows compliance with the established objectives. Thus, the design, elaboration, and development of the TEC requires expert actors gathered by economic sector or specific subject. In this sense, GTSyT were created, which are collegiate and representative working bodies, made up of multidisciplinary and multisectoral actors, whose objective is to contribute to the establishment of a national reference framework that allows characterizing the sustainable activities of the Sustainable Taxonomy of Mexico, through TEC.

For the development of TEC associated with the first objectives of the present Taxonomy, eight GTSyT were created, of which six Sectoral Groups correspond to the climate objectives for each associated economic sector (agriculture, energy and water supply, construction, manufacturing, transportation, and waste management) and two Thematic Groups correspond to the objectives of Sustainable Cities and Gender Equality.

The operation and functioning of the GTSyT is temporary, since once the TEC for the relevant economic activities are prepared the Groups will be dissolved. However, and taking into consideration that the Taxonomy must be an instrument that is constantly updated, the GTSyT may be convened again to review the updating and validity of the TEC.

Figure 1.5. Governance Mechanism of the Sustainable Taxonomy of Mexico



Source: Own elaboration.

On the other hand, the GTSyT were formed in a plural way and looking to represent the different types of participants. Its members come from the public and private sectors of the real economy and the financial sector, as well as academic and scientific institutions, business associations, organizations of the civil society, local and international organizations.

Considering their composition, the operational structure within the GTSyT is the following:

- **Operational coordination:** In charge of the activities and sessions of the GTSyT to be developed according to the designed work plan.
- **Main advisors:** Experts with technical and practical knowledge of the sector of the assigned group. Their functions include accompanying and guiding the rest of the members in the criteria selection process, and to collaborate with the operational coordination to guarantee the successful development of the sessions.
- **Sector and thematic experts:** People with proven technical experience in the different economic and thematic sectors. They contribute to the discussion and the methodological development of the TEC. Experts guarantee plurality of ideas within the GTSyT.

Principles and rules of operation of GTSyT

For an optimal functioning of the GTSyT it is essential to have principles that guide the elaboration of TEC and that establish the guidelines for the organization and functioning of the groups. Table 1.8 contains the principles that have guided the development of Technical Evaluation Criteria, within the framework of the GTSyT.

Table 1.8 Principles for the elaboration of the TEC

Principles
1. Identifying the most relevant potential contributions
2. Establishing measurement criteria (quantitative and qualitative) and their thresholds
3. Specify the minimum requirements to avoid significant damage to any objective of the Taxonomy
4. Base the criteria on national or international standards, methodologies or regulations
5. Based on conclusive scientific evidence
6. Consider the impacts of economic activities and the life cycle
7. Consider the nature and scale of the economic activity
8. Consider the potential impact on markets
9. Cover and prioritize relevant economic activities
10. Establish TEC seeking to facilitate the verification of their compliance when possible

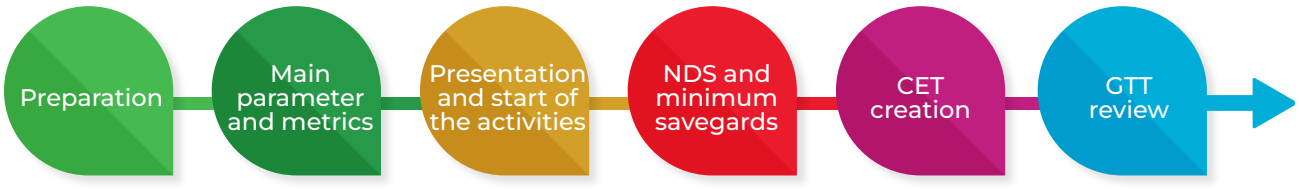
Source: Own elaboration.

The GTSyT have rules of operation that establish the basic conditions for their functioning, regulating the nomination methods and the groups' integration, their operational structure and duration of activities, to the functions and obligations of its members.

Creation Process of the TEC

Following the abovementioned principles, the GTSyT carried out the creation process of the TEC (Figure 1.6). This process begins with the integration of the groups, continues with the creation of the TEC and ends with the closing of the GTSyT. The TEC were built in stages and based on debates and methodological agreements on each element of the TEC by the GTSyT members.

Figure 1.6. Creation Process of the TEC



Source: Own elaboration.

Finally, the development and establishment of the TEC is reflected in technical sheets (Figure 1.7) that include the elements elaborated by the GTSyT, and that allow a more precise and efficient consultation of the parameters applicable to a specific economic activity.

Figure 1.7. Example of a Technical Sheet of a TEC

SECTOR AND ACTIVITY DESCRIPTION		
Economic Activity	**221114**	**Wind Electric Power Generation**
Description – **Includes**	Economic units (power plants) mainly dedicated to electric power generation from the kinetic energy of the wind, using wind turbines. The electric power generated is delivered to transmission or distribution systems for its supply to end users.	
Description – **Excludes**	Economic units mainly dedicated to the generation of electrical energy from fossil fuel energy (221111, Electricity generation from fossil fuels); from hydraulic energy (221112, Hydroelectric Power Generation); from solar energy (221113, Solar Electric Power Generation); from other types of energy (221119, Other Electric Power Generation); to the transmission of electrical energy (221121, Transmission of electrical energy); to the distribution of electrical energy (221122, Distribution of electrical energy), and to the commercialization of electrical energy (221123, Commercialization of electrical energy).	
Description – **Products**	Electrical energy from wind power structures generation.	
MAIN PARAMETER		
Contribution from the Mitigation of Greenhouse Gases (GHG)		
SUBSTANTIAL CONTRIBUTION		
Métrica	Emissions for power generation: $kgCO_2e/MWh$	
Umbral	Directly eligible and exempt from submitting a product life cycle assessment, including a carbon footprint assessment. If necessary, a periodic review will be carried out according to the threshold ≤ 100 g de CO_2e/kWh.	

DO NO SIGNIFICANT HARM ASSESSMENT		
ENVIRON-MENTAL	**Water**	According to the literature, wind energy has zero or minimal impacts on water resources; however, it must be ensured that during its life cycle the project does not generate negative impacts on them.
	Adaptation	It must positively contribute or not affect the adaptation actions established by the Mexican government. Possible effects of climate change on the infrastructure or operation of the project must be considered, for this, an investigation of the conditions of the local premises for the operation of the project or company, is recommended.
	Biodiversity	1. The project must not be carried out near or within: Protected Natural Areas, Priority Terrestrial Regions, Priority Hydrological Regions, and Important Areas for Bird Conservation, RAMSAR Sites or priority area for conservation, etc. 2. As it is identified that wind energy projects may have a potential risk for birds, the corresponding studies must be carried out so as not to locate them within migratory routes; as well as carry out monitoring plans for birds and bats. 3. The project must have the necessary operating permits and the Unified Technical Documents (DTU) that describe and evaluate its potential impacts. 4. Likewise, the ecological ordering of the territory must be respected and NOM-059-SEMARNAT-2010 must be followed. The activity does not give rise to a significant increase in pollutant emissions into the air, water, or soil, compared to the situation prior to the start of the activity. A selection of the waste generated during the development of the activity must be made, separating the waste into those that can be reused or recycled, the non-reusable nor recyclable and toxic or hazardous waste.
	Pollution	The activity does not give rise to a significant increase in pollutant emissions into the air, water, or soil, compared to the situation prior to the start of the activity.
	Circular Economy	A selection of the waste generated during the development of the activity must be made, separating the waste into those that can be reused or recycled, the non-reusable nor recyclable and toxic or hazardous waste

Source: Own elaboration.

4. TAXONOMY IMPLEMENTATION

Since its design, the Sustainable Taxonomy of Mexico has considered the entire Mexican financial system and its stakeholders as potential users. In this way, it seeks to promote sustainable financing through various channels and for this framework serves different products, markets, financing schemes and reporting mechanisms. However, it is necessary to identify the main potential users of the Taxonomy and recognize their different functions to design specific reporting mechanisms and guidelines for each case. With this, the present Taxonomy intends to recognize the different characteristics of potential users, while generating mechanisms that allow comparability between users and a holistic measurement of sustainable financing flows.

The Sustainable Taxonomy of Mexico is a guide for investors to identify sustainable practices that contribute to the achievement of the country's environmental and social objectives. In this way, it will be possible to mobilize

capital that contributes substantially to these objectives from the actions of the private sector of the real economy and with the boost that the financial system can provide through different sustainable financial products and services. With this, the Taxonomy seeks to generate better information for the markets, as well as greater transparency and efficiency to achieve sustainability targets, laying the foundations to promote the development of a sustainable finance market in Mexico.

4.1 USER IDENTIFICATION

The identification of potential users of the Sustainable Taxonomy of Mexico aims to characterize the profiles of the various actors that would use it, so that the characteristics and traits of potential users are known in advance, to identify possible needs, challenges and capabilities they might face when using it.

For the user identification process, the most relevant types of institutions for the financial system were analyzed in terms of the financing granted and their asset holding. As of the fourth quarter of 2022, commercial banks stand out as the main type of intermediary, granting 50.7% of financing to the private sector, followed by the Institute of the National Fund for Workers' Housing (INFONAVIT) and the Housing Fund of the Security and Social Services Institute for State Workers (FOVISSSTE) (20.0%), debt and capital markets (15.7%), non-banking intermediaries (9.31%), and development banks (4.43%).

In terms of asset holding, commercial banks registered assets equivalent to 42.2% of the GDP in the fourth quarter of 2022. For their part, AFORES registered assets equivalent to 17.6% of the GDP, followed by investment funds (9.6%), development banks (8.5%) and the insurance sector (7.3%).

Considering the issuance of labeled bonds related to sustainable development in Mexico, from 2015 to December 2022, 115 bonds have been issued in the national and foreign markets, for an amount equivalent to 551.02 billion MXN. The main issuers have been corporate entities, with an amount of 237.04 billion MXN in 53 issuances; followed by governments of different levels, with an amount of 159.39 billion MXN in 18 issuances; and development banks with 34 issuances per 118.02 billion MXN.

On the other hand, to characterize the users of the Mexican Taxonomy, the functions of the financial and non-financial sector actors were considered. In this way, the actors were classified based on the role they play as economic agents, their participation in the financial system and according to the financing flows relevant to their activities.

From this characterization process, the actors and potential users of this Taxonomy were classified into three groups of users:

1. Companies from the real sector: As the main user of the Taxonomy, companies from the real sector of the economy will be able to use it to mobilize efforts that allow the implementation of technologies aligned with the thresholds of the Taxonomy. The use of the Taxonomy for companies will allow them to access the sustainable finance market, through the issuance of bonds, loans, and thematic credits, improving the financing conditions of companies. With the objective of providing information on the use of financing to the financial sector, they may disclose their degree of alignment of their sales, capital expenses and ooperating expenses with the Taxonomy.

2. Credit institutions: Integrated by credit institutions that will rely on the Taxonomy to attract resources and mobilize capital towards sustainable activities, not only through holding sustainable assets, but also through their credit portfolios. Among this type of users are commercial banks, development banks and non-bank credit institutions. These types of users could report the value of their credit portfolio and other assets aligned with the Taxonomy. This type of users may use the Taxonomy to design green, social or sustainable financial products and services, based on the use of the financing granted, destined for activities aligned with the Taxonomy by the borrowers.

3. Institutional investors: This type of user includes AFORES, investment funds, and insurance companies, among others. Institutional investors will be able to make use of the Taxonomy to align their investments towards activities with social and environmental benefits, with reporting focused on the value of assets aligned with the Taxonomy. In this way, it is expected that this type of users will be the main agents for the demand for sustainable assets and that they will encourage issuers to generate greater commitments to sustainable development and to disclose their alignment with the Taxonomy.

Additionally, national agencies from different government levels may report the degree of alignment of their budgets with the objectives of the Taxonomy under the established metrics and thresholds. In the same way, the Taxonomy can serve as a guide for the preparation of frameworks to access sustainable financing markets, for public investment projects aligned with the Taxonomy.

4.2 TAXONOMY ALIGNMENT INFORMATION DISCLOSURE

Financing taxonomies require reporting guidelines to provide standardization of information and have correct applicability. The guidelines will allow a better measurement of the financial flows destined towards the environmental and social objectives determined for the Mexican case.

Prior to the information disclosure process, alignment with the present Taxonomy requires compliance with the TEC for a given economic activity. As established in the previous section, this implies that the following points must be met:

1. Eligibility of activities included in the Taxonomy,
2. Alignment of eligible activities under metrics and thresholds,
3. Compliance with the Do No Significant Harm criteria, and
4. Compliance with Minimum Safeguards.

In this sense, companies that seek to disclose their degree of alignment with the Taxonomy under the Climate Change Mitigation objective, must verify that their activities are within the activities considered in the Taxonomy based on the NAICS description. Subsequently, they must identify the cases in which the established metrics and thresholds are reached, as well as compliance with the DNSH and Minimum Safeguards criteria. Under the identified cases in which the four previous points are met, companies may disclose the percentage that such activities represent in terms of sales, capital expenditures and operating expenses.

Similarly, financial entities must check that the activities related to their financial assets comply with the four previous points. For this, it will be necessary for the agents of the real sector to be able to provide the necessary information to the financial institutions to carry out these reports. With the necessary information, financial

[12]This may be calculated as the proportion of the assets aligned with the taxonomy over the total assets of a given financial institution

institutions will be able to define which assets in their portfolio are aligned with the Taxonomy and, with this, they will be able to calculate the percentage of alignment of their assets with this instrument[12].

Although the implementation and disclosure of information in alignment with this Taxonomy at this stage is voluntary, the guidelines and reporting formats should contribute to:

a) Identify and characterize the sustainable financing flows in the various investment portfolios and credit portfolios. This characterization can be done in an aggregate manner, by type of instrument and economic sector or type of objective to which it contributes.
b) Allow the visualization, comparison and monitoring of the results related to the application of the taxonomy. This monitoring will be the responsibility of the corresponding authorities, institutions, and regulators.
c) Standardize the generation of information on financing aligned with the objectives of the taxonomy, in accordance with the guidelines established by the corresponding financial regulation.

4.3 FINAL CONSIDERATIONS

The Sustainable Taxonomy of Mexico is one of the most important efforts to promote the transition of the Mexican financial system towards sustainable development. This tool will allow to identify activities and production criteria necessary to ensure substantial contributions to the environmental and social objectives of the Taxonomy. In this way, for an optimal implementation of the taxonomy, it will be crucial to promote a correct understanding of this instrument among users and stakeholders.

s an activity classification system that serves as a guide for companies in the real sector, financial sector institutions and interested parties to identify, with clarity and certainty, those activities that can be classified as sustainable based on their alignment with the Taxonomy. However, the absence of any activity in the Taxonomy does not rule out its contribution to sustainable development, especially in this first stage, where only the first objectives of the Taxonomy have been addressed. Therefore, financial and non-financial institutions are invited to continue disclosing information on the efforts made towards sustainable development in activities or objectives not included in the Taxonomy in this first stage, including the generation of investments and commitments with concrete actions towards decarbonization[13].

In line with the aforementioned, this Taxonomy does not constitute a mandatory regulatory document on sustainable activities in Mexico, nor a public policy measure. The present Taxonomy is mainly an instrument on which investment strategies by the private sector; financial products and services related to sustainable development; regulation of financial authorities aimed at the disclosure of information on the alignment of assets with the Taxonomy or definition of thematic assets; frameworks for the issuance of sustainable-themed debt instruments, among others, can be defined. Likewise, the implementation of this Taxonomy is voluntary, as it seeks to make sustainability efforts visible in the markets, to provide better information to investors and other stakeholders interested in the Taxonomy.

Additionally, the Taxonomy is an instrument mainly dedicated to promoting the use of opportunities for the mobilization of capital towards sustainable activities, as well as generating greater certainty and better information for the markets. However, the Taxonomy should not be considered as a tool for an exact or exhaustive measurement of risks related to sustainable development or impacts on the financial or environmental materiality of users. To address risks and materiality issues, there are other frameworks that institutions should consider for proper measurement, evaluation, and disclosure of information, such as the recommendations of the Task Force on Climate-Related Financial Disclosure (TCFD) or the International Sustainability Standards Board (ISSB), and the possible regulation that may be issued regarding the disclosure of information related to sustainable development.

[13]However, this information should be disclosed separately from the measurements of alignment with the Taxonomy.

Finally, it is worth remembering that this Taxonomy is an instrument meant to be constantly updated and developed, seeking to respond to changes in market practices and needs, and to promote a timely transition towards sustainable development. As part of the foregoing, the verification of information may be done following the best current market practices, including the use of certifications, ratings, second opinions and audits by specialized private sector actors. With this, the financial authorities seek to continue promoting the development of an efficient sustainable finance market, which is adequate to the needs of financial institutions.

5. NEXT STEPS

The construction of a Taxonomy is the result of a collective effort of participants from the public, private, academic, international cooperation, multilateral organizations and non-governmental organizations, among others. A Taxonomy is a tool under constant evolution and development, responding to changes in the needs of factors related to sustainability, technical and technological capabilities, as well as development trajectories and market practices.

Following the publication of the Sustainable Taxonomy of Mexico, the next steps for its implementation during 2023 include the development and launch of an online learning tool for users of the Taxonomy. This tool will seek to disseminate information and develop capacities for the implementation of the Taxonomy and will have content from the point of view of users inside and outside the financial system. The tool will be hosted on an online education portal and will contain a completely virtual and self-managed course.

Additionally, a pilot program will be carried out to evaluate the effectiveness and use of the Taxonomy, to identify the opportunities and potential challenges that may be faced during implementation. This program will be voluntary and it will be directed towards institutions from different sectors of the financial system that seek a better understanding for the implementation of the Taxonomy and a participation in the development of this tool.

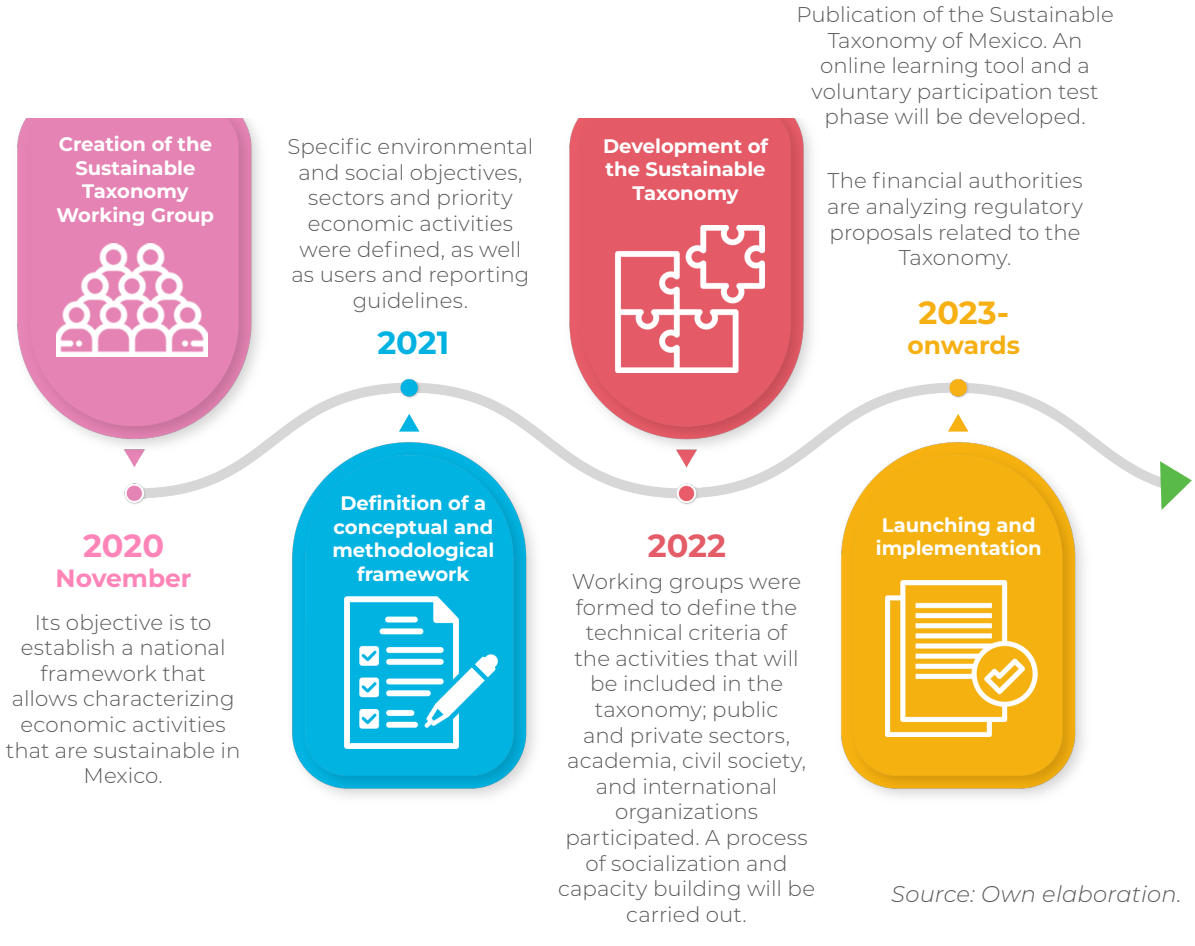
Since the beginning of 2023, and from within the CFS, the Mexican financial authorities have undertaken the task of discussing and working on the design and evaluation of possible ESG regulation measures related to the Taxonomy. These regulatory measures will be mainly focused on two axes: 1) disclosure of information related to the Taxonomy and 2) definition of ESG financial instruments. This regulation seeks to promote the mobilization of capital and the mitigation of greenwashing through the provision of clear and relevant information to the market. In line with other regulatory exercises and the needs of the financial system detected during the process of socialization of the Taxonomy, it is contemplated that these measures consider a sufficient transition period which allows financial institutions to build the necessary capacities for the implementation of Taxonomy-related requirements.

As part of the development processes of the Taxonomy, in the medium and long term, the development of the rest of the objectives of the Taxonomy will continue, including the conclusion of the TEC for the objective of Sustainable Cities and the rest of the social objectives. Additionally, through a collaborative process, and considering the needs of the market, the economic activities not included in this document will continue to be

developed, and the metrics and thresholds will be reviewed in cases where they require adaptation or updating.

Finally, it is important to remember that the development of a Taxonomy is a process under continuous adaptation and evolution in the face of technological and market changes that may redefine notions related to sustainable development. Therefore, the Taxonomy will require periodic updates that reflect the relevant

Figure 1.8. Construction process of the Sustainable Taxonomy of Mexico



Source: Own elaboration.

REFERENCES

Banco Mundial (2020, junio). Developing a National Green Taxonomy. Available at: https://documents1.worldbank.org/curated/en/953011593410423487/pdf/Developing-a-National-Green-Taxonomy-A-World-Bank-Guide.pdf

Bloomberg (2019, mayo). Gender Reporting Framework. International Women in Mining. Available at: https://data.bloomberglp.com/company/sites/46/2019/05/EXEC_GEI_Index_GenderReportingFramework_PDF_V6.pdf

CBI (2021). Taxonomía de Climate Bonds. Available at: https://www.climatebonds.net/files/page/files/cbi_taxonomy_tables-01_sp_1c.pdf

CCFV (2022). Tendencias de las finanzas sustentables en México y el mundo durante el 2021. Consejo Consultivo de Finanzas Verdes. Available at: https://www.ccfv.mx/blog/tendencias-del-2021

CICETE-UNDP (2020). Technical Report on SDG Finance Taxonomy. China. Available at: https://www.undp.org/china/publications/technical-report-sdg-finance-taxonomy

Comisión Europea (2021). Convocatoria de comentarios sobre los borradores de informes de la Plataforma sobre Finanzas Sostenibles sobre una taxonomía social y sobre una taxonomía ampliada para apoyar la transición económica. Comisión Europea. Available at: https://ec.europa.eu/info/publications/210712-sustainable-finance-platform-draft-reports_en

Comisión Europea (s.f.). EU Taxonomy Compass. https://ec.europa.eu/sustainable-finance-taxonomy/taxonomy-compass

CONSAR (2019, septiembre). Disposiciones de carácter general en materia financiera de los Sistemas de Ahorro para el Retiro. Diario Oficial de la Federación del 18 de septiembre de 2019. Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5572645&fecha=18/09/2019#gsc.tab=0

El Instituto Danés de Derechos Humanos (2017). DAAAC & salud y los derechos sexuales y reproductivos. Available at: https://www.humanrights.dk/files/media/migrated/aaaq-srhr_issue_paper_dihr_2017_spanish.pdf

EUR-Lex (s.f.). EUR-Lex - Sustainable Finance Available at: https://eur-lex.europa.eu/EN/legal-content/glossary/sustainable-finance.html

FIRA (2020, octubre). Marco de Referencia del Bono Social con enfoque de Género. Sostenibilidad FIRA. Available at: https://www.fira.gob.mx/InfEspDtoXML/abrirArchivo.jsp?abreArc=85584

Foro Económico Mundial (2022, julio). Global Gender Gap Report 2022 | World Economic Forum. Global Gender Gap Report 2022. Available at: https://www3.weforum.org/docs/WEF_GGGR_2022.pdf

GFLAC (2020, octubre). Emite FIRA el bono con equidad de género. Finanzas Verdes para América Latina y el Caribe. Available at: https://greenfinancelac.org/es/recursos/novedades/emite-fira-el-primer-bono-con-equidad-de-genero/

GIZ-Semarnat (2015). Metodología para la priorización de medidas de adaptación frente al cambio climático. Guía de uso y difusión. Available at: https://www.gob.mx/cms/uploads/attachment/file/223039/metodologia-priorizacion_guia-uso-difusion.pdf

Gobierno de Colombia (2022). Taxonomía Verde de Colombia. Available at: https://www.taxonomiaverde.gov.co/webcenter/ShowProperty?nodeId=/ConexionContent/WCC_CLUSTER-191401

Gobierno de México (2014). Compromisos de Mitigación y Adaptación ante el Cambio Climático para el Periodo 2020-2030. Available at: https://www.gob.mx/cms/uploads/attachment/file/162974/2015_indc_esp.pdf

Gobierno de México (2019a, julio). Plan Nacional de Desarrollo. Publicado en el Diario Oficial de la Federación el 12 de julio de 2019. Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5565599&fecha=12/07/2019#gsc.tab=0

Gobierno de México (2019b, noviembre). Estrategia Nacional para la Implementación de la Agenda 2030. Gobierno de México. Available at: https://www.gob.mx/cms/uploads/attachment/file/514075/EN-A2030Mx_VF.pdf

Gobierno de México (2021, noviembre). Emisiones de bonos sustentables | Banco Nacional de Obras y Servicios Públicos- Available at: https://www.gob.mx/banobras/acciones-y-programas/bonos-sustentables-con-perspectiva-de-genero-314453

Gobierno de México (2021, diciembre). Norma Mexicana NMX R 025 SCFI 2015 en Igualdad Laboral y No Discriminación. Available at: https://www.gob.mx/inmujeres/acciones-y-programas/norma-mexicana-nmx-r-025-scfi-2015-en-igualdad-laboral-y-no-discriminacion

Gobierno de México, SEMARNAT, & INECC (2022, noviembre). Contribución Determinada a nivel Nacional Actualización 2022. Available at: https://unfccc.int/sites/default/files/NDC/2022-11/Mexico_NDC_UNFCCC_update2022_FINAL.pdf

Grupo Experto Técnico en Finanzas Sostenibles de la Unión Europea (2020, marzo). Reporte técnico. Taxonomía: Informe final del Grupo Técnico de Expertos en Finanzas Sostenibles. Available at: https://finance.ec.europa.eu/system/files/2020-03/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf

ICMA (2021, mayo). Descripción general y recomendaciones para las taxonomías de finanzas sostenibles. Available at: https://www.icmagroup.org/assets/documents/Sustainable-finance/ICMA-Overview-and-Recommendations-for-Sustainable-Finance-Taxonomies-May-2021-180521.pdf

IDFC (2015). Mapeo de Finanzas Verdes para 2014. Available at: https://www.cbd.int/financial/gcf/idfc-mapping2015.pdf

INECC (2021a). Municipios vulnerables al cambio climático. Atlas Nacional de Vulnerabilidad al Cambio Climático. Available at: https://atlasvulnerabilidad.inecc.gob.mx/page/fichas/ANVCC_LibroDigital.pdf

INECC (2021b). Estimación de los costos y beneficios asociados a la implementación de acciones de mitigación para el cumplimiento de los objetivos de reducción de emisiones comprometidos en el Acuerdo de París. Available at: https://www.gob.mx/cms/uploads/attachment/file/756201/157_2021_Costo_Beneficio_Mitigacion_Acuerdo_Paris.pdf

INEGI (2020). División territorial. Cuéntame de México. Cuéntame INEGI. Available at: https://cuentame.inegi.org.mx/territorio/division/default.aspx#

INMUJERES (2020). PROIGUALDAD 2020-2024, Programa Nacional para la Igualdad Mujeres y Hombres 2020-2024. Publicado en el Diario Oficial de la Federación el 22 de diciembre de 2020. Available at: https://www.dof.

gob.mx/nota_detalle.php?codigo=5608467&fecha=22/12/2020#gsc.tab=0

INMUJERES (s.f.). Sistema de indicadores de género. Sistema de Indicadores de Género. Available at: http://estadistica.inmujeres.gob.mx/formas/index.php

Instituto de Investigaciones Jurídicas, UNAM (s.f.). VIII. METODOLOGÍA PARA LA CONSTRUCCIÓN DE ÍNDICES. Available at: https://archivos.juridicas.unam.mx/www/bjv/libros/6/2805/10.pdf

Khokhar, T. (2017, abril). Las emisiones de CO_2 aumentaron 60 % entre 1990 y 2013. Available at: https://blogs.worldbank.org/es/opendata/grafica-las-emisiones-de-co2-aumentaron-60-entre-1990-y-2013

NATIXIS (2022, marzo). Propuesta de taxonomía social de la UE: más simple y significativa pero a mitad de camino. Available at: https://gsh.cib.natixis.com/our-center-of-expertise/articles/eu-social-taxonomy-proposal-simpler-and-meaningful-but-half-way-through

OIT (2017, mayo). Camino a la diversidad de género: Buenas prácticas de empresa. OIT. Available at: https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---act_emp/documents/publication/wcms_578768.pdf

Plataforma en Financiamiento Sostenible (2022). Reporte Final de Taxonomía Social. Comisión Europea. Available at: https://finance.ec.europa.eu/system/files/2022-08/220228-sustainable-finance-platform-finance-report-social-taxonomy_en.pdf

J. C. Rivas Valdivia e Y. Gaudin, "Diagnóstico de las brechas estructurales en México: una aproximación sistémica general", Documentos de Proyectos (LC/TS.2021/207; LC/MEX/TS.2021/26), Ciudad de México, Comisión Económica para América Latina y el Caribe (CEPAL), 2021. Available at: https://repositorio.cepal.org/bitstream/handle/11362/47671/1/S2100989_es.pdf

Sarukhán, J., et al. (2017). Capital natural de México. Síntesis: evaluación del conocimiento y tendencias de cambio, perspectivas de sustentabilidad, capacidades humanas e institucionales. Comisión Nacional para el Conocimiento y Uso de la Biodiversidad, México. Available at: http://www2.biodiversidad.gob.mx/pais/pdf/CapNatMex/Sintesis_CNM_2017.pdf

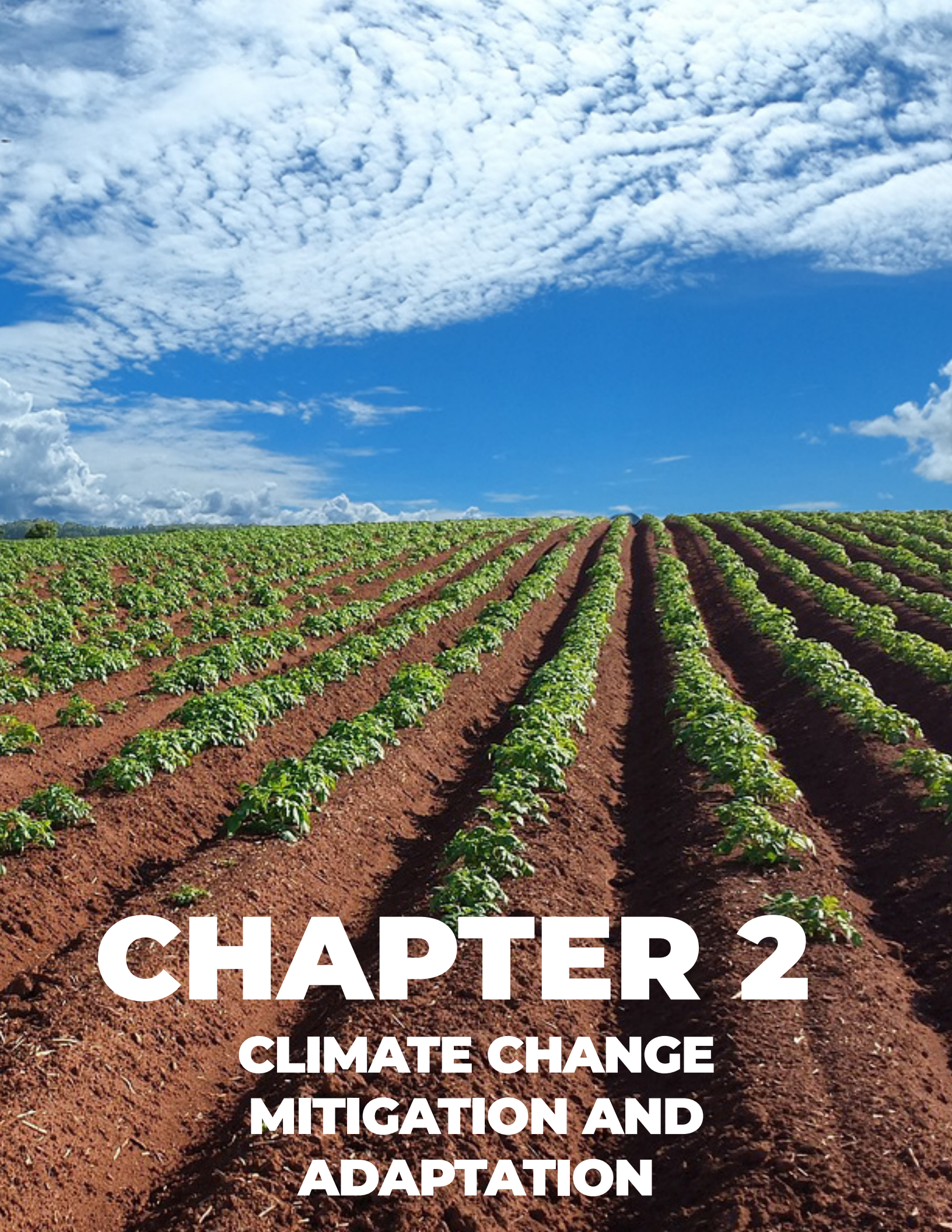
SEMARNAT (2021, noviembre). PROGRAMA Especial de Cambio Climático 2021-2024. Publicado en el Diario Oficial de la Federación el 8 de noviembre de 2021. Available at: https://www.gob.mx/cms/uploads/attachment/file/685848/SEMARNAT_081121_EV.PDF

SHCP (2014). Consejo de Estabilidad del Sistema Financiero. Available at: https://www.cesf.gob.mx/

SHCP (2020). Programa Nacional de Financiamiento del Desarrollo 2020-2024. Finanzas Públicas y Presupuesto. Available at: https://www.finanzaspublicas.hacienda.gob.mx/work/models/Finanzas_Publicas/docs/pronafide/pronafide2020.pdf

UN WOMEN (2021). Equality Means Business: Folleto WEPs | WEP. Available at: https://www.weps.org/sites/default/files/2020-06/WEPs%20Brochure%20%28web%29%201%20June%202020.pdf

UNFCCC (2021). ¿Qué es el Protocolo de Kyoto? | CMNUCC. UNFCCC. Available at: https://unfccc.int/es/kyoto_protocol



CHAPTER 2

CLIMATE CHANGE MITIGATION AND ADAPTATION

1 CLIMATE CHANGE MITIGATION

The climate change emergency has led governments of different countries to mobilize resources in favor of climate change mitigation and adaptation, mainly focused on reducing GHG emissions and generating adaptation measures for populations, economic activities, and strategic infrastructure that present high levels of vulnerability to climate change. Although most of the actions and projects to fight this global phenomenon have been mainly promoted by public sector institutions, more private sector actors are interested in making investments with low carbon intensity and in favor of building resilience to climate change.

As part of the inclusion of the perspective of the impacts and risks associated with climate change suffered by companies, a set of tools have been developed to facilitate investor decision-making. An example of this is the development of various taxonomies, in the international context, with a strong focus on mitigation and adaptation to climate change actions.

Due to its geographical location, Mexico is a country considered highly vulnerable to the effects of climate change. According to the Organization for Economic Cooperation and Development (OECD), 68% of the population may suffer some type of consequence from the increase of the temperature in the planet, although it only contributes to 1.2% of the global polluting emissions. Because of this, the Government of Mexico, with the intention of encouraging the mobilization of capital towards projects and activities focused on reducing the effects of climate change, decided to join international efforts to create a Taxonomy with an emphasis on climate change mitigation and adaptation objective.

For the development of the TEC within these objectives, the EU Taxonomy has been taken as the main reference, and the Green Taxonomy of Colombia has been considered as an important reference at a regional level. In this way, comparability between taxonomies to facilitate capital flows through different jurisdictions and contribute to the development of a sustainable financing market in Mexico is guaranteed.

As mentioned in the previous chapter, to guarantee the alignment of the activities with the Taxonomy, including the objective of Climate Change Mitigation, the following points must be met:

1. Eligibility of activities included in the Taxonomy,
2. Alignment of eligible activities under metrics and thresholds,
3. Compliance with the Do No Significant Harm (DNSH) criteria, and
4. Compliance with Minimum Safeguards.

In this way, an economic activity seeking to demonstrate its alignment with the Taxonomy under the objective of Climate Change Mitigation, must verify its eligibility, followed by compliance with the operation under the metrics and thresholds established in the technical sheets included in this chapter. Likewise, the DNSH criteria for other environmental objectives must be met, in accordance with what is established for each activity, and with the minimum safeguards of the guidelines established in the OECD Guidelines for Multinational Companies, the Declaration of the International Labor Organization (ILO) concerning the Fundamental Principles and Rights at Work, and the UN Guiding Principles for Business and Human Rights. The aforementioned, without prejudice to compliance with the laws and regulations in force in Mexico, in order to guarantee that economic

activities do not generate negative impacts regarding social and governance issues, including –but not limited to, issues related to health or working conditions, respect for indigenous peoples and cultural heritage.

In this first stage of the Sustainable Taxonomy of Mexico, six Sectoral Technical Groups were established to discuss the TEC and the economic activities included in the Taxonomy. These groups were coordinated by Ernesto Infante Barbosa of the International Finance Corporation (IFC), with the support of the Lead Advisors of each technical group. Within the GTSyT, which had the participation of different experts (for more details on the members, see the Annex. Participants of the GTSyT), the most relevant aspects for the selection of eligible activities were discussed, metrics and thresholds were established, and DNSH criteria were defined. The analysis started from a total of 171 activities in six economic sectors identified in a preliminary way by the Sustainable Taxonomy Working Group, to culminate in 124 TEC in this first stage. The economic sectors identified under NAICS include:

1. Agriculture, animal ranching and farming, and forestry use,
2. Electrical Energy and Water Supply (Generation, transmission, distribution and commercialization to the final consumer),
3. Construction,
4. Manufacturing industries,
5. Transportation, and
6. Waste management and remediation services.

ECONOMIC SECTOR

2.1 Agriculture, Animal Ranching and Farming, and Forestry Use

The agricultural sector is one of the most relevant in Mexico due to its contribution to the country's economic development, mainly in rural areas, as well as its relationship with food production and, therefore, with food security and self-sufficiency. Due to its geographical location and the diversity of climates that exist throughout the national territory, Mexico has great potential to produce different high-quality agricultural and animal products. Specifically, the variety of plant genetic resources available in the country has benefited the development of native crops such as corn, beans, chili, nopal, squash, among others, which have also been the basis of the diet of Mexicans (SNICS, 2017).

In recent years, the sector has registered significant growth, led mainly by the increase in exports of agricultural, livestock and fishery products. This has managed to consolidate Mexico as one of the main exporting countries of agri-food products, occupying the seventh position worldwide and achieving a surplus balance for the sector, since 2015 (SIAP, 2022).

In our country, around 5.4 million people are engaged in agricultural activities, while 869 thousand do so in animal ranching and farming activities. During 2022 the activities of the agricultural sector generated $1,336,086 billion MXN, of which 56.6% and 39% came from the agricultural and livestock sectors, respectively (SIAP, 2022). However, the agricultural sector in Mexico faces important challenges that affect its productivity, competitiveness, and performance, such as climate change. According to the INEGyCEI, in 2019 the activities of the agriculture sector and other land uses contributed 26.33% of the total net emissions (INECC, 2022), positioning itself as the third source of polluting emissions in the country. Among the activities with the greatest contribution are enteric fermentation, manure management, burning agricultural residues and the use of synthetic fertilization products.

Similarly, the agricultural sector is highly vulnerable to the effects of climate change. An example of this is that 60% of the country's agricultural areas are exposed to droughts, while 8% of the land is susceptible to flooding. Livestock activities are also impacted by climate variability, promoting a decrease in the availability and quality of forage, a higher incidence of diseases in cattle and heat stress, among others, which decrease the productivity of the subsector (SADER, 2022).

In accordance with the mitigation commitments established by Mexico in its 2015 NDC, the agricultural sector must reduce 7 MtCO2e by 2030. Similarly, in the 2022 update of the NDC, to reduce emissions from the sector, the incorporation of agroecological and conservation practices is contemplated, reduction of agricultural burning, as well as carrying out measures for the capture and management of gases derived from livestock waste.

In Mexico, forest exploitation activities are also considered within the agricultural sector and, in terms of polluting emissions, the availability of forest land represents one of the main carbon sinks in the country, capturing 27% of total emissions, which is equivalent to 192.75 GgCO2e (INECC, 2022). This highlights even more relevance to the development of sustainable forest management practices that do not affect biological diversity and forest productivity, while incorporating community and ecosystem conservation practices.

On the other hand, in the analysis of the links between the targets of each SDG, and the NDCs, with the economic sectors, it was identified that the agricultural sector has a direct impact on SDG 2 “Zero Hunger”, SDG 6 “Clean Water and Sanitation”, SDG 10 “Reduced Inequalities”, SDG 12 “Responsible Consumption and Production”, SDG 13 “Climate Action” and SDG 15 “Life on Land”.

In this sense, considering the climate change mitigation and adaptation needs of the agricultural sector, as well as its potential contribution to meeting the objectives of the 2030 Agenda for Sustainable Development, the sector was included in the Sustainable Taxonomy under climate goals of mitigation and adaptation. To define the economic activities that contribute to the sustainability of the sector, the Agricultural Sectoral Technical Group was created, which was divided into three working subgroups:

- Agriculture
- Forestry use
- Animal ranching and farming

This resulted in the development of the TEC of 64 economic activities in the subsectors of agriculture (53), forestry use (4), and animal ranching and farming (7) with which it will seek to promote the development of measures that favor climate change mitigation and adaptation in the sector, through the incorporation of agroecological practices, such as soil conservation, integration of cover crops, and replacement of synthetic fertilizers with organic fertilizers, among others. Likewise, in the forestry use subsector, sustainable use practices of timber and non-timber resources will be promoted while in the animal ranching and farming subsector actions such as livestock waste management, delimitation of dedicated lands to grazing, and inclusion of conservation lands are some of the actions that will facilitate the transition towards an agricultural sector with greater productivity, climate resilience and lower emissions.

The work was carried out through sessions with the Technical Group, and parallel sessions for each of the subsectors, coordinated thanks to the support of the lead advisor Ángel Manuel O'Dogherty Madrazo, Deputy General Director of Sectoral Intelligence of FIRA. In addition, experts from the Ministry of Agriculture and Rural Development (SADER), the Ministry of Environment and Natural Resources (SEMARNAT), the Institute

of Ecology and Climate Change (INECC), the National Institute of Ecology, A.C. (INECOL), National Finance for Rural Development (FND), the National Forestry Commission (CONAFOR), the Biodiversity Financial Initiative (BIOFIN-UNDP), BBVA México, S.A. and the IFC participated.

Subsector: Agriculture

Economic Activities

- **111110.** Soybean farming
- **111121.** Safflower farming
- **111122.** Sunflower farming
- **111129.** Other oilseed annual farming
- **111131.** Bean farming
- **111132.** Chickpea grain farming
- **111139.** Other legumes farming
- **111140.** Wheat farming (Not Perennial)
- **111151.** Corn grain farming
- **111152.** Forage corn farming
- **111160.** Rice farming
- **111191.** Grain sorghum farming
- **111192.** Oat grain farming
- **111193.** Barley grain farming
- **111194.** Forager sorghum farming
- **111195.** Forage oat farming
- **111199.** Other cereals farming
- **111211.** Tomato or red tomato farming
- **111212.** Chili farming
- **111213.** Onion farming
- **111214.** Melon farming
- **111215.** Green tomato farming (not perennial)
- **111216.** Potato farming (Not perennial)
- **111217.** Pumpkin farming
- **111218.** Watermelon farming
- **111219.** Other vegetables farming (not perennial)
- **111310.** Orange farming
- **111321.** Lemon farming
- **111329.** Other citric farming
- **111331.** Coffee farming
- **111332.** Banana farming
- **111333.** Mango farming
- **111334.** Avocado farming
- **111335.** Grape farming
- **111336.** Apple farming
- **111337.** Cacao farming
- **111339.** Other non-citrus fruit trees and nuts farming
- **111411.** Tomato farming in greenhouses and other protected agricultural structures
- **111412.** Strawberry farming in greenhouses and other protected agricultural structures
- **111413.** Berries farming in greenhouses and other protected agricultural structures, except strawberries
- **111414.** Chili farming in greenhouses and other protected agricultural structures
- **111415.** Apple farming in greenhouses and other protected agricultural structures
- **111416.** Cucumber farming in greenhouses and other protected agricultural structures
- **111419.** Other food products farming in greenhouses and other protected agricultural structures
- **111429.** Other non-food farming in greenhouses and other sheltered agricultures
- **111910.** Tobacco farming
- **111920.** Cotton farming
- **111930.** Sugar cane farming
- **111941.** Alfalfa farming
- **111942.** Pasture farming
- **111991.** Alcoholic Agave farming
- **111992.** Peanut farming
- **111999.** Other farming

Economic Activity		**111110**	**Soybean farming**
Description	**Includes**	Economic units mainly dedicated to the farming of soybeans.	
	Excludes	N/A.	
	Products	Soybean farming.	
Economic Activity		**111121**	**Safflower farming**
Description	**Includes**	Economic units mainly dedicated to the farming of safflower to harvest the seed.	
	Excludes	N/A.	
	Products	Safflower farming.	
Economic Activity		**111122**	**Sunflower farming**
Description	**Includes**	Economic units mainly dedicated to the farming of sunflower with the purpose of harvesting the seed.	
	Excludes	N/A.	
	Products	Sunflower farming	
Economic Activity		**111129**	**Other oilseed annual farming**
Description	**Includes**	Economic units mainly engaged in the annual farming of other oilseeds, such as canola, flaxseed, sesame, and other annual oilseeds not classified elsewhere. Also includes: economic units mainly dedicated to the farming of oilseeds to harvest the entire plant for the use of livestock, and economic units that combine the farming of different oilseeds when it is impossible to determine which is the main activity.	
	Excludes	Soybean farming (111110, Soybean farming); safflower (111121, Safflower farming); sunflower (111122, Sunflower farming); cotton (111920, Cotton farming); of peanuts (111992, Peanuts farming), and economic units that combine the farming of different plant species when it is impossible to determine which is the main activity (111999, Other farming).	
	Productos	Other oilseeds annual farming.	
Economic Activity		**111131**	**Bean farming**
Description	**Includes**	Economic units mainly dedicated to the farming of beans with the purpose of harvesting the grain.	
	Excludes	Green bean farming (111219, Other vegetables farming).	
	Products	Bean farming	

Economic Activity		**111132**	**Chickpea grain farming**
Description	**Includes**	Economic units mainly dedicated to the farming of chickpeas in order to harvest the grain.	
	Excludes	N/A	
	Products	Chickpea grain farming	
Economic Activity		**111139**	**Other legumes farming**
Description	**Includes**	Economic units mainly dedicated to the farming of legumes, such as lentils, peas, broad beans, and other grain legumes not classified elsewhere. Also includes: economic units mainly dedicated to the farming of legumes in order to harvest the entire plant for livestock use, and economic units that combine the farming of different legumes for grain when it is impossible to determine what the main activity is.	
	Excludes	Soybean farming (111110, Soybean farming); of beans (111131, Bean farming); chickpea (111132, Chickpea grain farming); green beans, peas, beans whose harvest is done green (111219, Other vegetables farming); of peanuts (111992, Peanuts farming); economic units that combine agricultural activities with the animal ranching and farming when it is impossible to determine which is the main activity (111993, Agricultural activities combined with animal ranching and farming), and economic units that combine the farming of different plant species when it is impossible to determine which is the main activity (111999, Other farming).	
	Products	Other legumes farming.	
Economic Activity		**111140**	**Wheat farming (not perennial)**
Description	**Includes**	Economic units mainly dedicated to the farming of wheat.	
	Excludes	N/A.	
	Products	Wheat farming.	
Economic Activity		**111151**	**Corn grain farming**
Description	**Includes**	Economic units mainly dedicated to the farming of white, yellow, purple, popcorn, and peanut corn, to harvest the grain.	
	Excludes	Forage corn farming (111152, Forage corn farming), and the corn or sweet corn farming (111219, Other vegetables farming).	
	Productos	Corn grain farming.	
Economic Activity		**111152**	**Forage corn farming**
Description	**Includes**	Economic units mainly dedicated to the farming of corn to harvest the entire plant to be consumed by livestock.	
	Excludes	Grain corn farming (111151, Grain corn farming), and economic units that combine agricultural activities with animal ranching and farming when it is impossible to determine which is the main activity (111993, Agricultural Activities Combined with Animal Production).	
	Products	Forage corn farming.	

Economic Activity		**111160**	**Rice farming**
Description	**Includes**	Economic units mainly dedicated to the farming of rice with the purpose of harvesting the grain.	
	Excludes	Wild rice farming (111199, Other cereals farming).	
	Productos	Rice farming.	
Actividad Económica		**111191**	**Sorghum grain farming**
Description	**Includes**	Economic units mainly dedicated to the farming of sorghum for the purpose of harvesting the grain.	
	Excludes	Forage sorghum farming (111194, Sorghum Forage Farming).	
	Productos	Sorghum grain farming.	
Actividad Económica		**111192**	**Oat grains farming**
Description	**Includes**	Economic units mainly dedicated to the farming of oats with the purpose of harvesting grain.	
	Excludes	Farming of forage oats (111195, Farming of forage oats).	
	Productos	Oat grains farming.	
Actividad Económica		**111193**	**Barley grain farming**
Description	**Includes**	Economic units mainly dedicated to the farming of barley with the purpose of harvesting the grain.	
	Excludes	Forage barley farming (111199, Other cereals farming).	
	Productos	Barley grain farming.	
Actividad Económica		**111194**	**Sorghum forage farming**
Description	**Includes**	Economic units mainly dedicated to the farming of sorghum to harvest the entire plant to be consumed by livestock. Also includes: economic units mainly dedicated to the farming of broom sorghum.	
	Excludes	Sorghum grain farming (111191, Sorghum grain farming), and economic units that combine agricultural activities with animal ranching and farming when it is impossible to determine which is the main activity (111993, Agricultural Activities Combined with Animal Production).	
	Productos	Sorghum forage farming.	
Actividad Económica		**111195**	**Oat forage farming**
Description	**Includes**	Economic units mainly dedicated to the farming of oats with the purpose of	
	Excludes	Oat grain farming (111192, Oat grain farming), and economic units that combine agricultural activities with animal ranching and farming when it is impossible to determine which is the main activity (111993, Agricultural Activities Combined with Animal Production).	
	Productos	Oat forage farming.	

Economic Activity		**111199**	**Other cereals farming**
Description	**Includes**	Economic units mainly dedicated to the farming of cereals, such as millet, rye, birdseed, wild rice, and other cereals not classified elsewhere, and to the farming of cereals not classified elsewhere for the purpose of harvesting the entire plant to be consumed by livestock. Also includes: economic units that combine the farming of different cereals when it is impossible to determine which is the main activity.	
	Excludes	Rice farming (111160, Rice farming); farming of sorghum grain (111191, Sorghum grain farming); grain oats (111192, Oat grain farming); of barley grain (111193, Barley grain farming); forage sorghum (111194, Sorghum forage farming); of forage oats (111195, Oat forage farming); economic units that combine agricultural activities with animal production when it is impossible to determine which is the main activity (111993, Agricultural Activities Combined with Animal Production); economic units that combine agricultural activities, animal ranching and farming and forestry use when it is impossible to determine which is the main activity (111995, Agricultural Activities Combined with Animal Production and Forestry Use), and economic units that combine the farming of different plant species when it is impossible to determine what the activity main is (111999, Other farming).	
	Products	Other cereals farming.	
Economic Activity		**111211**	**Tomato or red tomato farming**
Description	**Includes**	Economic units mainly dedicated to the farming of tomato or red tomato in open field.	
	Excludes	Tomato or red tomato farming in greenhouses and other protected agricultural structures (111411, Tomato farming in greenhouses and other protected agricultural structures).	
	Products	Tomato or red tomato farming.	
Economic Activity		**111212**	**Chili farming**
Description	**Includes**	Economic units mainly dedicated to the farming of chili in open field.	
	Excludes	Farming of chili in greenhouses and other protected agricultural structures (111414, Chili farming in greenhouses and other protected agricultural structures).	
	Productos	Chili farming.	
Economic Activity		**111213**	**Onion farming**
Description	**Includes**	Economic units mainly dedicated to the farming of onion in open field.	
	Excludes	Onion farming in greenhouses and other protected agricultural structures (111419, Other food products farming in greenhouses and other sheltered agricultural structures).	
	Products	Onion farming.	
Economic Activity		**111214**	**Melon farming**
Description	**Includes**	Economic units mainly dedicated to the farming of onion in open field.	
	Excludes	Onion farming in greenhouses and other protected agricultural structures (111419, Other food products farming in greenhouses and other sheltered agricultural structures).	
	Products	Melon farming.	

Economic Activity		**111215**	**Green tomato farming (not perennial)**
Description	**Includes**	Economic units mainly dedicated to the farming of green tomatoes in open field.	
	Excludes	Green tomato farming in greenhouses and other protected agricultural structures (111419, Other food products farming in greenhouses and other sheltered agricultural structures).	
	Products	Green tomato farming.	
Economic Activity		**111216**	**Potato farming (No perennial)**
Description	**Includes**	Economic units mainly dedicated to the farming of potatoes in open field.	
	Excludes	Potato farming in greenhouses and other protected agricultural structures (111419, Other food products farming in greenhouses and other sheltered agricultural structures).	
	Products	Potato farming.	
Economic Activity		**111217**	**Pumpkin farming**
Description	**Includes**	Economic units mainly dedicated to the farming of squash and zucchini in open field.	
	Excludes	Pumpkin and zucchini farming in greenhouses and other protected agricultural structures (111419, Other food products farming in greenhouses and other protected agricultural structures).	
	Products	Pumpkin farming.	
Economic Activity		**111218**	**Watermelon farming**
Description	**Includes**	Economic units mainly dedicated to the farming of watermelon in open field.	
	Excludes	Farming of watermelon in greenhouses and other protected agricultural structures (111419, Other food products farming in greenhouses and other sheltered agricultural structures).	
	Products	Watermelon farming.	
Economic Activity		**111219**	**Other vegetables farming (not perennial)**
Description	**Includes**	Economic units mainly dedicated to the farming of vegetables in open field, such as broccoli, lettuce, garlic, carrots, beets, asparagus, nopal vegetables, cucumber and other vegetables not classified elsewhere. It also includes: the farming of corn or sweet corn; green beans, peas, broad beans harvested green, and economic units that combine the farming of different vegetables when it is impossible to determine which is the main activity.	
	Excludes	Corn grain farming (111151, Corn grain farming); to the farming of forage corn (111152, Forage corn farming); open field strawberry farming (111339, Other non-citrus fruit trees and nuts farming); Cucumber farming in greenhouses and other protected agricultural structures (111416, Cucumber farming in greenhouses and other protected agricultural structures); the farming of food plants in greenhouses and other protected agricultural structures, and the production of vegetable seedlings and seedlings in nurseries (111419, Other food products farming in greenhouses and other protected agricultural structures); to the farming of improved vegetable seeds; sugar and forage beet; of forage cabbage; economic units that combine the farming of different plant species when it is impossible to determine which is the main activity (111999, Other farming); economic units that combine agricultural activities with animal ranching and farming when it is impossible to determine which is the main activity (111993, Agricultural activities combined with animal ranching and farming), and economic units that combine agricultural activities, animal ranching and farming and forestry use when it is impossible to determine which is the main activity (111995, Agricultural activities combined with animal ranching and farming and forestry use).	
	Products	Other vegetables farming.	

Economic Activity		**111310**	**Orange farming**
Description	**Includes**	Economic units mainly dedicated to the farming of oranges.	
	Excludes	Production of rootstocks and young orange trees (111429, Other non-food farming in greenhouses and other protected agricultural structures).	
	Products	Orange farming..	
Economic Activity		**111321**	**Lemon farming**
Description	**Includes**	Economic units mainly dedicated to the farming of lemon.	
	Excludes	Production of rootstocks and young lemon trees (111429, Other non-food farming in greenhouses and other protected agricultural structures).	
	Products	Lemon farming.	
Economic Activity		**111329**	**Other citric farming**
Description	**Includes**	Economic units dedicated primarily to the farming of citrus fruits, such as grapefruit, mandarin orange, lime, tangerine, citron, and other citrus fruits not classified elsewhere. Also includes: economic units that combine the farming of different citrus species when it is impossible to determine which is the main activity.	
	Excludes	Orange farming (111310, Orange farming); lemon farming (111321, Lemon farming); to the production of rootstocks and young citrus trees (111429, Other non-food farming in greenhouses and other protected agricultural structures), and economic units that combine the farming of different plant species when it is impossible to determine what is the main activity (111999, Other farming).	
	Products	Other citrus farming.	
Economic Activity		**111331**	**Coffee farming**
Description	**Includes**	Economic units mainly dedicated to the farming of coffee.	
	Excludes	Production of rootstocks and young coffee plants (111429, Other non-food farming in greenhouses and other protected agricultural structures).	
	Products	Coffee farming.	
Economic Activity		**111332**	**Banana farming**
Description	**Includes**	Economic units mainly dedicated to the farming of bananas.	
	Excludes	Production of banana seedlings (111429, Other non-food farming in greenhouses and other protected agricultural structures).	
	Products	Banana farming.	
Economic Activity		**111333**	**Mango farming**
Description	**Includes**	Economic units mainly dedicated to the farming of mango.	
	Excludes	Production of rootstocks and young mango trees (111429, Other non-food farming in greenhouses and other sheltered agricultural structures).	
	Productos	Mango farming.	

Economic Activity		**111334**	**Avocado farming**
Description	**Includes**	Economic units mainly dedicated to the farming of avocado.	
	Excludes	Production of graft and young avocados (111429, Other non-food farming in greenhouses and other sheltered agricultural structures).	
	Products	Avocado farming.	
Economic Activity		**111335**	**Grape farming**
Description	**Includes**	Economic units mainly dedicated to the farming of grapes.	
	Excludes	Production of seedlings and young vine plants (111429, Other non-food farming in greenhouses and other protected agricultural structures).	
	Products	Grape farming.	
Economic Activity		**111336**	**Apple farming**
Description	**Includes**	Economic units mainly dedicated to the farming of apples.	
	Excludes	Apple farming in greenhouses and other protected agricultural structures (111415, Apple farming in greenhouses and other protected agricultural structures), and to the production of rootstocks and young apple trees (111429, Other non-food farming in greenhouses and other protected agricultural structures).	
	Productos	Apple farming.	
Economic Activity		**111337**	**Cacao farming**
Description	**Includes**	Economic units mainly dedicated to the farming of cocoa.	
	Excludes	N/A	
	Products	Cacao farming.	

Economic Activity		**111339**	**Other non-citrus fruit trees and nuts farming**
Description	**Includes**	Economic units mainly dedicated to the farming of other non-citrus fruit trees, such as guava, blackberry, papaya, plums, pineapple, peach, sapodilla, olive, and nuts, such as almonds, pecan nuts or paper shells, Castilla nuts, pistachios, hazelnuts, nutmeg, macadamia. Also includes: farming of strawberries, palm nuts, and economic units that combine the farming of different species of fruit trees and nuts when it is impossible to determine which is the main activity.	
	Excludes	Farming of melon (111214, Melon farming); watermelon (111218, Watermelon farming); strawberry farming in greenhouses and other protected agricultural structures (111412, Strawberry farming in greenhouses and other protected agricultural infrastructure); the farming of berries in greenhouses and other protected agricultural infrastructure (111413, Berries farming in greenhouses and other protected agricultural infrastructures, except strawberries); the farming of other food products in greenhouses and other protected agricultural infrastructure (111419, Other food products farming in greenhouses and other protected agricultural infrastructure); to the production of propagation materials for fruit trees and nuts, such as seedlings, rootstocks, young fruit trees, and fruit tree seedlings (111429, Other non-food farming in greenhouses and other protected agricultural infrastructure); to the collection of wild fruits (113212, Collection of forestry products); economic units that combine agricultural activities with animal production when it is impossible to determine which is the main activity (111993, Agricultural activities combined with animal production); economic units that combine agricultural activities, animal ranching and farming and forest use when it is impossible to determine which is the main activity (111995, Agricultural activities combined with animal ranching and farming and forest management), and economic units that combine the farming of different plant species when it is impossible to determine what the main activity is (111999, Other farming).	
	Products	Other non-citrus fruit trees and nuts farming.	
Economic Activity		**111411**	**Tomato farming in greenhouses and other protected agricultural structures**
Description	**Includes**	Economic units mainly dedicated to the farming of tomatoes in greenhouses and other protected agricultural infrastructure.	
	Excludes	Open field tomato farming (111211, Tomato or red tomato farming).	
	Products	Tomato farming.	
Economic Activity		**111412**	**Strawberry farming in greenhouses and other protected agricultural structures**
Description	**Includes**	Economic units mainly dedicated to the farming of strawberries in greenhouses and other protected agricultural structures.	
	Excludes	Farming of strawberries in the open field (111339, Other non-citrus fruit trees and nuts farming), and the farming of berries in greenhouses and other protected agricultural structures (111413, Berries farming in greenhouses and other protected agricultural structures, except strawberries).	
	Products	Strawberry farming in greenhouses.	

Economic Activity		**111413**	**Berries farming in greenhouses and other protected agricultural structures, except strawberries**
Description	**Includes**	Economic units mainly dedicated to the farming of berries in greenhouses and other protected agricultural structures.	
	Excludes	Open-air farming of berries (111339, Other non-citrus fruit trees and nuts farming), and farming of strawberries in greenhouses and other protected agricultural structures (111412, Strawberries farming in greenhouses and other protected agricultural structures).	
	Products	Berries farming.	
Economic Activity		**111414**	**Chili farming in greenhouses and other protected agricultural structures**
Description	**Includes**	Economic units mainly dedicated to the farming of chili in greenhouses and other protected agricultural structures.	
	Excluye	Farming of chili in the open field (111212, Chili farming).	
	Productos	Chili farming in greenhouses.	
Economic Activity		**111415**	**Apple farming in greenhouses and other protected agricultural structures**
Description	**Includes**	Economic units mainly dedicated to the farming of apples in greenhouses and other protected agricultural structures.	
	Excludes	Open field apple farming (111336, Apple farming).	
	Products	Apple farming in greenhouses.	
Economic Activity		**111416**	**Cucumber farming in greenhouses and other protected agricultural structures**
Description	**Includes**	Economic units mainly dedicated to the farming of cucumbers in greenhouses and other protected agricultural structures.	
	Excludes	Cucumber farming in the open field (111219, Other vegetables farming).	
	Products	Cucumber farming in greenhouses.	
Economic Activity		**111419**	**Other food farming products in greenhouses and other protected agricultural structures**
Description	**Includes**	Economic units mainly dedicated to the farming of other food products in greenhouses and other protected agricultural structures, such as chard, basil, eggplant, zucchini, peas, mushrooms, lettuce, nopal (cactus), vegetables, radishes, purslane, carrots, and others not classified elsewhere. Also includes: economic units mainly dedicated to the production of seedlings and vegetable seedlings in nurseries, and to hydroponic farming.	
	Excludes	Farming of other vegetables in the open field (111219, Other vegetables farming); to the farming of other non-citrus fruit trees and walnuts in the open field (111339, Other non-citrus fruit trees and nuts farming); to the production of propagation materials for fruit trees (111429, Other non-food farming in greenhouses and other protected agricultural structures), and to vegetable aquaculture (112512, Fish farming and other aquaculture, except shrimp farming).	
	Products	Other food farming products in greenhouses and other protected agricultural structures.	

Economic Activity		**111429**	**Other non-food farming in greenhouses and other protected agricultural structures**
Description	**Includes**	Economic units mainly dedicated to the farming of ornamental plants and live shrubs; to the production of propagation materials by conventional means (vegetative or asexual, and sexual or generative multiplication), such as shoots, bulbs, rootstocks, stakes, cuttings, suckers, and young plants, and to seedlings of floral species in greenhouses and other protected farm structures. Also includes: economic units that combine different farming in greenhouses and other protected agricultural structures when it is impossible to determine which is the main activity.	
	Excludes	Farming of food plants in greenhouses and other protected agricultural structures and to the production of vegetable seedlings and seedlings in plant-nurseries (111419, Other food products farming in greenhouses and other protected agricultural structures); cut flowers in greenhouses and other protected agricultural structures (111422, Floriculture in greenhouses and other protected agricultural structures); Christmas trees and timber species with productive cycles of 10 years or less (111423, Farming of trees with a productive cycle of 10 years or less); economic units that combine the farming of different plant species when it is impossible to determine which is the main activity (111999, Other farming), and nurseries dedicated mainly to the farming of forest species for afforestation and reforestation tasks (113211, Forest nurseries).	
	Products	Other non-food farming in greenhouses and other protected agricultural structures.	
Economic Activity		**111910**	**Tobacco farming**
Description	**Includes**	Economic units mainly dedicated to the farming of tobacco	
	Excludes	N/A	
	Products	Tobacco farming	
Economic Activity		**111920**	**Cotton farming**
Description	**Includes**	Economic units mainly dedicated to the farming of cotton.	
	Excludes	N/A.	
	Products	Cotton farming.	
Economic Activity		**111930**	**Sugar cane farming**
Description	**Includes**	Economic units mainly dedicated to the farming of sugar cane.	
	Excludes	Farming of forage cane (111942, Pasture farming).	
	Products	Sugar cane farming.	

Economic Activity		**111941**	**Alfalfa farming**
Description	**Includes**	Economic units mainly dedicated to the farming of alfalfa.	
	Excludes	N/A..	
	Products	Alfalfa farming.	
Economic Activity		**111942**	**Pasture farming**
Description	**Includes**	Economic units mainly dedicated to the farming of forage pastures and grasses, such as forage cane, forage spike, cornbread, and red grass. Also includes: economic units mainly dedicated to the farming of clover.	
	Excludes	Farming of sugar cane (111930, Sugar cane farming), and the farming of grass or grass in rolls or in loaves (111999, Other farming).	
	Products	Pasture farming.	
Economic Activity		**111991**	**Alcoholic agave farming**
Description	**Includes**	Economic units mainly dedicated to the farming of alcoholic agaves, such as tequila maguey, maguey mezcalero, maguey pulquero, or other agaves cultivated for producing alcoholic spirits.	
	Excludes	Elaboration of pulque (312132, Elaboration of pulque).	
	Products	Alcoholic agave farming.	
Economic Activity		**111992**	**Peanut farming**
Description	**Includes**	Economic units mainly dedicated to the farming of peanuts.	
	Excludes	N/A.	
	Products	Peanut farming..	
Economic Activity		**111999**	**Other farming**
	Excludes	Soybean farming (111110, Soybean farming); to the annual farming of oilseeds (11112, Oilseeds farming, except soybeans); to the farming of cocoa (111337, Cocoa farming); coconut (111338, Coconut farming); olive; palm nuts (111339, Other non-citrus fruits and nuts farming); to the farming of pastures and forage grasses (111942, Pasture farming); to vegetable aquaculture (112512, Fish farming and other aquaculture, except shrimp farming); to the collection of gums, resins and other forest products when no previous agricultural work is carried out for this purpose (113212, Collection of forestry products); to installation and maintenance services for green areas inside and outside buildings (561730, Installation and maintenance services for green areas); economic units that combine agricultural activities with animal husbandry when it is impossible to determine which is the main activity (111993, Agricultural activities combined with animal production); economic units that combine agricultural activities with forest use when it is impossible to determine which is the main activity (111994, Agricultural activities combined with forestry use); economic units that combine agricultural activities, animal ranching and farming and forest management when it is impossible to determine which is the main activity (111995, Agricultural activities combined with animal ranching and farming and forestry exploitation).	
	Products	Other farming.	

MAIN PARAMENTER	
Contribution from the Mitigation of Greenhouse Gases (GHG)	
SUBSTANTIAL CONTRIBUTION	
Metric	Reduction of CO_2e emissions (gCO_2e) Carbon sequestration
Mexico Threshold	

Minimum criteria to determine if the economic activity is considered sustainable:

The activities of the agricultural subsector will be considered sustainable and will be able to demonstrate their contribution to the compliance of the main parameter (contribution to climate change mitigation) through the following criteria:

a. Property located within the agricultural border in accordance with Series III of the SIAP, 2018. In the event that the property was located in a federal entity that has an agricultural border baseline, that border will be respected, for example, through geospatial validation.

b. Having a temporary disposal site for inorganic waste from agricultural activity, verifiable through, for example, a photograph. Seeking to make it operational and that it applies in each of the segments.

c. Having a transition plan that considers at least two improvement practices, either basic practices or advanced or transformative practices; and additionally, resources are allocated to some of the investment concepts described below:

Basic practices:

- Crop rotation (improves soil quality and increases productivity)
- Integration of cover crops.
- Conservation of segments and linear corridors of native vegetation and encourage diversified and multi-layer living fences. Soil analysis for the optimal use of fertilizers (reduces costs)
- Planning in the application of fertilizers.
- Substitution of synthetic fertilizers by organic fertilizers or bio-inputs.
- Carrying out soil conservation works (terraces, gabion dams, contour lines, soil drainage).
- Incorporation of organic matter into the soil (harvest residues, compost, etc.).
- Integration of agroforestry system, polyculture, or associated crops in permanent crops.
- Minimum or reduced tillage application
- Productive reconversion (if it requires fewer inputs).
- Reduced burning of crop residues or plant parts to facilitate harvesting.
- Increase tree species (native or non-invasive) in the plots.

Advanced or transformative practices:

- Protected agriculture facility with recyclable materials.
- Restoration of degraded soils.
- Sustainable production certifications or badges. For example: Primus GFS, Global Gap, organic, USDA, SENASICA, Rainforest Alliance, RSPO, (HACCP), BRC, ISO 14001, ISEAL ALLIANCE or others that guarantee GHG mitigation.

Investment practices and concepts to which the resources are allocated:

- Constitution and strengthening of organizations that implement basic sustainable practices.
- Energy saving and clean energy
  - o Energy cogeneration equipment or LED luminaires
  - o Efficient boilers
  - o Efficient pumping systems
  - o Modernization of the cooling system
  - o Power cogeneration equipment
  - o Solar powered heaters
  - o Wind generators/turbines
  - o Geothermal power generation equipment
  - o Renewable bioenergy source installations
  - o Solar thermal systems
- Drones for agricultural use
- Precision seeding
- Machinery and accessories that facilitate minimum tillage and conservation
- Machinery and accessories that provide alternatives to waste burning
- Macro tunnels
- Greenhouses (as long as it is recyclable material)
- Production of bioenergy biofuels
- Biofuel production machinery and equipment, such as biodigesters
- Protected agriculture
- Efficient motors
- Efficient pumping systems
- Modernization of cooling systems
- Establishment of forest plantations
- Maintenance of forest plantations
- Live fences
- Conservation tillage
- Agrosilvopastoral systems
- Agroforestry systems
- Shade-grown production
- Silvopastoral systems

DO NO SIGNIFICANT HARM ASSESSMENT

Environmental	**Water**	In Mexico, the agricultural sector uses 78% of the water resource, which is contaminated by the use of inputs, such as pesticides and chemical fertilizers. **Section A.1** All economic activities in the agriculture subsector must include the following guidelines: • Identify factors that make it possible to provide certainty about a lower impact on the use of water resources (that water consumption per economic unit does not increase), that agricultural production be established according to the geographical characteristics of the site that the demand for products that multiply the demand for water decreases, that the irrigated area is not expanded). • Prevent contamination of water bodies by runoff, leaching, filtration or atmospheric deposition, changing the use of agrochemicals for pesticides and organic fertilizers. • Comply with the legal requirements for the use and storage of water for different uses (drinking, irrigation, industry, etc.) • Avoid diverting channels. • Work the land located at more than four meters from a body of water and maintain the corresponding riparian vegetation. • Increase efficiency in the use of water by adopting new irrigation techniques that save water resources (control the amount of water used, avoid losses in the irrigation system or water retention methods). • Use do no significant harm assessment indices, such as the water footprint, extraction/recharge ratio, state of conservation, mean annual availability of groundwater and surface water, as well as water efficiency metrics. • Comply with the Regulation established by the National Waters Law on the use and reuse of water. Concession title issued by CONAGUA. Applies in deep wells, it is not common in the case of rivers and canals. Align with the regime of concessions for the use or exploitation of water in accordance with the provisions of Articles 113 and 118 of the National Waters Law. • National Waters Law (LAN): Water is a vital, vulnerable and finite federal public domain good, with social, economic and environmental value, whose preservation in quantity and quality and sustainability is a fundamental task of the State and the Society, as well as a priority and a matter of national security (TITLE “National Water Policy”, Art. 14 BIS 5) • Follow the provisions of other regulatory instruments to preserve water resources such as restricted seasons, regulations, regulated areas, and reserve areas. • Comply with the National Water Program 2020-2024, as well as state and municipal water management strategies and plans, and attend to the recommendations of the Basin Councils by hydrological basin or by hydrological region. • Identify the availability of water and the risks of water contamination, both of surface waters and aquifers, and in particular the sources of water used for human consumption, in the hydrological basin and in the hydrological region in question. • The collection of rainwater and the reuse of water in the facilities is relevant, as well as compliance with NOM-001-SEMARNAT-2021, which establishes the permissible limits of pollutants in wastewater discharges in receiving bodies owned by the nation.

Environmental	**Adaptation**	**Section A.2** All economic activities in the agriculture subsector must include the following guidelines: ● It is forbidden to work the land on slopes greater than 20% without soil conservation works (terraces, gabion dams, etc). ● It is forbidden to drain flooded soils (histosols, gleysols and umbrisols according to the INEGI map of soil types). ● Carrying out agricultural activities that meet the need for care and protection of natural resources, as well as the impacts on the environment, through good management practices in agricultural production. ● Promoting those activities that are resilient and adaptable to climatic phenomena caused by climate change on the planet. ● Consider actions in favor of climate-resilient agriculture, based on: o Ecosystem-based Adaptation (EbA). It is the use of biodiversity and ecosystem services to help people adapt to the adverse effects of climate change. It integrates sustainable management, conservation, and restoration of ecosystems to provide services that allow people to adapt to the impacts of climate change. o Community-Based Adaptation (CbA). Adaptation approach focused on improving the adaptive capacity of local communities, maintaining the resilience of livelihoods, risk reduction, capacity development, social mobilization and networking, considering community and traditional knowledge. o Adaptation based on Disaster Risk Reduction (AbDRR). Focus on disaster risk management related to climate variability, extreme events and preparedness for risks related to climate change, it also incorporates elements to increase resilience through, among other aspects, the use of ecosystem functions to reduce the risk of disasters, for example, the reduction of sedimentation or landslides, to name a few. ● Each project must demonstrate that it has evaluated the dimension of the alterations and impacts that could affect municipalities vulnerable to climate change, reviewing, but not limited to, the following tools: o National Atlas of Vulnerability to Climate Change o National Risk Atlas
	Biodiversity	**Section A.3** All economic activities in the agriculture subsector must include the following guidelines: ● Intensify measures for the Protection and Restoration of biodiversity and ecosystems, based on national legislation, as well as encourage the use of bio-inputs that do not destroy current ecosystems in Mexico. ● Monoculture systems should have patches, corridors or green fences with native plants. ● The use of genetically modified organisms must be subject to the Law on Biosafety of Genetically Modified Organisms and its respective Regulations.

DO NO SIGNIFICANT HARM ASSESSMENT		
Environmental	**Pollution prevention and control**	**Section A.4** All economic activities in the agriculture subsector must include the following guidelines ● Promote the culture of prevention and control of pollution to the atmosphere, water, or soil, limiting the use of chemical insecticides and herbicides, as well as promoting and giving preference to the use of insecticides of biological origin with microorganisms to combat pests and thus avoid pesticides and herbicides. ● It is forbidden to carry out burnings on the property. ● It is forbidden to use pesticides with a yellow or red label according to the sanitary registry of pesticides issued by COFEPRIS. ● The use of pesticides and herbicides must ensure compliance with the instructions on the labeling of the products, as well as the Manual for the Good Use and Management of Pesticides in the Field published and disseminated by SENASICA. Likewise, the aforementioned agro-inputs must belong to classes III and IV according to the toxicological classification of the WHO (slightly hazardous (III) and virtually non-toxic (IV).
	Circular Economy	**Section A.5** All economic activities in the agriculture subsector must include the following guidelines ● Efficient use of natural resources. ● Implementation of new sustainable production modes, such as matching the crops with the topography, type of soil and climatic conditions of the region, crop rotation and polyculture. ● Use non-renewable energy sources. ● Reduction of waste and restrictions on the extraction of new materials, using raw materials that allow their correct use in terms of durability and repair, updating, reuse or recycling possibilities. ● Introduction of new technologies for the incineration of non-recyclable hazardous waste. ● Promote the consumption of local and seasonal products.

Subsector: Forestry Use

Economic Activities:

- **113110.** Forestry
- **113212.** Use of non-timber forest resources (Collection of forest products sensu NAICS)
- **113310.** Use of timber forest resources (Tree logging sensu NAICS)
- **113211.** Forestry nurseries

Economic Activity		113110	Forestry
Description	Includes	Economic units mainly dedicated to carrying out forestry activities, such as planting, reforestation, and conservation of timber species with productive cycles of more than 10 years, such as pine, oyamel (sacred fir), cedar, mahogany and oak, with the purpose of making the sale on standing timber.	
	Excludes	Cultivation of Christmas trees and timber species with productive cycles of 10 years or less (111423, Tree Growing with a productive cycle of 10 years or less); economic units that combine agricultural activities, animal ranching and farming and forestry use when it is impossible to determine which is the main activity (111995, Agricultural activities combined with animal ranching and farming and forestry use); economic units that combine animal ranching and farming with logging when it is impossible to determine which is the main activity (112991, Animal Production Combined with Forestry), and economic units that carry out both tree production and logging (113310, Tree logging).	
	Products	Forestry activities, such as planting, reforestation, and conservation of timber species with productive cycles of more than 10 years, such as pine, oyamel, cedar, mahogany and oak, with the purpose of making the sale on standing timber.	
Economic Activity		**113212**	**Use of non-timber forest resources (Collection of forest products sensu NAICS)**
Description	Includes	Economic units mainly dedicated to the collection of forest products, such as gums, resins (gum and latex), barks, mosses, balsams, rhizomes, fibers, hay, firewood, wild fruits, ornamental and medicinal plants, seeds, roots, cork and other Wild products.	
	Excludes	Cultivation of fruit trees and nuts (1113, Fruit trees and nuts farming); to the collection of maple sap; the collection of gums, resins and other forest products in plantations or that carry out agricultural work for this purpose (111999, Other crops); economic units that combine agricultural activities, animal ranching and farming and forestry use when it is impossible to determine which is the main activity (111995, Agricultural activities combined with animal ranching and farming and forestry use), and economic units that combine animal ranching and farming with exploitation of forestry when it is impossible to determine what the main activity is (112991, Animal Production Combined with Forestry).	
	Products	Collection of forest products.	

Economic Activity		113310	Use of timber forest resources (logging of trees sensu NAICS)
Description	Includes	Economic units mainly dedicated to the logging of trees in forest areas of species such as pine, oyamel, cedar, mahogany and oak, either on their own account or as a service for third parties. It also includes: economic units that carry out both the production of trees and their logging, and the activities that are carried out in the same place of logging, such as the roughing and debarking of trunks and the production of logs, chips and wood slices.	
	Excludes	Cultivation of Christmas trees and timber species with productive cycles of 10 years or less (111423, Tree Growing with a productive cycle of 10 years or less); to the production of various wood products from roundwood (321111, Integrated sawmills), and economic units that combine agricultural activities, animal ranching and farming and forestry when it is impossible to determine which is the main activity (111995, Combined agricultural activities with animal ranching and farming and forestry use).	
	Products	Tree logging.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG)

SUBSTANTIAL CONTRIBUTION

Metric	Increase in forest carbon stocks (gCO_2e)
Mexico Threshold	

Minimum criteria to consider economic activity as sustainable

The activities of the forestry exploitation subsector will be considered sustainable and may demonstrate their contribution to compliance with the main parameter, through the following criteria:

a. Sustainable Forest Management

Economic activities will be considered sustainable if they are consistent with Sustainable Forest Management (SFM), which, according to the General Act for Sustainable Forestry Development of Mexico (LGDFS), is defined as: "the process that includes the set of actions and procedures whose purpose is the management, cultivation, protection, conservation, restoration and use of resources and environmental services of a forest ecosystem, considering ecological principles, respecting the functional integrity and interdependence of resources and without diminishing or jeopardizing the productive capacity of the ecosystems and existing resources in it".

It will be considered that the economic activity is consistent with the SFM if it is carried out in compliance with the applicable legal framework and in accordance with the content of the technical planning instrument (Forest Management Program) authorized or with the approval issued by SEMARNAT. The Forest Management Program is defined, according to the LGDFS, as "the technical planning and monitoring instrument that describes the actions and procedures of sustainable forest management." The content and execution of the technical planning instruments, as well as the processes for their authorization are governed by the LGDFS and its regulations, and by the internal regulations of SEMARNAT, among other applicable regulatory instruments.

b. Forest management certification

Additionally, in accordance with Art. 31 of the LGDFS, the Government of Mexico, through SEMARNAT and CONAFOR, promote forest certification as part of the social criteria of the national forest policy. According to the LGDFS, "forest management certification is a means to accredit adequate forest management, improve the protection of forest ecosystems and facilitate access to national and international markets" (Art. 107 of the LGDFS). This certification is a voluntary procedure that ensures that the management of a forest ecosystem is sustainable and responsible. It is also a process that involves an evaluation by a certifying body whose purpose is to recognize that the management of a property meets the specifications of the regulations of a country or a region, guaranteeing that the environment is respected and that it generates economic and social benefits.

The Government of Mexico, through CONAFOR, promotes the certification of forest management through the following instruments:

- **Preventive Technical Audit:** Instrument operated by CONAFOR whose purpose is to promote and induce compliance with the forest and environmental legal provisions of forest management programs, which can be carried out by CONAFOR directly or through auditors accredited as Verification Units, under the terms of the Federal Law on Metrology and Standardization (Chapter IV, Forest Certification and Preventive Technical Audits, LGDFS).

- **Mexican Standard NMX-AA-143-SCFI-2015 for the Certification of Sustainable Forest Management:** Instrument that verifies compliance with principles, criteria, and indicators to certify sustainable forest management through certification bodies accredited by the Mexican Accreditation Entity (EMA) and registered with SEMARNAT.

- **International forest management certification standards and chain of custody for Mexico of the Forest Stewardship Council (FSC):** Instruments that verify compliance with principles, criteria, and internationally recognized environmental sustainability indicators through Bodies accredited by FSC and registered with SEMARNAT.

The forest management certification process strengthens the guarantee of sustainability in forest ecosystems under management that meet the minimum criteria established in section 1. As of October 2022, Mexico has 2.32 million hectares under certified forest management with any of the 3 instruments mentioned above. Additionally, around 1 million hectares of forest ecosystems are in the process of certification. The sum of these figures represents approximately 40% of the area under forestry use.

The certification of forest management and the minimum criteria of the properties under forest management established in section 1, constitute the central concepts for the demonstration of compliance with the main parameter (contribution to climate change mitigation) of the economic activity.

2. Demonstration of compliance with the main parameter and substantial contribution

Compliance of the economic activity with the main parameter (contribution to climate change mitigation) and the substantial contribution (increase in forest carbon stocks) must be demonstrated in accordance with the following:

A. Forestry of natural forest ecosystems for the use of timber and the use of non-timber and timber forest resources in natural ecosystems.

A.1. If the economic activity has a current SFM certification (obtained through any of the three instruments promoted by CONAFOR: Preventive Technical Audit, NMX-AA-143-SCFI-2015 and FSC International Certification), both the main parameter and the substantial contribution will be considered fulfilled, since there is sufficient and relevant evidence that accredits the sustainable development of the economic activity, which, among other climatic, environmental and socio-economic benefits, implies the increase of forest carbon stocks on the land in which forestry is applied. The required documentary evidence will be the SFM certificate issued by the relevant authority and/or accredited body, in accordance with the certification instrument used.

A.2. If the economic activity does not have a current SFM certification, both the main parameter and the substantial contribution will be considered fulfilled as long as the economic activity meets the following two criteria:

Criteria	Documentary evidence
(i) The economic activity has a technical instrument for planning and monitoring that describes the actions and procedures of the forestry of natural forest ecosystems for the use of timber, which is in force and has been authorized by SEMARNAT in accordance with the corresponding regulations.	**Activity 113110, 113310** ● Official Letter of Authorization for the Use of Timber Forest Resources, issued by SEMARNAT. ● Document of the Forest Management Program authorized by SEMARNAT (if required by the financial institution or agency). **Activity 113212** ● Notice or Authorization for the Use of Non-Timber Forest Resources, issued by SEMARNAT ● Technical Study or Forest Management Program authorized by SEMARNAT (if required by the financial institution or agency).
(ii) Regular reporting on the execution, development and compliance of the technical instrument referred to in criterion (i) before SEMARNAT.	● Annual reports on the execution, development, and compliance of the forest exploitation program, received by SEMARNAT

A.3. If the economic activity does not meet criteria (i) and (ii) of subsection A.2., said activity cannot be considered sustainable and, therefore, both the main parameter and the substantial contribution cannot be considered fulfilled.Z

B. Forestry of commercial timber forest plantations and commercial non-timber (this subactivity must be considered in 111999, Other crops) and timber forest plantations.

B.1. If the economic activity has a current certification from the Commercial Forest Plantation (PFC), through the FSC International Certification (which is promoted by CONAFOR), both the main parameter and the substantial contribution will be considered fulfilled, because there is sufficient and relevant evidence that proves the sustainability of the economic activity, which, among other climatic, environmental and socio-economic benefits, implies the increase of forest carbon stocks in temporary forest lands or preferably forest lands in which the PFC was established. The required documentary evidence will be the PFC sustainability certificate issued by the body accredited by the Mexican Accreditation Entity and SEMARNAT.

B.2. If the economic activity does not have a current certification from the PFC, both the main parameter and the substantial contribution will be considered fulfilled as long as the economic activity meets the following two criteria:

Criteria	Documentary evidence
(i) The economic activity has a technical instrument for planning and monitoring that describes the actions and procedures of the forestry of timber PFC, which is in force and has been authorized by SEMARNAT in accordance with the corresponding regulations.	• Certificate of Commercial Forest Plantation issued by SEMARNAT. • Notice of Commercial Forest Plantation authorized by SEMARNAT.
(ii) Presentation of periodic reports on compliance with the technical instrument referred to in criterion (i) to SEMARNAT.	• Annual reports on the use of PFC raw materials received by SEMARNAT.

B.3. If the economic activity does not meet criteria (i) and (ii) of subsection A.2., said activity cannot be considered sustainable and, therefore, both the main parameter and the substantial contribution cannot be considered fulfilled.

C. Forestry on properties with timber harvesting of species listed in NOM-059-SEMARNAT-2010 and non-timber and timber harvesting of species listed in NOM-059-SEMARNAT-2010.

C.1. Both the main parameter and the substantial contribution will be considered fulfilled as long as the economic activity meets the following two criteria:

Criteria	Documentary evidence
(i) The economic activity has a technical instrument for planning and monitoring that describes the actions and procedures of forestry in lands with timber harvesting of species listed in NOM-059-SEMARNAT-2010, which is in force and has been authorized by SEMARNAT in accordance with the corresponding regulations.	• Management Plan of the Management Unit for the Conservation of Wildlife, authorized by SEMARNAT • Official Letter of Authorization for the use of the Management Unit for the Conservation of Wildlife in force, issued by SEMARNAT.
(ii) Presentation of periodic reports on compliance with the technical instrument referred to in criterion (i) to SEMARNAT.	• Annual report on conservation activities and sustainable use of wildlife, received by SEMARNAT.

Economic Activity		113211	Forestry Nurseries
Description	Includes	Economic units mainly dedicated to the cultivation of forest species for afforestation and reforestation tasks.	
	Excludes	N/A	
	Products	Forestry Nurseries	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG).

SUBSTANTIAL CONTRIBUTION

Metric	Increase in forest carbon stocks (gCO_2e)
Mexico Threshold	

Minimum criteria to determine if the Economic Activity is considered sustainable:

Forestry nurseries will be considered sustainable when they meet the following eligibility criteria:

Criteria	Documentary Evidence
(i) If the nursery is located on forest land.	• Authorization for land use change of forest lands (Art. 93 of the LGDFS).
(ii) Water supply, which is permanently guaranteed in the production cycle.	• Permits for the use of the water supply sources used in the nursery, as the case may be, are the following: o Permission from the National Water Commission. o Receipt or contract of the municipal Public Network. o Right of exploitation or use of national waters for ejido or small property, as appropriate. • Permits must be up to date with payments.

(iii) Operating information necessary for the project, defining the objectives, processes, and delivery times.	• Submit "Plant Production Protocol" including: o Objectives and goals; Location; Infrastructure; Technical sheets of species to produce; Planting and harvest calendar; Prevention and control of diseases; Fertilization; Organizational chart of the workforce during the production cycle. o Daily activity monitoring log.
(iv) The use of forest germplasm and its legal origin, as well as the supply of germplasm for conservation and restoration purposes.	• Identification codes and Permission of the legal origin of forest Germplasm for Reforestation and Afforestation for conservation or restoration purposes (Art. 128 of the LGDFS and art. 88 of its Regulations). • Documentation that supports the origin of the germplasm to be used in plant production, as established by the Mexican Standard NMX-AA-169-SCFI-2014, or the one that replaces it. o Forest Germplasm Production Unit (UPGF) must submit forest remittances and seed attributes sheet. o Collection Center (CABGF) must present an invoice and the seed attributes file. • In the event that the species to be produced is on the list of species at risk of NOM-059, SEMARNAT-2010, have permission from SEMARNAT as a Management Unit for the Conservation of Wildlife.
(v) Origin and supply of substrates and growth media for the proposed production goal.	• Section Four of the Use of Non-Timber Forest Resources of the LGDFS (Art. 85): Authorization is required for use in the following cases: o Mountain soil and leaf litter; o In the case of "tepezil", "jal", "tezontle", or any other material, a copy of the use permit of the exploitation or extraction bank, with the "Environmental Impact Assessment" issued by SEMARNAT.
(vi) Pesticides and insecticides with their degree of toxicity to be used to prevent and combat pests and diseases.	• List of products for the control of pests and diseases, prioritizing the use of biological products that comply with the conditions and safety and health measures for their management.
(vii) Management of empty containers of chemicals used in the production process.	• Disposal pit for plants affected by pests and diseases (including their root balls), which will be located outside the production area). Art. 31 of the General Law for the Prevention and Integral Management of Waste (LGPGIR) fracc. IX and Article 87 of its Regulations.
(viii) For day laborers hired during the plant production cycle.	• Comply with the obligations of Article 132 of the Federal Labor Law, Fourth Title on Rights and Obligations of Workers and Employers, Chapter I. Obligations of Employers.

DO NO SIGNIFICANT HARM ASSESSMENT

Environmental	Water	**Section A.1** All economic activities in the forestry exploitation subsector must include the following guidelines: ● Comply with Mexican legislation on the use and reuse of water. o National Waters Law (LAN): Water is a vital, vulnerable and finite federal public domain good, with social, economic and environmental value, whose preservation in quantity and quality and sustainability is a fundamental task of the State and the Society, as well as a priority and a matter of national security (Title "National Water Policy", Art. 14 BIS 5). ● The economic activity should not cause significant damage to the water resource to have the authorization for the use of timber forest resources, issued by SEMARNAT. The foregoing, based on the provisions of the Second Section on the Use of Timber Forest Resources of the LGDFS where it is also established that the Ministry may only deny the requested authorization when the provisions of this Law, its Regulations, the Official Mexican Standards or the applicable legal provisions are contravened (Art. 77, section I of the LGDFS). ● Likewise, in accordance with NOM-152-SEMARNAT-2006, numeral 5.2.6.4. on Hydrology, the forest management programs (PMF) must indicate the following information for the property or group of properties to be exploited: a) Hydrological Region and Basin, indicating names and keys; b) Sub-basin; c) Micro-basin; d) Permanent and intermittent currents and their length in kilometers, and e) Bodies of water, in m2. The information in subparagraphs a), b) and c) must be based on the most up-to-date version of INEGI. ● Likewise, in accordance with NOM-152-SEMARNAT-2006, section 5.2.13, the PMF must contain a description and programming of the prevention and mitigation measures of environmental impacts, indicating the affected resources (including water). , the stage of use in which the impact occurs, duration of the impact, prevention and mitigation measures and the start and end period of the measures. ● Regarding the PFCs, the economic activity will not cause damage (at least not significant damage) to the water resource if it has the authorization or proof indicated in the documentary evidence of section 2.3. issued by SEMARNAT, in adherence to the technical criteria established in the LGDFS. In addition, based on the scientific literature, it is considered that PFCs have a positive effect on water resources since they are established on land devoid of natural forest vegetation (Preferably Forest Land or Temporarily Forest Land) where infiltration increases, it reduces runoff and increases water quality (Ceccon, E. and Martínez, M., 1999).

Environmental	**Water**	• Comply with the National Water Program 2020-2024, as well as state and municipal water management strategies and plans, and attend to the recommendations of the Basin Councils by hydrological basin or by hydrological region. • Identify the availability of water and the risks of water contamination, both of surface waters and aquifers, and in particular the sources of water used for human consumption, in the hydrological basin and in the hydrological region in question. • The collection of rainwater and the reuse of water in the facilities are relevant. • In the same way, compliance with NOM-001-SEMARNAT-2021 must be ensured, which establishes the permissible limits of pollutants in wastewater discharges in receiving bodies owned by the nation.
	Adaptation	**Section A.2** All economic activities in the forestry exploitation subsector must include the following guidelines: • One of the objectives of the LGDFS (Art. 2, section XXXIX) is to promote sustainable forest management to help maintain and increase carbon stocks, reduce emissions from deforestation and forest degradation, as well as reduce vulnerability and strengthen resilience and adaptation to climate change. • Sustainable forest management contributes to reducing the vulnerability of both local communities and forest ecosystems, and increasing the adaptive capacity of socio-ecosystems, through the following approaches: o Ecosystem-based Adaptation (EbA). It is the use of biodiversity and ecosystem services to help people adapt to the adverse effects of climate change. It integrates sustainable management, conservation, and restoration of ecosystems to provide services that allow people to adapt to the impacts of climate change. o Community-Based Adaptation (CbA). Adaptation approach focused on improving the adaptive capacity of local communities, maintaining the resilience of livelihoods, risk reduction, capacity development, social mobilization and networking, considering community and traditional knowledge. o Adaptation based on Disaster Risk Reduction (AbDRR). Focus on disaster risk management related to climate variability, extreme events and preparedness for risks related to climate change, it also incorporates elements to increase resilience through, among other aspects, the use of ecosystem functions to reduce the risk of disasters, for example, the reduction of sedimentation or landslides, to name a few. • Below are some of the benefits of sustainable forest management in terms of adaptation:

Environmental	**Adaptation**	o Adaptation through strengthening the adaptive capacity of forest communities through (CPF, 2008): o The reinforcement of strategies to face new situations and/or scenarios derived from climate change. o Diversification of employment opportunities and livelihoods related to forest management. o Planning and adaptive management of land use. Therefore, sustainable forest management, far from causing harm in terms of adaptation, contributes substantially to increasing the adaptive capacity of commons and forest communities (and of the ecosystems themselves) and to reducing the vulnerability of socio- forest ecosystems. ● Each project must demonstrate that it has evaluated the dimension of the alterations and impacts that could affect municipalities vulnerable to climate change, reviewing, but not limited to, the following tools: o National Atlas of Vulnerability to Climate Change o National Risk Atlas
	Biodiversity	**Section A.3** All economic activities in the forest exploitation subsector must include the following guidelines: ● The economic activity must not cause significant damage to biodiversity to have the authorization for the use of timber forest resources, issued by SEMARNAT. The foregoing, based on the provisions of the Second Section on the Use of Timber Forest Resources of the LGDFS where it is also established that the Ministry may only deny the requested authorization when: The biodiversity of the area and the regeneration and productive capacity of the land in question are compromised (Art. 77, section II of the LGDFS). ● Description and programming of prevention and mitigation measures for environmental impacts, indicating the affected resources (among them, flora and fauna), the exploitation stage in which the impact occurs, the duration of the impact, prevention and mitigation measures, and the start and end period of the measures

Environmental	**Biodiversity**	• In cases in which the economic activity requires the application of regulations regarding environmental impact (for example, forestry in ANPs), it will be considered that said activity does not cause significant damage to biodiversity if it has authorization from SEMARNAT in terms of environmental impact (which is part of the harvest authorization process), based on the provisions of Section V of the General Law of Ecological Balance and Environmental Protection (LGEEPA) and the Regulations of said Law on environmental impact assessment. • Based on the LGEEPA, environmental impact assessment is understood as "the procedure through which SEMARNAT establishes the conditions to which the performance of works and activities that may cause ecological imbalance or exceed the limits and conditions established in the applicable provisions to protect the environment and preserve and restore ecosystems, in order to avoid or minimize their negative effects on the environment". The activities and works that require authorization in terms of environmental impact from the Ministry are listed in the LGEEPA. • Regarding PFCs, according to Art. 79 of the LGDFS, their establishment on temporary forestlands and preferably forestlands will be promoted, and the use of native species that are technologically and economically viable will be promoted primarily. The authority will have at all times the power to supervise the management of the plantation, taking special care of possible adverse environmental impacts. • Article 78 of the LGDFS indicates that the establishment of commercial forest plantations to replace the forest vegetation of forestlands is prohibited.
	Biodiversity	**Section B.3** The following activities must include the guidelines indicated in section A3, plus those included in this section: **113212. Use of non-timber forest resources:** (Collection of forest products sensu NAICS) • The Arts. 71 and 73 of the LGDFS regulations establish the content of the technical study or management program for the use of non-timber, where it is stated that the description or general diagnosis of the physical, biological and ecological characteristics of the property must be considered, estimation of the population structure and of the real stocks of the species or parts to be exploited with a scientific and common name, as well as the surfaces in hectares and the quantities to be exploited annually in cubic meters, liters or kilograms; and the definition and justification of the recovery period to which the intervened areas will be subject, according to the characteristics of reproduction and development of the species under exploitation.

Environmental	**Pollution Prevention and Control**	**Section A.4** The following activities must include the guidelines indicated in this section: The activity does not cause significant air pollution harm if: • The internal combustion vehicles and machinery that are used in the implementation of forest management activities, which include actions related to the use, protection, conservation, and restoration, comply with the regulations regarding emission limits and/or with the regulatory guidelines related to verification of vehicle emissions or similar issued by the competent authority in the matter, whether at the federal or state level. • If in the forest management program or authorized technical document by SEMARNAT to carry out forest exploitation (timber or non-timber), activities are established to reduce the effects of the use of fire and forest fires, including those related to air pollution, among others, in accordance with the provisions of the Forest Development Law and its Regulations, as well as the provisions of NOM-152-SEMARNAT-2006, which establishes the guidelines, criteria and specifications of the contents of forest management programs for the use of timber forest resources in forests, jungles and vegetation of arid zones. • If the activities that require the use of fire as a sustainable forest management tool are carried out in accordance with the provisions of NOM-015-SEMARNAT/SAGARPA-2007, which establishes the technical specifications of methods for the use of fire in forest land and land for agricultural use, in particular with regard to the specifications for the use of fire in forest lands that are described in section 5 of the aforementioned standard.
	Circular Economy	**Section A.5** All economic activities in the forest exploitation subsector must include the following guidelines: • Timber product value chains that integrate products at the end of their useful life promote the circular economy since timber residues can be revalued as secondary products or recycled for the generation of biomass and compost. • Economic activities consistent with Sustainable Forest Management promote the circular economy by optimizing the use of materials, as long as the productive capacity of the ecosystems and resources existing in them is not diminished or put at risk.

Subsector: Animal Ranching and Farming

Economic Activities:

- **112110.** Beef Cattle Ranching and Farming, Including Feedlots.
- **112120.** Dairy Cattle and Milk Production.
- **112131.** Dual-Purpose Bovine Cattle Ranching and Farming.
- **112139.** Cattle Farming for Other Purposes.
- **112410.** Sheep Farming.
- **112420.** Goat Farming.
- **115210.** Support Activities for Animal Production.

Economic Activity		112110	Beef Cattle Ranching and Farming
Description	Includes	Economic units mainly dedicated to the ranching and farming of bovine cattle for the production of meat, in any of its phases. Also includes economic units mainly dedicated for the breeding of calves and stallions in development to be used as bovine cattle for milk production.	
	Excludes	Ranching and farming, excluding breeding, of stallions for milk production (112120, Dairy Cattle and Milk Production); stallion farming for the joint production of milk and meat; other cattle for the joint production of milk and meat (112131, Dual-Purpose Bovine Cattle Farming); the ranching and farming of stallions for other purposes; cattle farming for recreation or sport (112139, Cattle Farming for Other Purposes); economic units that combine agricultural activities with the ranching and farming of animals when it is impossible to determine which is the main activity (111993, Crop and Livestock Combination Farming), and economic units that combine bovine cattle farming for the production of meat with forest use, when it is impossible to determine what the main activity is (112991, Animal Production Mixed).	
	Products	Cattle for meat production.	
Economic Activity		112120	Dairy Cattle and Milk Production
Description	Includes	Economic units mainly dedicated to the ranching and farming of bovine cattle for the production of milk.	
	Excludes	Calves and developing stallions breeding to be used as cattle for milk production; ranching and farming of stallions for meat production (112110, Beef Cattle Ranching and Farming); the ranching and farming of stallions for the joint production of milk and meat; other cattle for the joint production of milk and meat (112131, Dual-Purpose Cattle Farming); the ranching and farming of stallions for other purposes; cattle farming for leisure or sport (112139, Cattle Farming for Other Purposes); economic units that combine agricultural activities with the ranching and farming of animals when it is impossible to determine which is the main activity (111993, Crop and Livestock Combination Farming), and economic units that combine the ranching and farming of bovines for milk production with forest use when it is impossible to determine what the main activity is (112991, Animal Farming Combined with Forestry).	
	Products	Dairy cattle or cattle farming for milk production.	

Economic Activity		112131	Dual-Purpose Bovine Cattle Ranching and Farming
Description	Includes	Economic units mainly dedicated to the ranching and farming, in any of its phases, of bovine cattle for the joint production of milk and meat.	
	Excludes	The breeding of calves and developing stallions to be used as cattle for milk production; the ranching and farming of stallions for meat production (112110, Beef Cattle Ranching and Farming); the ranching and farming, excluding breeding, of stallions for milk production (112120, Cattle Farming for milk production); the ranching and farming of stallions for other purposes (112139, Cattle Farming for other purposes); economic units that combine agricultural activities with animal husbandry when it is impossible to determine which is the main activity (111993, Crop and Livestock Combination Farming); economic units that combine the cattle farming for the joint production of milk and meat with forest use when it is impossible to determine which is the main activity (112991, Animal Farming Combined with Forest Use), and economic units that combine the ranching and farming of animals of different species when it is impossible to determine which is the main activity (112999, All Other Animal Production).	
	Products	Bovine farming for the joint production of milk and meat.	
Economic Activity		112139	Cattle Farming for Other Purposes
Description	Includes	Economic units mainly dedicated to the ranching and farming, in any of its phases, of bovine cattle for other economic units mainly dedicated to the ranching and farming not classified elsewhere, such as sport or recreation, for example fighting bulls and repair bulls for rodeos. Also includes: economic units that combine the ranching and farming of bovine cattle with different purposes when it is impossible to determine which is the main activity.	
	Excludes	Calves breeding and stallion farming to be used as cattle for milk production; the ranching and farming of stallions for meat production (112110, Beef Cattle Ranching and Farming); the ranching and farming, excluding stallion breeding for milk production (112120, Dairy Cattle and Milk Production); the stallion ranching and farming for the joint production of milk and meat (112131, Dual-Purpose Bovine Cattle Farming); economic units that combine agricultural activities with animal husbandry when it is impossible to determine which is the main activity (111993, Crop and Livestock Combination Farming); economic units that combine cattle farming for other purposes with forestry use when it is impossible to determine which is the main activity (112991, Animal Production Combined with Forestry Use), and economic units that combine the ranching and farming of animals of different species when it is impossible to determine what the main activity is (112999, All Other Animal Production).	
	Products	Cattle farming for other purposes.	

Economic Activity		**112410**	**Sheep Farming**
Description	**Includes**	Economic units mainly dedicated to sheep farming. It also includes economic units that combine the ranching and farming of sheep with that of goats when it is impossible to determine which is the main activity.	
	Excludes	Economic units that combine agricultural activities with the production of animals when it is impossible to determine which is the main activity (111993, Crop and Livestock Combination Farming); the farming of goats only (112420, Goat Farming); economic units that combine the ranching and farming of sheep with forestry use when it is impossible to determine which is the main activity (112991 Animal Production Combined with Forestry Use), and economic units that combine the ranching and farming of animals of different species when it is impossible to determine which is the main activity (112999, All Other Animal Production).	
	Products	Sheep farming.	
Economic Activity		**112420**	**Goat Farming**
Description	**Includes**	Economic units mainly dedicated to goat farming.	
	Excludes	Economic units that combine agricultural activities with the ranching and farming of animals when it is impossible to determine which is the main activity (111993, Crop and Livestock Combination Farming); economic units that combine the ranching and farming of sheep with that of goats when it is impossible to determine which is the main activity (112410, Sheep Farming); economic units that combine the production of goats with forestry use when it is impossible to determine which is the main activity (112991, Animal Production Combined with Forestry Use), and economic units that combine the production of different species of animals when it is impossible to determine which is the main activity (112999, All Other Animal Production).	
	Products	Goat farming.	
Economic Activity		**115210**	**Support Activities for Animal Production**
Description	**Includes**	Economic units mainly dedicated to providing support services to third parties to carry out livestock activities, such as administration of economic units for animal ranching and farming, rental of machinery and equipment for livestock use with operator, shearing, artificial insemination, animal sperm banks, castration, inspection zootechnical and phytosanitary, shelter and care of animals, cleaning chicken coops, manure collection, parasiticide baths, egg cleaning and classification, pedigree registration, horseshoeing, animal husbandry services, marking, nebulization and livestock scale services; and services related to fishing not elsewhere classified.	
	Excludes	Rental of machinery without operator for the ranching and farming of animals (532491, Rental and leasing of agricultural, fishing and manufacturing machinery and equipment); technical consultancy services in the ranching and farming of animals (541690, Other Scientific and Technical Consulting Services); providing private and public veterinary services for pets and livestock (54194, Veterinary Services), and pet boarding services (812990, All Other Personal Services).	
	Products	Support Activities for Animal Production.	

MAIN PARAMETER	
Contribution from Mitigation of Greenhouse Gases (GHG)	
SUBSTANTIAL CONTRIBUTION	
Metric	Reduction of CO2 emissions CO_2 (gCO_2e). Carbon sequestration
Mexico Threshold	

Minimum criteria to determine if the Economic Activity is considered sustainable

The activities of the animal farming and ranching subsector will be considered sustainable and may demonstrate their contribution to comply with the main parameter (contribution to climate change mitigation) by meeting at least two of the following criteria:

- Avoiding or reducing GHG emissions through the implementation of agricultural good practices and the mobilization of resources towards investment concepts listed in this section, or by demonstrating the reduction of at least 8% of GHG emissions (gCO_2e) in 2030 compared to the 2020 emissions for the agricultural sector.[14]

o Good agricultural practices and the application of investment concepts, actions and management practices, including those previously identified by initiatives for low carbon economies development, such as projects certified by the Climate Bonds Initiative (CBI), and the concepts of sustainable investment of the Trust Funds for Rural Development of Mexico , or by those for which there is sufficient scientific knowledge and expert consensus on their mitigation effects and interactions with other environmental and food security objectives (see Table 1).

- Maintaining and increasing carbon reserves for a period equal to or greater than 20 years through the good practices' implementation (see table 1).

- Showing evidence of potential soil carbon sequestration over time, through one of the following ways:

  o Having secure land rights, low threat of conversion, contractual commitments, or the application of appropriate management practices (see Table 1). This could be less in the case of agroforestry projects that use fast-growing tree species with a cutting cycle of 8 to 15 years (e.g., Gmelina Arborea) or that, due to their useful life must be renewed (e.g. palm coconut).

  o Having a verified baseline to demonstrate carbon sequestration and GHG emissions generated by livestock activities. This criterion considers carbon pools (e.g., aboveground, belowground, and soil biomass) primarily in grasslands older than 5 years. In the case of holdings in enclosures, stables or on farms, a commitment must be established to implement wooded spaces or multispecies paddocks in 20% of their total area after 5 years from the start of the project.

[14]In accordance with the Fifth Transitory Article of the General Climate Change Law Regulations, the establishments subject to reporting will attach to their annual report, the verification opinion of their emissions as of 2018 (those that generate between 25,000 and 100,000 tons of CO_2) , including the agricultural sector. Therefore, possible GHG reductions should be estimated and counted to demonstrate their contribution to sustainable development.

- Counting with animal welfare certifications in those activities or farms that have a specialized nature or low carbon storage capacity (e.g. pens, feeders, stables or farms): Humane Farm Animal Care, RSPCA Assured, Animal Welfare Approved by A Greener World, Beter Leven levels 2 and 3; G.A.P levels 4 and 5, FARM; and power systems (e.g. RSB, RTRS, ISCC Plus, Proterra); or through any practice that reduces or compensates CH4 by 20% in respect to a previously verified baseline.
- Having national and international seals and/or certificates.
- Organic Mexico (SADER), Soil Conservation Agro-ecological Certificate (Mexico City), Calakmul Sustainability Collective Seal, products from Voluntarily Designated Areas for Conservation (CONANP) or Private Conservation Areas, and any other that may apply.
- Reporting information to the SADER National Livestock Register to promote the reporting and monitoring of information and improve national statistics on the livestock sector in Mexico.
- Make payments for environmental services (CONAFOR).
- Dedicating or allocating a percentage of property for regeneration or conservation.
- Promoting and protecting rural, ecological reserves, voluntarily designated areas for conservation, ANP buffer zones, as well as lands where a greater number of native forage species (herbaceous, shrubby, tree) of a region can be used and managed, as part of a landscape management strategy that contributes significantly to its sustainability, within the framework of productive activities.

The activities cannot be considered sustainable and, thus, both the main parameter and the substantial contribution cannot be considered fulfilled, if they are carried out under the following criteria:

- Outside the agricultural frontier[15]: the area occupied by the agricultural frontier is dynamic, since it is reduced in places where urban areas continue to grow and occupy spaces that were previously rural; on the contrary, it can increase in those territories occupied by forest cover, removing land from forests and jungles and exerting pressure on those resources. However, the trend is in the direction of producing more food without occupying more space, which leads to being more productive.
- On land with recent changes in land use (e.g., from forestry to ranching or agricultural, as well as from ranching to agricultural, after 2018).
- Continuous wooded areas: plots of more than one hectare with trees more than five meters tall and a canopy cover greater than 30%, or trees capable of reaching those thresholds in situ.
- Wetlands: land covered or saturated with water permanently or during a significant part of the year (e.g., mangroves, flooded savannahs).
- Protected Natural Areas core zones.
- Lands with no propensity for cattle raising whose best use is forestry (e.g., due to slopes, badlands).

[15]Frontera Agricola. Serie III. (SIAP). Available at: https://cmgs.gob.mx/siapdsg/apps/webappviewer/index.html?id=19e91e718f7644c380c178703e46f1ef ; https://idegeo.centrogeo.org.mx/layers/geonode%3Af_agr_adesur

PRACTICE	DESCRIPTION	ELIGIBLE ACTIONS EXAMPLES
• Conservation	• The property includes an area dedicated to the conservation and/or maintenance of functional forest ecosystems with the condition of maintaining and increasing carbon reserves for a period equal to or greater than 20 years through the application of good practices (Google Map Evidence Earth of the property with distribution of land uses or recent photographs).	• The property is part of a Voluntarily Designated Area for Conservation (CONANP-SEMARNAT certification).
• Increase in aerial and underground biomass	• Agroforestry systems implementation. • Creation of nurseries for trees, shrubs • or similar plants of agroforestry importance, preferably with local species. • Establishment of cover crops, preferably with easy-to-manage species.	With livestock agroforestry technologies: • Windbreak barriers. • Planting boundaries. • Protection belts. • Living fences or simple or multi-layer hedges with multi-use forest or fruit species. • Lines with local trees or wooded strips on the banks of streams, rivers, jagueyes or other bodies of water. • Protein or energy banks. • Trees scattered in pastures (in medium or high density). • Protection and/or enrichment of acahuales. • Introduction of grass, herbaceous, shrubby and tree strips interspersed in pastures (Alley farming) or agricultural areas (Alley cropping, MIAF). • Creation of connectivity zones through vegetation corridors or diversified and multi-layer live fences. • Reforestation and revegetation with native species considering ecological principles. • Use of waste organic materials as cover.
• Diversification of productive activities	• From lands dedicated to grazing land. • From land with forest, fruit or pasture plantations • Production under shade.	With livestock agroforestry technologies: • Grazing in plantations of perennial crops. • Grazing in forest plantations. • Family gardens with backyard livestock.

• Grazing management	• Calculation of the stocking rate. • Pasture management (rotational, deferred, PARI, PRV). • Multispecies livestock farms.	• Electric fences. • Rotation operation with solar energy. • Protein banks
• Livestock feed management	• Use of foods of high nutritional quality (high proportion of digestible dry matter). • Avoid the use of hormones in fattening.	• Protein banks, pasture in alleys. • Forage choppers. • Produces and uses silage. • Use of legumes. • Multinutritional blocks. • Cutting grass, hydroponic forage. • Dietary supplements to reduce emissions.
• Waste management	• Manure management. • Garbage management.	• Composting, bocashi, biofertilizers (super lean, compost tea). • Biochar. • Vermicomposting. • Use of leachate. • Biodigesters. • Temporary storage of inorganic residues from agricultural activity (photo). • Any practice that reduces or offsets CH_4 and N_2O by 20%.

Eligible Investment Concepts to which resources are allocated in the livestock branch

- Energy cogeneration equipment
- LED luminaire
- Other crops production of bioenergy biofuels
- Machinery and production equipment with biofuels
- Forest nurseries
- Efficient motors
- Efficient pumping systems
- Cooling system renovation
- Biodigesters
- Solar power equipment
- Solar water heaters
- Equipment for geothermal power generation
- Solar thermal systems
- Wind generators
- Establishment of forest plantations (compensation actions)
- Facilities renewable sources bioenergy
- Forest plantation maintenance
- Photovoltaic systems

DO NO SIGNIFICANT HARM ASSESSMENT

Environmental	**Water**	**Section A.1** All economic activities in the subsector: animal ranching and farming must include the following guidelines. • Identifying the actions and practices that favor the conservation of quality and/or water amount: o Protection of water bodies, watercourses and springs through reforestation-revegetation and fencing. o Management plans for the use/conservation of water, integrated management of water resources. o Water storage and collection works (for example, embankments, dams, cisterns, water pots). o Treatment and reuse of wastewater. o Use of drinking troughs, water pots and water conduction lines to the paddocks, to prevent cattle from drinking water directly from their natural source. o Establishment of paddocks less than 5 m from the shore. o Preventive management plans for possible droughts or water stress. o Harvesting water with rainwater harvesting systems. o Identifying the availability of water and the risks of water contamination, both of surface waters and aquifers, and in particular the sources of water used for human consumption, in the hydrological basin and in the hydrological region in question • Using insignificant damage assessment indexes, such as the water footprint. • Complying with Mexican legislation on the use and reuse of water:

Environmental		• National Water Law. Concession title issued by CONAGUA. Applies in deep wells, it is not common in the case of rivers and canals[16]. • National Water Program 2020-2024, as well as state and municipal water management strategies and plans, and address the recommendations of the Basin Councils by hydrological basin or by hydrological region. • NOM-001-SEMARNAT-2021, which establishes the permissible limits of pollutants in wastewater discharges in receiving bodies owned by the nation.
	Adaptation	**Section A.2** All economic activities in the subsector: Animal ranching and farming must include the following guidelines. • Promoting the conservation, recovery and/or improvement of ecosystems and systems • of production, seeking to reduce their sensitivity or improve their resilience and adaptation capacity to disasters related to climate change and enhance their climate regulation services, based on the establishment of the following key environmental aspects. • Live barriers, stabling or pen feeding in critical periods, as well as the protection of wetlands and forests by regulating the concentration of animals. • Livestock systems capable of adapting to a changing climate. o Forage species, agricultural varieties, breeds and forest species tolerant to drought and floods. o Embankments, runoff diversion ditches, plot drainage, infrastructure for the conservation and/or storage of forage in case of floods. o Infrastructure for the mobilization of livestock in cases of natural disasters (internal roads interconnected with neighboring properties or with communication routes). Increase in volume and carbon sinks (e.g., use of plant species with higher carbon fixation such as legumes). Use of natural shadows. • Carrying out rainwater harvesting actions. • Avoiding soil erosion and/or contribute to the restoration of ecosystems. • Developing and disseminate protocols and training programs on climate change. • Demonstrating the evaluation of the dimension of the alterations and impacts that could affect municipalities vulnerable to climate change. The following tools should be reviewed, including, but not limited to: o National Atlas of Vulnerability[17] o National Risk Atlas [18]

[16]In accordance with the Fifth Transitory Article of the Regulations of the General Climate Change Law, the establishments subject to reporting will attach to their annual report the verification opinion of their emissions as of 2018 (those that generate between 25,000 and 100,000 tons of CO2); including the agricultural sector. Therefore, possible GHG reductions should be estimated and counted to demonstrate their contribution to sustainable development.

[17]National Vulnerability Atlas. First edition (SEMARNAT-INECC). Available at: https://atlasvulnerabilidad.inecc.gob.mx/page/fichas/ANVCC_LibroDigital.pdf

[18]National Risk Atlas (CENAPRED). Available at: http://www.atlasnacionalderiesgos.gob.mx/

Environmental	**Biodiversity**	**Section A.3** All economic activities in the subsector: Animal ranching and farming must include the following guidelines: ● Conserving, restoring and sustainably using biodiversity to ensure the preservation, recovery and/or improvement of ecosystem processes and the provision of key environmental goods and services through the following: o Encouraging the increase of the protected natural areas surface and other effective area-based conservation measures. o Preventing the introduction of exotic species and ensure their effective management, control and eradication. o Controlling the use of agrochemicals, avoiding their unsustainable use. o Promoting activities for the conservation of native vegetation and its restoration and the recovery of ecological connectivity. o Reducing the number of practices that affect the processes, functions and biodiversity of ecosystems (e.g., burning, felling, overgrazing, cattle raising in areas with slopes greater than 20°) as well as the negative impacts that derive from them. o Strengthening practices that allow the sustainable use of nutrients and the biological control of pests, diseases or parasites, promoting the development of desirable organisms that act as natural predators, decomposers, and parasitoids. o Contributing to the conservation of native species. o Halting the expansion of forests for feed and pasture production. ● Using an inventory of indicator species of the state of ecosystem health (e.g., birds, insects, plants, etc.). ● Carrying out the practices established in the National Strategy for the conservation and sustainable use of pollinators (ENCUSP), regarding the promotion of Sustainable and Friendly production with Biodiversity.
	Pollution prevention and control	**Section A.4** All activities in the subsector: Animal ranching and farming must include the following guidelines: ● Protecting the physical, chemical and biological integrity of soils and promoting actions and practices that promote the conservation and recovery of land for livestock use, through the following key environmental aspects. ● Preventing physical degradation: soil erosion and compaction. ● Encouraging the implementation of structures for soil conservation (e.g., curves or level edges, terraces, contour furrows, dams, ditches, etc.). ● Managing runoff in periods of high rainfall (e.g., live barriers using agaves, cacti or other woody plant species with deep and extensive root systems or that grow naturally in such conditions). ● Reducing the deposition of sediments in bodies of water due to soil erosion. ● Carrying out sustainable practices (e.g., crop rotation, zero or minimum tillage, strip cropping, green manures, cover crops, manure treatment, etc.). ● Preventing chemical degradation: salinization, acidification/alkalization and soil contamination.

Environmental		• Using fertilizers trying to reduce the loss of excess nutrients by leaching, volatilization or oxidation and that agrochemicals are applied rationally and selectively (in time and on the treated surface); but give preference to sustainable biological, physical or other non-chemical methods, if possible. • Avoiding biological degradation: loss of organic matter, imbalance of biological activity and mineralization processes (e.g., avoid bare soil, tillage). • Reducing fire and/or burning of input containers emissions.
	Circular economy	**Section A.5** All economic activities in the subsector: animal production, ranching and farming must include the following guidelines: • Promote actions and practices that reduce the effects of the activities carried out in production and value chains on the environment, through the following key environmental aspects: • Using residues and by-products and any other measures to minimize the use of primary raw materials per unit of production, including energy. • Minimizing the loss of nutrients from the production system to the environment. The development of local and regional markets encourages consumption and reduces impacts due to the use of energy for transportation and distribution of products. • Making efficient use of materials and natural resources, such as non-renewable energy sources, raw materials, water or soil in one or several phases of the product life cycle, particularly in terms of durability and possibilities of repair, update, reuse or recycling of products, minimizing the generation of waste and its proper management.

REFERENCES

Ceccon, E. y Martínez, M. (1999). Aspectos ambientales referentes al establecimiento de plantaciones de eucalipto de gran escala en áreas tropicales: aplicación al caso de México. Interciencia, 24(6), 352-353.

Collaborative Partnership on Forests (2008). Strategic framework for forests and climate change. A proposal by the Collaborative Partnership on Forests for a coordinated forest-sector response to climate change. The Collaborative Partnership on Forests.

CONABIO (2016). Estrategia Nacional sobre Biodiversidad de México y Plan de Acción 2016-2030. Available at: https://bioteca.biodiversidad.gob.mx/janium/Documentos/12890.pdf

Deschamps-Solórzano, L., J. A. Domínguez-Vizcarra, A. Vega-López, M. A. García-García, C. González-Rebeles, D. Carmona, E. Méndez-Guzmán y L. Ortega-Reyes. (2020). Hacia una Ganadería Sustentable y de Bajas Emisiones en México: una propuesta de implementación de una acción nacionalmente apropiada de mitigación para transitar hacia la ganadería bovina extensiva sustentable. FMVZ UNAM, FIRA, INIFAP, SADER, IICA.

Diario Oficial de la Unión Europea (2021). Reglamento Delegado (UE) 2021/2139 de la Comisión. Available at: : https://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:32021R2139&from=EN

ENCUSP (2021). Estrategia Nacional de para la Conservación y el Uso Sustentable de Polinizadores. Available at: https://www.gob.mx/agricultura/documentos/estrategia-nacional-para-la-conservacion-y-uso-sustentable-de-los-polinizadores-encusp

ENEI (2007). Estrategia de especies exóticas invasoras en México. Available at: https://www.biodiversidad.gob.mx/especies/Invasoras/estrategia

FAO (2019). Five practical actions towards low-carbon livestrock. Rome. Available at: https://www.fao.org/3/ca7089en/ca7089en.pdf

Gobierno de Colombia (2022). Taxonomía Verde de Colombia. Available at: https://www.taxonomiaverde.gov.co/webcenter/ShowProperty?nodeId=/ConexionContent/WCC_CLUSTER-191401

Gobierno de México-SEMARNAT-INECC (2022). México: Inventario Nacional de Emisiones de Gases y Compuestos de Efecto Invernadero 1990-2019. Available at: https://unfccc.int/sites/default/files/resource/InventarioGEI_Mexico_1990_2019.pdf

Grupo Experto Técnico en Finanzas Sostenibles de la Unión Europea (2020, march). Taxonomy: Final report of the Technical Expert Group on Sustainable Finance. Available at: https://finance.ec.europa.eu/system/files/2020-03/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf

Halffter, G., M. Cruz y C. Huerta (2018). Ganadería sustentable en el Golfo de México. Instituto Nacional de Ecología, A.C. México.

Hoth, J. (2012). Buenas prácticas ganaderas en México/Beneficial Livestock Management Practices in Mexico. Comisión para la Cooperación Ambiental de América del Norte (CCA). Montreal. 30 pp.

Huerta, E., L. Neyra, R.M. Portilla-Alonso y C. Velázquez (2020). Prácticas amigables con la biodiversidad: una propuesta para su adopción en seis sistemas productivos. Proyecto Sistemas Productivos Sostenibles y Biodiversidad. Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO), Banco Mundial, Fondo Mundial para el Medio Ambiente (GEF). México.

INEGI (2023). Producto Interno Bruto por Actividad Económica. Available at: https://www.inegi.org.mx/temas/pib/

INMUJERES (2020). PROIGUALDAD 2020-2024, Programa Nacional para la Igualdad Mujeres y Hombres 2020-2024. Diario Oficial de la Federación el 22 de diciembre de 2020. Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5608467&fecha=22/12/2020#gsc.tab=0

Kauppi, P. E., Stål, G., Arnesson-Ceder, L., Hallberg Sramek, I., Hoen, H. F., Svensson, A., Wernick, I. K., Högberg, P., Lundmark, T., y Nordin, A. (2022). Managing existing forests can mitigate climate change. Forest Ecology and Management, 513, 120186. Available at: https://pub.epsilon.slu.se/28655/1/kauppi-p-et-al-220712.pdf

Nuñez,M et al. (2021). Should tree invasions be used in treeless ecosystems to mitigate climate change? Frontiers un Ecology and the Environment. Available at: https://doi.org/10.1002/fee.2346

Palma, JM, JA Torres-Rivera y E Valdés Velarde (XXX) Tecnologías agroforestales Tecnologías agroforestales para la adaptación y mitigación al -cambio climático – opciones y perspectivas. Universidad de Colima. 298 pp.

Red Temática de Sistemas Agroforestales de México (2020). Los sistemas agroforestales de México: avances, experiencias, acciones y temas emergentes en México. Primera edición. Morelia, Michoacán. Universidad Nacional Autónoma de México, Escuela Nacional de Estudios Superiores, Unidad Morelia. Available at: https://www.researchgate.net/profile/Ana-Moreno-Calles/publication/326557060_LOS_SISTEMAS_AGROFORESTALES_DE_MEXICO/links/5b55d3d5aca27217ffb464f6/LOS-SISTEMAS-AGROFORESTALES-DE-MEXICO.pdf

SADER (2020) Programa Sectorial de Agricultura y Desarrollo Forestal. Diario Oficial de la Federación del 25 de junio de 2020. Available at: https://dof.gob.mx/nota_detalle.php?codigo=5595549&fecha=25/06/2020#gsc.tab=0

SADER (2022). Plan Estratégico de Cambio Climático del Sector Agroalimentario. Available at: https://www.gob.mx/cms/uploads/attachment/file/776923/PLECCA_2022.pdf

Sammuels, I. y M.N. Niamir-Fukker (XXX). La aforestación de pastizales no es una estrategia viable de mitigación del cambio climático. Available at: https://www.iyrp.info/sites/iyrp.org/files/IYRP%20IC-VCM%20points%20on%20afforestation-Spanish.pdf

Saynes Santill{an, V. et al (2016). Emisiones de gases de efecto invernadero en sistemas agrícolas de México. Terra Latinoam, Chapingo, v. 34, n. 1, p. 83-96. Available at: http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0187-57792016000100083&lng=es&nrm=iso

SEMARNAT (2015). Compromisos de Mitigación y Adaptación ante el Cambio Climático para el periodo 2020-2030, Instrumentación. México. Available at: http://www.gob.mx/semarnat/articulos/compromisos-de-mitigacion-y-adaptacion-2020-2030

SEMARNAT (2020). Programa Nacional Forestal 2020-2024. Publicado en el Diario Oficial del 31 de diciembre de 2020. Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5609275&fecha=31/12/2020#gsc.tab=0

SEMARNAT (2020). Programa Sectorial de Medio Ambiente y Recursos Naturales (Promarnat) 2020-2024. Diario Oficial de la Federación el 7 de julio de 2020. Available at: https://www.gob.mx/cms/uploads/attachment/file/566832/PROMARNAT-2020-2024.pdf

Gobierno de México. Secretaría de Medio Ambiente y Recursos Naturales. (2022). México: Tercer Informe Bienal de Actualización ante la Convención Marco de las Naciones Unidas sobre el Cambio Climático (2022). Available at: https://www.gob.mx/cms/uploads/attachment/file/747507/158_2022_Mexico_3er_BUR.pdf

SEMARNAT-INECC (2016, noviembre). Contribuciones Previstas y Determinadas a Nivel Nacional (INDC) para Adaptación. Disponible en: https://www.gob.mx/inecc/acciones-y-programas/contribuciones-previstas-y-determinadas-a-nivel-nacional-indc-para-adaptacion#:~:text=Las%20Contribuciones%20Previstas%20y%20Determinadas%20a%20Nivel%20Nacional%20(INDC%2C%20por,de%20reducir%20las%20emisiones%20de

SEMARNAT-INECC (2018). Sexta Comunicación Nacional y Segundo Informe Bienal de Actualización ante la Convención Marco de las Naciones Unidas sobre el Cambio Climático (Issue c). Available at: https://cambioclimatico.gob.mx/sexta-comunicacion/

INECC. 2019. Atlas Nacional de Vulnerabilidad al Cambio Climático México. 1ª. Edición (libro electrónico). Instituto Nacional de Ecología y Cambio Climático. México. Available at: https://atlasvulnerabilidad.inecc.gob.mx/page/fichas/ANVCC_LibroDigital.pdf

SEMARNAT (2021). PROGRAMA Especial de Cambio Climático 2021-2024. Diario Oficial de la Federación el 8 de noviembre de 2021. Available at: https://www.gob.mx/cms/uploads/attachment/file/685848/SEMARNAT_081121_EV.PDF

SADER-SIAP (2018). Frontera Agrícola (Serie III). Available at: https://cmgs.gob.mx/siapdsg/apps/webappviewer/index.html?id=19e91e718f7644c380c178703e46f1ef

SIAP (2022). Servicio de Información Agroalimentaria y Pesquera. Panorma Agroalimentario 2022. Available at: https://drive.google.com/file/d/1jVWS4EFKK7HGwQOBpGeljUyaDT8X8lyz/view

SNICS (2017). Cultivos nativos de México para la alimentación y la agricultura. Available at: https://www.gob.mx/snics/acciones-y-programas/cultivos-nativos-de-mexico-para-la-alimentacion-y-la-agricultura

GLOSSARY OF TERMS

Agricultural frontier: The zone of division between the lands occupied with crops and those that were never cultivated before, where non-agricultural activities are carried out and only natural vegetation grows, which can be used for hunting, fruit gathering or some other activity.

Agroforestry system: Set of land management techniques that involve the simultaneous or staggered combination in time and space of forest trees with livestock and/or crops.

Biodegradable: Product or substance that can disintegrate or decompose into the chemical elements that make it up, due to the action of biological agents and under natural environmental conditions.

Biodiversity: Diversity of plants and animals within a region, including terrestrial and aquatic ecosystems, as well as the ecological complexes of which they are a part.

Biofuels: Any fuel obtained from the treatment of vegetable biomass, which is much less polluting than fossil fuels.

Circular economy: Strategy that seeks to reduce both: the entry of virgin materials and the production of waste, closing the economic and ecological flows of resources.

Climate change: Climate modification based on climate history on a global or regional scale.

Crop rotation: When a crop regularly grown is changed to another but in the same property.

Commercial forest plantation: It is the cultivation of forest species established on temporary forestland or preferably forestland, for commercial purposes (Art. 7, Fracc. XL of the LGDFS).

Commercial forest plantation: It is the cultivation of forest species established on temporary forestland or preferably forestland, for commercial purposes (Art. 7, Fracc. XL of the LGDFS).

Cover crops: Additional crops that can be integrated together with the main crop or can be established to cover the land in order to protect the soil from the erosive effects of wind, rain and high temperatures outside the main productive cycle.

Deep tillage: The agricultural operation that consists of drawing deep furrows in the soil with agricultural machinery, by means of tools or with a plow.

Deforestation: The process of disappearance of forests or forest mass, mainly caused by human activity.

Environmental degradation: Progressive deterioration of the environment from the depletion of resources.

Erosion: The accelerated removal of the topsoil from the Earth's surface through water, wind, and tillage.

Fertilizer: Organic or inorganic material added to the soil with the purpose of supplying certain essential elements for plant growth.

Forestry: The theory and practice of controlling the establishment, composition, constitution, growth and development of forest ecosystems for the continuous production of goods and services (Art. 7, Fracc. LXIV of the LGDFS).

Forest ecosystem: The basic functional unit of interaction of forest resources among themselves and them with the environment, within a determined space and time (Art. 7, Fracc. XXIII of the LGDFS).

Fossil fuels: Those, which come from the biomass, produced in past eras, which has undergone burial and, after it, transformation processes, due to an increase in pressure and temperature, until the formation of substances with a high energy content, such as coal, oil, or natural gas. Since it is not renewable energy, it is not considered biomass energy, even if its origin is organic or biomass.

Gas mitigation: Human intervention aimed at reducing sources or enhancing sinks of greenhouse gases.

GHG emissions: Gaseous component of the atmosphere, natural or anthropogenic, that absorbs and emits radiation at certain wavelengths of the terrestrial radiation spectrum emitted by the Earth's surface, the atmosphere itself and clouds.

Global warming: The long-term increase in the average temperature of the Earth's atmosphere and oceans.

Greenhouse effect: Phenomenon in which certain gases retain part of the energy emitted by the ground after being heated by solar radiation, which results in a temperature increase.

Harvest residues: The agricultural residues that it generates can be used for animal feed, recycling nutrients and in the form of organic matter within the agricultural system, as a plant cover for the soil to maintain moisture and prevent erosion, control undesirable plants, as well as power generation.

Incorporation of organic matter into the soil: When harvest and compost residues are made.

Live fences or biological corridors: Called live fences because they are made up of trees, these are linear plantations of one or several species that support the barbed wire and form a barrier around the farm lots.

Management units for wildlife conservation: Registered properties and facilities that operate in accordance

with an approved management plan and within which, permanent monitoring of the state of the habitat and of the local populations or specimens. (Art. 7, Section XLVIII of the LGVS).

Medium tillage: Tillage system in which at least 30% of the soil surface must be covered with plant residues after sowing, in order to control erosion.

Non-recyclable materials: Materials that due to their composition are not reusable in the production of by-products.

Non-timber forest resources: It refers to the non-woody part of the vegetation of a forest ecosystem, susceptible to exploitation or use, including lichens, mosses, fungi and resins, as well as the soils of forest lands and preferably forest lands (Art. 7, Section XLIX of the LGDFS).

Plant mass: Shrubs, herbaceous vegetation and the aerial part of trees that during their vital activity process through photosynthesis, fix carbon. In the organic mass, not decomposed layer found in the soil such as leaves, branches and seeds.

Perennials: Those with very long cycles, since their vegetative life span can be extended beyond 25 continuous years; during which, once sowing is done, several harvests can be obtained, either cyclical or continuous, depending on the plantation type.

Productive reconversion: When a change is made from one crop to another, to increase the productivity of a property.

Reduced tillage: The proposed tillage system for rapid and economic renewal of sugarcane plantations called "Reduced tillage (RT or LBR in Spanish)".

Series III (from SIAP 2018): Series number three of the agricultural frontier classifications according to SIAP to mark an area distribution with agricultural activity, of territory characteristics and dynamics of each temporality; issued in 2018.

Soil conservation works: When terraces, gabion dams, contour lines, soil drainage are carried out.

Soil degradation: It mainly refers to the processes triggered by human activities that reduce their current and/or future capacity to sustain natural or managed ecosystems, to maintain or improve air and water quality, and to preserve human health.

Sustainability: Development that focuses solely on natural resources and the environment, trying to preserve, conserve and protect them for the benefit of current and future generations. Without taking into account the specific economic and social needs of the human being.

Sustainable development: Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs; including social, economic, and environmental. (Based on the Brundtland Declaration of 1987.)

Sustainable agriculture: The type that contributes to improving environmental quality and the basic resources on which agriculture depends in the long term.

Sustainable forest use: The extraction carried out, under the terms of this Law, of the forest resources of the environment in which they are found, including timber and non-timber, in a manner that respects the functional integrity and carrying capacities of the ecosystems of which such resources are part, for indefinite periods of time (Art. 7, Fracc. III de la LGDFS).

Sustainable Economy: One that achieves durability and increases an organization's capital without neglecting the social, environmental and economic aspects of the community where the activity is carried out.

Synthetic fertilizers: The one manufactured through an industrial process. As indicated before, complex fertilizers are synthetic, as are a wide variety of simple fertilizers, such as urea, superphosphates, ammonium nitrate, etc. A variant of the synthetic origin is that of the by-products.

Temporary waste disposal site: These are temporary storage facilities for waste to then, be transported to a final disposal site; eventually, some other process could be applied to such materials, like separation, compaction and crushing.

Timber forest resources: Those made up of woody vegetation susceptible to exploitation or use (Art. 7, Fracc. XLVIII of the LGDFS).

Water availability: The total volume of liquid in a region.

Zero tillage: Cultivation technique without soil disturbance by plowing.

Fuente: freepik / wirestock

ECONOMIC SECTOR

1.2 ELECTRIC POWER AND WATER SUPPLY (GENERATION, TRANSMISSION, AND DISTRIBUTION)

The energy sector in Mexico is essential for the population, by providing inputs to carry out a large part of the productive activities of sectors like construction, manufacturing, and agriculture, among others. According to the analysis carried out by the Sustainable Taxonomy Working Group of the existing links between the targets of the SDGs and the NDCs with the economic sectors, it was identified that this sector has a direct impact on SDG 6 “Clean Water and Sanitation”; SDG 7 “Affordable and Clean Energy”; SDG 11 “Sustainable Cities and Communities”; and SDG 13 “Climate Action”. According to the economic impact analysis, in the 2010-2020 period, this sector contributed an average of 1.76% of the GDP.

The search for a better quality of life increased our energy consumption level. However, the electricity supply activities are those that contributed the most to GHG emissions in 2019, with 23.3% of the total emissions of the INEGyCEI (Mexico Government, et al. 2022). Electricity in Mexico is mainly generated through fossil fuel combustion, which contributes to the emission of pollutants such as SOx, NOx, CO, PM 10, PM 2.5 and volatile organic compounds (VOCs), which have the capacity to cause environmental impacts; for instance, on air quality and adverse effects in the population’s health through respiratory, lung and heart diseases, among others.

In this context, one of the most significant challenges in Mexico is moving towards a more sustainable energy model that integrally and efficiently guarantees energy for the whole population while complying with international environmental commitments. The NDC committed by Mexico in 2015 estimates that the energy sector, particularly electricity, has a 63 million tCO2e reduction potential and a clean energy

generation of 35% in 2024 and 43% by 2030 (Mexico Government, 2015). The 2022 NDC update also considers clean energy integration in electricity generation and the substitution of fuels with high carbon content through wind, geothermal and photovoltaic energy, among others (INECC, 2022).

The energy sector has a high potential to contribute to the mitigation of and adaptation to climate change through the modification of the structure of the primary energy matrix of Mexico, which was integrated in 2019 by 86.9% fossil, 10.3% renewable, and 2% nuclear energy (SENER, 2022). However, the change from fossil fuel consumption to clean energy is exposed to climate change since water availability decrease and droughts rise can restrict hydroelectric generation, representing the 61.9% of the total renewable energies (SENER, 2018).

Due to the latent climate change mitigation, through this sector's GHG emissions reduction, its potential to adapt to climate change, its direct contribution to the SDGs, and its impact on the economy, the energy and water supply sectors were included in the Sustainable Taxonomy of Mexico. In line with the above, the Energy and Water Supply Sectoral Technical Group was formed, with the participation of Gleb Kouznetsov from Bancomext as the main advisor in charge of conducting the investigation and carrying out appropriate activities to back the group's discussion.

Work meetings were held with experts from different institutions to develop the TEC of the 16 eligible economic activities for this sector, including BANCOMEXT, NAFIN, CFE, the German Development Bank (KfW), ECLAC, IFC, the Mexican Carbon Platform (MEXICO2), the Mario Molina Center, the National Autonomous University of Mexico (UNAM), the Mexican Wind Energy Association (AMDEE), the Mexican Association of Photovoltaic Solar Energy, A.C. (ASOLMEX), CONAGUA, the Electric Energy Savings Trust Fund of Mexico (FIDE), SEMARNAT and INECC.

Economic Activities:

- **221112.** Hydroelectric Power Generation.
- **221113.** Solar Electric Power Generation (photovoltaic systems)
- **221113.** Solar Electric Power Generation (solar concentrators)
- **221114.** Wind Electric Power Generation.
- **221119.** Other Electric Power Generation (geothermal energy)
- 2**21119.** Other Electric Power Generation (bioenergy)
- **221119.** Other Electric Power Generation (efficient cogeneration)
- **221119.** Other Electric Power Generation (cogeneration from biomass)
- **221119.** Other Electric Power Generation (ocean energy)
- **221121.** Electric Power Transmission.
- **221122.** Electric Power Distribution.
- **221311.** Water collection, treatment and supply carried out by the private sector (construction, expansion and operation of water collection, purification and distribution systems)
- **221311.** Water collection, treatment and supply carried out by the private sector (renovation of water collection, purification and distribution systems)
- **221312.** Water collection, treatment and supply carried out by the public sector (construction, expansion and operation of water collection, purification and distribution systems)
- **221312.** Water collection, treatment and supply carried out by the public sector (construction, expansion and operation of centralized wastewater systems)
- **221312.** Water collection, treatment and supply carried out by the public sector (renovation of centralized wastewater systems)

Economic Activity	221112	Hydroelectric Power Generation
Description – Includes	Economic units (power plants) mainly dedicated to electrical power generation from water's potential or kinetic energy into electricity. In this activity, water force produces power to drive a turbine. The electrical power generated is delivered to transmission or distribution systems for its supply to end users.	
Description – Excludes	Electricity generation from fossil fuel energy (221111, Electricity generation from fossil fuels); from solar power (221113, Solar Electric Power Generation); from wind energy (221114, Wind Electric Power Generation); from other types of energy (221119, Other Electric Power Generation); to the transmission of electrical energy (221121, Transmission of electrical energy); to the distribution of electrical energy (221122, Distribution of electrical energy), and to the commercialization of electrical energy (221123, Commercialization of electrical energy).	
Description – Products	Electric power produced from power plants that convert the potential or kinetic energy of water into electricity.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG)

SUBSTANTIAL CONTRIBUTION

Metric	Emissions for power generation: $kgCO_2e/MWh$
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- A threshold less than or equal to 100gCO2e/kWh / greater than or equal to 5W/m2 is proposed:
- Those activities with a power per unit area greater than or equal to 5W/m2 are directly eligible and are exempt from submitting a product life cycle assessment, including the carbon footprint assessment.
- Such activities are subject to a periodic review in accordance with the current threshold.
- Those activities with a power per unit area of less than 5 W/m2 must demonstrate that the life cycle of GHG emissions is less than 100 gCO2e/kWh. The calculation of the life cycle of GHG emissions may be carried out using the ISO 14067 standard or by evaluating the carbon footprint.
  - As part of ISO 14067, the G-res tool4 and the IEA Hydro Framework22 are accepted methodologies.
- Pumped storage facilities are eligible if they meet the previous requirements.
- Run-of-water hydropower installations are directly eligible if they comply with local legislation.

Economic Activity	221113	Solar Electric Power Generation (photovoltaic systems)
Description – Includes	Economic units (power plants) mainly dedicated to electrical power generation from the Sun's radiation. Photovoltaic cells or solar concentrators are used for the production of electric power. The electrical power generated is delivered to transmission or distribution systems for its supply to end users.	

	Excludes	Electricity generation from fossil fuel energy (221111, Electricity generation from fossil fuels); from hydraulic energy (221112, Hydroelectric Power Generation); from wind energy (221114, Wind Electric Power Generation); from other types of energy (221119, Other Electric Power Generation); to the transmission of electrical energy (221121, Transmission of electrical energy); to the distribution of electrical energy (221122, Distribution of electrical energy), and to the commercialization of electrical energy (221123, Commercialization of electrical energy).
	Products	Electric power from solar energy equipment such as photovoltaic systems.

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG)

SUBSTANTIAL CONTRIBUTION

Metric	Emissions for power generation: $kgCO_2e/MWh$

Threshold

Minimum criteria to determine if the economic activity is considered sustainable

- Are directly eligible and are exempt from submitting a product life cycle assessment, including a carbon footprint assessment.
- If necessary, a periodic review will be carried out according to the threshold ≤ 100 g de CO_2e/kWh.

Economic Activity	**221113**	**Solar Electric Power Generation (solar concentrators)**
Description	**Includes**	Economic units (power plants) mainly dedicated to electric power generation from the sun's radiation. Photovoltaic cells or solar concentrators are used for the production of electric energy. The electric power generated is delivered to transmission or distribution systems for its supply to end users.
	Excludes	Electricity generation from fossil fuel energy (221111, Electricity generation from fossil fuels); from hydraulic energy (221112, Hydroelectric Power Generation); from wind energy (221114, Wind Electric Power Generation); from other types of energy (221119, Other Electric Power Generation); to the transmission of electrical energy (221121, Transmission of electrical energy); to the distribution of electrical energy (221122, Distribution of electrical energy), and to the commercialization of electrical energy (221123, Commercialization of electrical energy).
	Products	Electric power from solar power equipment such as solar concentrators

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG)

SUBSTANTIAL CONTRIBUTION

Metric	Emissions for power generation: $kgCO_2e/MWh$

Threshold

Minimum criteria to determine if the economic activity is considered sustainable

- Are directly eligible and are exempt from submitting a product life cycle assessment, including a carbon footprint assessment.
- If necessary, a periodic review will be carried out according to the threshold ≤ 100 g de CO_2e/kWh.

Economic Activity		221114	Wind Electric Power Generation
Description	Includes	Economic units (power plants) mainly dedicated to electric power generation from the kinetic energy of the wind, using wind turbines. The electric power generated is delivered to transmission or distribution systems for its supply to end users.	
	Excludes	Electricity generation from fossil fuel energy (221111, Electricity generation from fossil fuels); from hydraulic energy (221112, Hydroelectric Power Generation); from solar energy (221113, Solar Electric Power Generation); from other types of energy (221119, Other Electric Power Generation); to the transmission of electrical energy (221121, Transmission of electrical energy); to the distribution of electrical energy (221122, Distribution of electrical energy), and to the commercialization of electrical energy (221123, Commercialization of electrical energy).	
	Products	Electric power generated from the kinetic energy of the wind, using wind turbines.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG)

SUBSTANTIAL CONTRIBUTION

Metric	Emissions for power generation: $kgCO_2e/MWh$
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- Are directly eligible and are exempt from submitting a product life cycle assessment, including a carbon footprint assessment.
- If necessary, a periodic review will be carried out according to the threshold ≤ 100 g de CO_2e/kWh.

Economic Activity		221119	Other Electric Power Generation (geothermal energy)
Description	Includes	Economic units (power plants) mainly dedicated to electric power from geothermal energy. The electric power generated is delivered to transmission or distribution systems for its supply to end users.	
	Excludes	The generation of electrical energy obtained from fossil fuels (221111, Generation of electricity from fossil fuels); hydraulic energy (221112, Hydroelectric Power Generation); solar energy (221113, Solar Electric Power Generation); wind energy (221114, Wind Electric Power Generation); to the transmission of electrical energy (221121, Transmission of electrical energy); to the distribution of electrical energy (221122, Distribution of electrical energy), and to the commercialization of electrical energy (221123, Commercialization of electrical energy).	
	Products	Electric power generated from geothermal energy.	

MAIN PARAMETER	
Contribution from the Mitigation of Greenhouse Gases (GHG)	
SUBSTANTIAL CONTRIBUTION	
Metric	Emisiones para la generación de energía: $kgCO_2e/MWh$
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- Must show that the life cycle GHG emissions are less than 100 gCO_2e/ kWh. The life cycle calculation can be carried out using the ISO 14067 standard or by evaluating the carbon footprint.

	Economic Activity	221119	Other Electric Power Generation (bioenergy)
Description	Includes	Economic units (power plants) mainly dedicated to electric power generation from bioenergy, that is, biomass, biogas, and bioenergy in general. The electric power generated is delivered to transmission or distribution systems for its supply to end users.	
	Excludes	The generation of electrical energy obtained from fossil fuels (221111, Generation of electricity from fossil fuels); hydraulic energy (221112, Hydroelectric Power Generation); solar energy (221113, Solar Electric Power Generation); wind energy (221114, Wind Electric Power Generation); to the transmission of electrical energy (221121, Transmission of electrical energy); to the distribution of electrical energy (221122, Distribution of electrical energy), and to the commercialization of electrical energy (221123, Commercialization of electrical energy).	
	Products	Electric power generated from biomass, biogas, bioenergy in general.	

MAIN PARAMETER	
Contribution from the Mitigation of Greenhouse Gases (GHG)	
SUBSTANTIAL CONTRIBUTION	
Metric	Emissions for power generation: $kgCO_2e/MWh$
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- Must demonstrate that the life cycle GHG emissions are less than 100 gCO_2e/ kWh. The life cycle calculation can be carried out using the ISO 14067 standard or by evaluating the carbon footprint.

Economic Activity	221119	Other Electric Power Generation (efficient cogeneration)
Description	Includes	Economic units (power plants) mainly dedicated to electric power from efficient cogeneration. The electric power generated is delivered to transmission or distribution systems for its supply to end users.
	Excludes	The generation of electrical energy obtained from fossil fuels (221111, Generation of electricity from fossil fuels); hydraulic energy (221112, Hydroelectric Power Generation); solar energy (221113, Solar Electric Power Generation); wind energy (221114, Wind Electric Power Generation); to the transmission of electrical energy (221121, Transmission of electrical energy); to the distribution of electrical energy (221122, Distribution of electrical energy), and to the commercialization of electrical energy (221123, Commercialization of electrical energy).
	Products	Electric power generated by efficient cogeneration.

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG)

SUBSTANTIAL CONTRIBUTION

Metric	Emissions for power generation: $kgCO_2e/MWh$
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- Must demonstrate that the life cycle GHG emissions are less than 100 gCO_2e/ kWh. The life cycle calculation can be carried out using the ISO 14067 standard or by evaluating the carbon footprint.

Economic Activity	221119	Other Electric Power Generation (Cogeneration from Biomass)
Description	Includes	Economic units (power plants) mainly dedicated to electric power generation by cogeneration from biomass. The electric power generated is delivered to transmission or distribution systems for its supply to end users.
	Excludes	The generation of electrical energy obtained from fossil fuels (221111, Generation of electricity from fossil fuels); hydraulic energy (221112, Hydroelectric Power Generation); solar energy (221113, Solar Electric Power Generation); wind energy (221114, Wind Electric Power Generation); to the transmission of electrical energy (221121, Transmission of electrical energy); to the distribution of electrical energy (221122, Distribution of electrical energy), and to the commercialization of electrical energy (221123, Commercialization of electrical energy).
	Products	Electric power generated by cogeneration from biomass

[19]In accordance with the General Administrative Provisions (DACG) that contain the efficiency criteria and establish the calculation methodology to determine the percentage of free energy from fuel in energy sources and electrical energy generation processes, efficient cogeneration is the electrical energy cogeneration process that, when evaluated with the methodology of said DACG, complies with fuel-free energy criteria.

MAIN PARAMETER	
Contribution from the Mitigation of Greenhouse Gases (GHG)	
SUBSTANTIAL CONTRIBUTION	
Metric	Emissions for power generation: $kgCO_2e/MWh$
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- Must demonstrate that life cycle GHG emissions are ≤ 100 gCO_2e/kWh. The life cycle calculation can be carried out using the ISO 14067 standard or by evaluating the carbon footprint.

Economic Activity		**221119**	**Other Electric Power Generation (ocean energy)**
Description	**Includes**	Economic units (power plants) mainly dedicated to electric power generation from ocean energy. The electric power generated is delivered to transmission or distribution systems for its supply to end users.	
	Excludes	The generation of electrical energy obtained from fossil fuels (221111, Generation of electricity from fossil fuels); hydraulic energy (221112, Hydroelectric Power Generation); solar energy (221113, Solar Electric Power Generation); wind energy (221114, Wind Electric Power Generation); to the transmission of electrical energy (221121, Transmission of electrical energy); to the distribution of electrical energy (221122, Distribution of electrical energy), and to the commercialization of electrical energy (221123, Commercialization of electrical energy).	
	Products	Electric power generated from ocean energy	

MAIN PARAMETER	
Contribution from the Mitigation of Greenhouse Gases (GHG)	
SUBSTANTIAL CONTRIBUTION	
Metric	Emisiones para la generación de energía: $kgCO_2e/MWh$
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- Are directly eligible and are exempt from submitting a product life cycle assessment, including a carbon footprint assessment.
- If necessary, a periodic review will be carried out according to the threshold of
- ≤ 100 g CO_2e/kWh for electricity generation.
-

Economic Activity	221121	Electric Power Transmission
Description	Includes	Economic units mainly dedicated to operating electric power transmission systems and the physical control (regulating voltages) of the transmission network from the generating source to distribution centers, or other electric installations, through lines, substations and other transformation elements. Electric power transmission is carried out at voltage levels equal to or greater than 69 kV or whose purpose is to raise the voltage level by levels equal to or greater than 69 kV. This economic activity is carried out exclusively by the State through agencies or State Productive Enterprises (EPE), its subsidiary companies, or through the contractor's figure.
	Excludes	Electricity generation from fossil fuel energy (221111, Electricity generation from fossil fuels); from hydraulic energy (221112, Hydroelectric Power Generation); from solar energy (221113, Solar Electric Power Generation); from wind energy (221114, Wind Electric Power Generation); from other types of energy (221119, Other Electric Power Generation); to the distribution of electrical energy (221122, Distribution of electrical energy), and to the commercialization of electrical energy (221123, Commercialization of electrical energy).
	Products	Transmission of electric power with controlled voltage from the generating source to distribution centers or other electric installations, through lines, substations and other transformation elements.

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG)

SUBSTANTIAL CONTRIBUTION

Metric	Emissions for power generation: $kgCO_2e/MWh$
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- The investment leads to a reduction in transmission losses of at least 20% compared to the baseline on the transmission systems in question. The foregoing must be demonstrated through a calculation prepared by an independent consultant or by the investor (for example, CFE).
- The respective electric system is on a full decarbonization trajectory.
  - o The system is considered to be on that trajectory if more than 67% of the newly connected generation capacity in the system is below 100 gCO2e/kWh, during a period of five years; or if the average emissions factor of the grid is below 100 gCO2e/kWh, over a rolling average period of five years.
- The subproject refers to investment in a cross-border transmission line and, in the long term, does not contribute to increasing the average carbon emission factor [gCO2e/kWh] of the affected electrical systems.
- Equipment purchased under the subproject belongs to one or more of the following categories:
  - o Installation of distribution transformers that meet the requirements of NOM-002-SEDE/ENER-2014 on safety and energy efficiency.
  - o Direct connection of renewable energy sources.
  - o Equipment whose main objective is to increase the generation or use of renewable electricity generation (indirect connection).
  - o Electric vehicle charging stations and infrastructure for public transportation, including the transmission and distribution equipment necessary for the correct operation of the charging stations.

Economic Activity		221122	Electric Power Distribution
Description	Includes	Economic units mainly dedicated to electric power transfer from the delivery points of the National Transmission Network (RNT), its conduction and voltage conversion through lines, substations and transformation, switching, measurement and monitoring equipment, among others; as well as the delivery of electrical energy to the Load Centers connected to such networks. The distribution of electric power is carried out by means of equipment that operates with nominal voltage levels of less than 69 kV. This economic activity is carried out exclusively by the State through agencies or State Productive Enterprises (EPE), its subsidiary companies, or through the figure of the contractor.	
	Excludes	Electricity generation from fossil fuel energy (221111, Electricity generation from fossil fuels); from hydraulic energy (221112, Hydroelectric Power Generation); from solar energy (221113, Solar Electric Power Generation); from wind energy (221114, Wind Electric Power Generation); from other types of energy (221119, Other Electric Power Generation); to the transmission of electrical energy (221121, Transmission of electrical energy), and to the commercialization of electrical energy (221123, Commercialization of electrical energy).	
	Products	Transfer of electric power from the delivery points of the National Transmission Network (RNT), delivery of electrical energy to the Load Centers connected to the Network.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG)

SUBSTANTIAL CONTRIBUTION

Metric	Emissions for power generation: $kgCO_2e/MWh$
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- The investment leads to a reduction in distribution losses of at least 20% compared to the baseline in the distribution systems in question. The foregoing must be demonstrated through a calculation prepared by an independent consultant or by the investor (for example, CFE).
- The respective electrical system is on a full decarbonization trajectory.
  - o The system is considered to be on a full decarbonization trajectory if more than 67% of the newly connected generation capacity in the system is below 100 gCO_2e/kWh, during a period of five years; or if the average emissions factor of the grid is below 100 gCO_2e/kWh, over a rolling average period of five years.
- The subproject refers to the investment in a cross-border distribution line and, in the long term, does not contribute to increasing the average carbon emission factor [gCO2e/kWh] of the affected electrical systems.
- Equipment purchased under the subproject belongs to one or more of the following categories:
  - o Installation of distribution transformers that meet the requirements of NOM-002-SEDE/ENER-2014 on safety and energy efficiency.
  - o Direct connection of renewable energy sources.
  - o Equipment whose main objective is to increase the generation or use of renewable power generation (indirect connection).
  - o Electric vehicle charging stations and infrastructure for public transportation, including the transmission and distribution equipment necessary for the proper functioning of charging stations.

Economic Activity		**221311**	**Water collection, treatment and supply carried out by the private sector (construction, expansion and operation of water collection, purification and distribution systems)**
Description	**Includes**	Economic units of the private sector mainly dedicated to water collection, purification and supply, and the collection and treatment of wastewater. Also includes: economic units of the private sector dedicated to providing the agricultural irrigation service.	
	Excludes	Economic units of the public sector dedicated mainly to the purification and bottling of natural water (312112, Water Purifying and Bottling); economic units of the private sector dedicated mainly to the treatment or final disposal of hazardous waste (562211, Treatment and final disposal of hazardous waste by the private sector); economic units of the private sector primarily engaged in providing water remediation services (562911, Waste Remediation Services by the Private Sector); economic units of the private sector dedicated mainly to provide cleaning services for septic tanks, cleaning and desilting of pits, drainage networks and sewerage pipes (562998, Other waste management services by the private sector), and governmental economic units mainly dedicated to the establishment of standards and procedures to improve the environment (931510, Regulation and promotion of activities to improve and preserve the environment).	
	Products	New or expanded water collection, purification and supply systems by private organizations.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG)

SUBSTANTIAL CONTRIBUTION

Metric	kWh per cubic meter of supplied water

Threshold

Minimum criteria to determine if the economic activity is considered sustainable

- Average net energy consumption for extraction and treatment is equal to or less than 0.5 kWh per cubic meter of water supplied.
- Structural leaks have a threshold equal to or less than 1.5 per cubic meter of water supplied according to the Structural Leakage Index (ILI).
- If a desalination plant is used, it is subject to the global emission threshold of less than or equal to 100gCO_2e/KWh.

Economic Activity		**221311**	**Water collection, treatment and supply carried out by the private sector (renovation of water collection, purification and distribution systems)**
Descripción	**Includes**	Economic units of the private sector dedicated mainly to the collection, purification and supply of water, and the collection and treatment of wastewater. Also includes: economic units of the private sector dedicated to providing the agricultural irrigation service.	

	Excludes	Economic units of the public sector dedicated mainly to the purification and bottling of natural water (312112, Bottled Water Manufacturing); economic units of the private sector dedicated mainly to the treatment or final disposal of hazardous waste (562211, Treatment and final disposal of hazardous waste by the private sector); economic units of the private sector primarily engaged in providing water remediation services (562911, Waste Remediation Services by the Private Sector); economic units of the private sector dedicated mainly to provide cleaning services for septic tanks, cleaning and desilting of pits, drainage networks and sewerage pipes (562998, Other waste management services by the private sector), and governmental economic units mainly dedicated to the establishment of standards and procedures to improve the environment (931510, Regulation and promotion of activities to improve and preserve the environment).
	Productos	Renewed water collection, purification and supply systems by private organizations.

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG)

SUBSTANTIAL CONTRIBUTION

Metric	Percentage % of net energy consumption

Threshold

Minimum criteria to determine if the economic activity is considered sustainable

- The renovation of a water collection, treatment and supply system that improves energy efficiency must reduce its net energy consumption by 20% compared to its average reference performance of the last three years.
- The renovation of a wastewater treatment plant that improves energy efficiency should reduce net energy consumption by 20% compared to its average reference performance of the last three years.

Economic Activity		**221312**	**Water collection, treatment and supply carried out by the public sector (construction, expansion and operation of water collection, purification and distribution systems)**
Description	**Includes**	Economic units of the public sector mainly dedicated to the collection, purification and supply of water, and the collection and treatment of wastewater. Also includes: economic units of the public sector dedicated to provide the agricultural irrigation service.	
	Excludes	Economic units of the private sector mainly dedicated to the purification and bottling of natural water (312112, Bottled Water Manufacturing); economic units of the public sector mainly dedicated to the treatment or final disposal of hazardous waste (562212, Treatment and final disposal of hazardous waste by the public sector); economic units of the public sector primarily engaged in providing water remediation services (562912, Waste Remediation Services by the Public Sector); economic units of the public sector dedicated mainly to provide cleaning and desilting services for pits, drainage networks and sewerage pipes (562999, Other waste management services by the public sector), and governmental economic units mainly dedicated to the establishment of standards and procedures to improve the environment (931510, Regulation and promotion of activities to improve and preserve the environment).	
	Products	New or expanded water collection, purification and supply systems by public entities.	

MAIN PARAMETER	
Contribution from the Mitigation of Greenhouse Gases (GHG)	
SUBSTANTIAL CONTRIBUTION	
Metric	kWh per cubic meter of water supplied
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- Average net energy consumption for extraction and treatment is equal to or less than 0.5 kWh per cubic meter of water supplied.
- Structural leaks have a threshold equal to or less than 1.5 per cubic meter of water supplied according to the Structural Leakage Index (ILI).
- If a desalination plant is used, the reverse osmosis purification process is subject to the global emission threshold of less than or equal to 100gCO_2e/KWh.

Economic Activity	**221312**	**Water Collection, treatment and supply carried out by the public sector (construction, expansion and operation of centralized wastewater systems).**
Description	**Includes**	Economic units of the public sector mainly dedicated to the collection, purification and supply of water, and the collection and treatment of wastewater. Also includes: economic units of the public sector dedicated to provide the agricultural irrigation service.
	Excludes	Economic units of the private sector mainly dedicated to the purification and bottling of natural water (312112, Bottled Water Manufacturing); economic units of the public sector dedicated mainly to the treatment or final disposal of hazardous waste (562212, Treatment and final disposal of hazardous waste by the public sector); economic units of the public sector primarily engaged in providing water remediation services (562912, Waste Remediation Services by the Public Sector); economic units of the public sector dedicated mainly to provide cleaning and desilting services for pits, drainage networks and sewerage pipes (562999, Other waste management services by the public sector), and governmental economic units mainly dedicated to the establishment of standards and procedures to improve the environment (931510, Regulation and promotion of activities to improve and preserve the environment).
	Products	New systems or expanded wastewater collection and treatment systems owned by public entities.

MAIN PARAMETER	
Contribution from the Mitigation of Greenhouse Gases (GHG)	
SUBSTANTIAL CONTRIBUTION	
Metric	kWh per inhabitant equivalent per year
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- The net energy consumption of the wastewater treatment facility is equal to or less than:
  - o 35 kWh per inhabitant equivalent (e-h) per year if the capacity of the treatment facility is less than 10,000 e-h.
  - o 25 kWh per inhabitant equivalent (e-h) per year if the capacity of the treatment facility is between 10,000 and 100,000 e-h.
  - o 20 kWh per inhabitant equivalent (e-h) per year if the capacity of the treatment facility is greater than 100,000 e-h.

Economic Activity		221312	Water Collection, treatment and supply carried out by the public sector (renovation of centralized wastewater systems).
Description	Includes	Economic units of the public sector mainly dedicated to the collection, purification and supply of water, and the collection and treatment of wastewater. Also includes: economic units of the public sector dedicated to provide the agricultural irrigation service.	
	Excludes	Economic units of the private sector mainly dedicated to the purification and bottling of natural water (312112, Bottled Water Manufacturing); economic units of the public sector dedicated mainly to the treatment or final disposal of hazardous waste (562212, Treatment and final disposal of hazardous waste by the public sector); economic units of the public sector primarily engaged in providing water remediation services (562912, Waste Remediation Services by the Public Sector); economic units of the public sector dedicated mainly to provide cleaning and desilting services for pits, drainage networks and sewerage pipes (562999, Other waste management services by the public sector), and governmental economic units mainly dedicated to the establishment of standards and procedures to improve the environment (931510, Regulation and promotion of activities to improve and preserve the environment).	
	Products	Renovated wastewater collection and treatment systems owned by public entities.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG)

SUBSTANTIAL CONTRIBUTION

Metric	kWh per inhabitant equivalent per year
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- The renovation of a wastewater treatment system that improves energy efficiency must reduce its net energy consumption by 20% compared to its average efficiency of the last three years.
- The renovation of a wastewater treatment plant that improves energy efficiency must reduce its net energy consumption by 20% compared to its average efficiency of the last three years.

DO NO SIGNIFICANT HARM ASSESSMENT

Environmental	Water	**Section A.1** All economic activities in the energy sector must include the following guidelines: • National Waters Law (LAN): Water is a vital, vulnerable and finite federal public domain good, with social, economic and environmental value, whose preservation in quantity and quality and sustainability is a fundamental task of the State and Society, as well as a priority and a matter of national security (TITLE "National Water Policy", Art. 14 BIS 5). **Section B.1** The following activities must include the guidelines indicated in Section A.1, plus those included in this section: 221112. Hydroelectric Power Generation,

DO NO SIGNIFICANT HARM ASSESSMENT		
Environmental	Water	221113. Solar Electric Power Generation (photovoltaic systems) 221113. Solar Electric Power Generation (solar concentrators) 221114. Wind Electric Power Generation 221119. Other Electric Power Generation (geothermal energy) 221119. Other Electric Power Generation (bioenergy) 221119. Other Electric Power Generation (cogeneration from biomass) 221119. Other Electric Power Generation (ocean energy) 221121. Electric power transmission 221122. Electric power distribution 221311. Water collection, treatment and supply carried out by the private sector (construction, expansion and operation of water collection, purification and distribution systems) 221311. Water collection, treatment and supply carried out by the private sector (renovation of water collection, purification and distribution systems) 221312. Water collection, treatment and supply carried out by the public sector (construction, expansion and operation of water collection, purification and distribution systems) 221312. Water collection, treatment and supply carried out by the public sector (construction, expansion and exploitation of centralized wastewater systems) 221312. Water collection, treatment and supply carried out by the public sector (renovation of centralized wastewater systems) • Compliance with the National Water Program 2020-2024, as well as with the strategies and plans of state and municipal water management and address the recommendations of the Basin Councils by hydrological basin or by hydrological region. • Compliance with applicable Mexican water legislation. **Section C.1** The following activities must include the guidelines indicated in Section A.1, plus those included in this section: 221112. Hydroelectric Power Generation 221113. Solar Electric Power Generation (photovoltaic systems) 221113. Solar Electric Power Generation (solar concentrators) 221114. Wind Electric Power Generation 221119. Other Electric Power Generation (geothermal energy) 221119. Other Electric Power Generation (bioenergy) 221119. Other Electric Power Generation (cogeneration from biomass) 221119. Other Electric Power Generation (ocean energy) 221311. Water collection, treatment and supply carried out by the private sector (construction, expansion and operation of water collection, purification and distribution systems) 221311. Water collection, treatment and supply carried out by the private sector (renovation of water collection, purification and distribution systems) 221312. Water collection, treatment and supply carried out by the public sector (construction, expansion and operation of water collection, purification and distribution systems) 221312. Water collection, treatment and supply carried out by the public sector (construction, expansion and operation of centralized wastewater systems) 221312. Water collection, treatment and supply carried out by the public sector (renovation of

Environmental		• In particular, monitor the temperature of discharged water, as a water quality criterion for the protection of aquatic life and for drinking water supply sources. It is also a parameter established as the maximum limit allowed in wastewater discharges and an important specification in energy and heat balance calculations for industrial processes (NMX-AA-007 Water analysis-temperature measurement in waters: natural, residual and treated residual-test method). • In the case of wastewater discharge into municipal drainage or sewerage, have the permits and authorizations required by law. **Section D.1** The following activities must include the guidelines indicated in Section A.1, plus those included in this section: 221112. Hydroelectric Power Generation. • Having a water concession title, issued by CONAGUA for use in hydraulic power generation and duly registered in the Public Registry of Water Rights of the corresponding hydrological region (Articles 30 and 78, LAN). • Having wastewater discharge permits in national water bodies, duly registered in the Public Registry of Water Rights of the corresponding hydrological region (Art 30, LAN), complying with the Official Mexican Standard NOM-001-SEMARNAT-2021 that establishes the permissible limits of contaminants in water discharges in receiving bodies owned by the nation. **Section E.1** The following activities must include the guidelines indicated in Section A.1, plus those included in this section: 221119. Other Electric Power Generation (efficient cogeneration) • Indicating the scale of the project, identifying the availability of water and the risks of water contamination, both of surface waters and aquifers, in particular, sources of water used for human consumption.
Environmental	**Adaptación**	**Section A.2** All economic activities in the energy sector must include the following guidelines: • Establishing adaptation measures with the fundamental and essential criteria, reduce vulnerability to climate change: o Human community-based adaptation: interacting with project workers, and with local communities, to train and inform about climate risks, and increase the adaptive capacity of people to new and changing climate challenges and ensure that adaptation activities must not have adverse effects on the adaptation efforts of other communities, infrastructure or neighboring ecosystems. o Ecosystem-based adaptation: identifying the sensitivity of ecosystems to reduce vulnerability and increase the resilience of surrounding ecosystems and contributing to the conservation and restoration of ecosystems. o Adaptation based on Disaster Risk Reduction: anticipating and reducing the risk of disasters, exposure to disaster risks and have plans for recovery after disasters occurrence. • Developing criteria for risk management and adaptation to climate change in the design, construction, reconstruction, rehabilitation and maintenance of associated infrastructure. • Each project must demonstrate that it has evaluated the dimension of the alterations and impacts that could affect municipalities vulnerable to climate change. The following tools should be reviewed, including but not limited to:

Environmental	**Adaptation**	o National Vulnerability Atlas [20] o National Risk Atlas [21] **Section B.2** The following activities must include the guidelines indicated in Section A.2, plus those included in this section: 221112. Hydroelectric Power Generation 221113. Solar Electric Power Generation (photovoltaic systems) 221113. Solar Electric Power Generation (solar concentrators) 221119. Other Electric Power Generation (geothermal energy) 221119. Other Electric Power Generation (bioenergy) 221119. Other Electric Power Generation (cogeneration from biomass) 221119. Other Electric Power Generation (ocean energy) 221121. Electric Energy Transmission 221122. Electric Power Distribution 221311. Water collection, treatment and supply carried out by the private sector (construction, expansion and operation of water collection, purification and distribution systems) 221311. Water collection, treatment and supply carried out by the private sector (renovation of water collection, purification and distribution systems) 221312. Water collection, treatment and supply carried out by the public sector (construction, expansion and operation of water collection, purification and distribution systems) 221312. Water collection, treatment and supply carried out by the public sector (construction, expansion and operation of centralized wastewater systems) 221312. Water collection, treatment and supply carried out by the public sector (renovation of centralized wastewater systems) ● Indicate the scale of the project, considering whether the project is located at any risk area such as canyon walls, stream beds and channels, geological fault zones, landslides, flooding; as well as coastal areas exposed to storm surges and erosion processes in river mouths and rivers; areas identified as highly vulnerable to climate change, including the surrounding urban and peri-urban areas when there are any. **Section C.2** The following activities must include the guidelines indicated in Section A.2, plus those included in this section: 221112. Hydroelectric Power Generation ● Identifying the availability of water and the risks of water contamination, both of surface waters and aquifers, and in particular the sources of water used for human consumption, in the hydrological basin and in the hydrological region in question. **Section D.2** The following activities must include the guidelines indicated in Section A.2, plus those included in this section: 221114. Wind Electric Power Generation ● Indicating the scale of the project, identifying water availability and the risks of water contamination, both of surface waters and aquifers, and in particular the sources of water used for human consumption.

[20]National Vulnerability Atlas. First edition (SEMARNAT-INECC). Available at: https://atlasvulnerabilidad.inecc.gob.mx/page/fichas/ANVCC_LibroDigital.pdf

[21]National Risk Atlas (CENAPRED). Available at: http://www.atlasnacionalderiesgos.gob.mx/

Environmental	**Biodiversity**	**Sección A.3** All economic activities in the energy sector must include the following guidelines: ● The delimitation of the project must be consistent with the magnitude of the environmental impacts, complying with existing planning instruments (Ecological Territorial Planning Program (POET), Urban Development Plan (PDU), hydrological basins, among others). (See LGEEPA, LGEEPA Regulation on Environmental Impact and Environmental Impact Guides in accordance with article 9 of the aforementioned Regulation.) ● If applicable, having an authorization to change the use of land in forest areas, as well as jungles or arid zones, in accordance with article 68 of the General Law of Sustainable Forest Development. ● Considering the National Strategy on Biodiversity of Mexico (ENBioMex), Action Plan 2016-2030 and the National Strategy for the Conservation and Sustainable Use of Pollinators, and the corresponding State Biodiversity Strategies, at the site and location-specific level. ● Having an environmental impact statement (MIA) or a preventive environmental report, authorized by the competent (federal) authority, with validity and reports of compliance with environmental conditions. The MIA discloses, based on studies, the Environmental Impact and potential that a work or activity would generate, as well as the way to avoid or mitigate it.
Environmental	**Pollution prevention and control**	**Section A.4** All economic activities in the energy sector must include the following guidelines: ● Monitoring and complying with the maximum permissible limits of polluting emissions established in the Official Mexican Standards (NOM), and in Mexican standards regarding: **Air:** the vehicles used in the collection must comply with the permissible air pollution limit values. **Water:** Cleaning practices for vehicles, equipment and collection tools should preferably use treated water, and be carried out in places specifically designated for this task, taking care that wastewater is channeled to drainage and sewerage. If the wastewater is discharged into national bodies of water, having the permits and authorizations by law. **Soil and odors:** having an inventory that includes classification and detailed quantification of MSW and RME; avoid the incineration and burning of MSW in the open field, so as not to generate black carbon that causes warming of the atmosphere, damages ecosystems and affects human health. **Noise and vibrations:** Noise mitigation and prevention measures will be applied when the expected or measured noise impact of a project's facilities or operations exceeds the applicable noise level at the most sensitive reception point (residential, institutional, educational, industrial, commercial; parks and nearby sensitive ecosystems) as well as the exposure of workers in the project. The combination of noise and vibrations accompanying noise from stationary and mobile sources should be measured.

Environmental	**Biodiversity**	**Landscape:** Complying with the conditions established in the federal and state environmental impact authorizations. As part of the authorized MIA, assess the impact on the landscape, including visibility, landscape quality and visual fragility. (See LGEEPA, LGEEPA Regulation on Environmental Impact and Environmental Impact Guides in accordance with article 9 of the LGEEPA Regulation on Environmental Impact). **Thermal and light energy:** Complying with the established conditions in federal and state environmental impact authorizations, as well as international best practices.
Environmental	**Circular Economy**	**Section A.5** All economic activities in the energy sector must include the following guidelines: ● Identifying the type of waste generated during the different phases of the project, estimating the volume that could be generated. ● Identifying and reporting the availability of infrastructure services for the management and final disposal of waste, in the locality and/or region, such as: sanitary landfills, municipal wastewater treatment plants, separation services, management, treatment, recycling or confinement of waste, among others. In case of making use of them, indicate if these services are sufficient to cover the present and future demands of the project and other projects present in the area. ● Based on the estimated useful life of the project, a program for the dismantling and abandonment must be presented, which includes the procedures, handling and destination of materials and equipment and the rehabilitation or restoration programs of the sites. In this phase, the environmental actions proposed in the MIA should be considered as mitigation measures and should continue to be executed after the end of the useful life of the project **Section B.5** The following activities must include the guidelines indicated in Section A.5, plus those included in this section: 221112. Hydroelectric Power Generation ● Ensuring that the hydroelectric plant facilities have been designed and manufactured for high durability, easy disassembly, restoration, and recycling. ● Ensuring the reparability of the hydroelectric plant facilities thanks to the accessibility and interchangeability of the components. **Section C.5** The following activities must include the guidelines indicated in Section A.5, plus those included in this section: 221113. Solar Electric Power Generation (photovoltaic systems) ● Ensuring that photovoltaic panels and associated components were designed and manufactured to offer high durability, ease of disassembly, reconditioning, and recycling.

Environmental		**Section D.5** The following activities must include the guidelines indicated in Section A.5, plus those included in this section: 221113. Solar Electric Power Generation (solar concentrators) • Making sure that the installations of Concentrated Solar Panels have been designed and manufactured for high durability, easy disassembly, renovation, and recycling. **Section E.5** The following activities must include the guidelines indicated in Section A.5, plus those included in this section: 221114. Wind Electric Power Generation 221119. Other Electric Power Generation (ocean energy) 221121. Electric power transmission 221122. Electric power distribution • Declaring the ambition to maximize recycling at the end of the useful life on the basis of waste management plans, decommissioning and decommissioning processes at the time of decommissioning (e.g., through contractual agreements with recycling partners, reflected in financial forecasts or official project documentation). **Section G.5** The following activities must include the guidelines indicated in Section A.5, plus those included in this section: 221119. Other Electric Power Generation (efficient cogeneration) 221119. Other Electric Power Generation (cogeneration from biomass) • Applying the measures related to waste management required by the Official Mexican STANDARD NOM-085-SEMARNAT-2011, Atmospheric pollution-Maximum permissible emission levels from indirect heating combustion equipment, and its measurement..

REFERENCES

Andrada, A. M. (2020). Potencial de la energía mareomotriz. Universidad Americana de Europa. Available at: https://unade.edu.mx/energia-mareomotriz/

CENAPRED (2023). Atlas Nacional de Riesgos. Available at: http://www.atlasnacionalderiesgos.gob.mx/

CONABIO (2016). Estrategia Nacional sobre Biodiversidad de México y Plan de Acción 2016-2030. Available at: https://bioteca.biodiversidad.gob.mx/janium/Documentos/12890.pdf

CONAGUA (2018). Estadísticas del Agua en México. Available at: http://sina.conagua.gob.mx/publicaciones/EAM_2018.pdf

Diario Oficial de la Unión Europea (2021). Reglamento Delegado (UE) 2021/2139 de la Comisión. Available at: https://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:32021R2139&from=EN

Gobierno de Colombia. (2022). Taxonomía Verde de Colombia. Available at: https://www.taxonomiaverde.gov.co/webcenter/ShowProperty?nodeId=/ConexionContent/WCC_CLUSTER-191401

Gobierno de México-SEMARNAT-INECC (2022, noviembre). Contribución Determinada a nivel Nacional. Actualización 2022. Available at: https://unfccc.int/sites/default/files/NDC/2022-11/Mexico_NDC_UNFCCC_update2022_FINAL.pdf

Gobierno de México-SEMARNAT-INECC (2022). México: Inventario Nacional de Emisiones de Gases y Compuestos de Efecto Invernadero 1990-2019. Available at: https://unfccc.int/sites/default/files/resource/InventarioGEI_Mexico_1990_2019.pdf

Grupo Experto Técnico en Finanzas Sostenibles de la Unión Europea (2020, marzo). Taxonomy: Final report of the Technical Expert Group on Sustainable Finance. Available at: https://finance.ec.europa.eu/system/files/2020-03/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf

Hernández-Fontes, J.V.; Felix, A.; Mendoza, E.; Cueto, Y.R.; Silva, R. On the Marine Energy Resources of Mexico. J. Mar. Sci. Eng. 2019, 7, 191. Disponible en: https://doi.org/10.3390/jmse7060191

INMUJERES (2020, diciembre). PROIGUALDAD 2020-2024. Programa Nacional para la Igualdad Mujeres y Hombres 2020-2024. Diario Oficial de la Federación del 22 de diciembre de 2020. Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5608467&fecha=22/12/2020#gsc.tab=0

Martínez M.L., Vázquez G., Pérez-Maqueo O., Silva R., Moreno-Casasola P., Mendoza-González G., López-Portillo J., MacGregor-Fors I., Heckel G., Hernández-Santana J.R., García-Franco J.G., Castillo-Campos G. Lara-Domínguez G. A systemic view of potential environmental impacts of ocean energy production, Renewable and Sustainable Energy Reviews, Volumen 149, 2021, 111332, ISSN 1364-0321. Available at: https://doi.org/10.1016/j.rser.2021.111332

Red Mexicana de Bioenergía A.C. (2011, agosto). La Bioenergía en México. Situación actual y perspectivas. Available at: https://rembio.org.mx/wp-content/uploads/2014/12/CT4.pdf

SEMARNAT (2020). Decreto por el que se aprueba el Programa Nacional Hídrico 2020-2024. Diario Oficial de la Federación del 30 de diciembre de 2020. Disponible en: https://www.gob.mx/cms/uploads/attachment/file/642632/PNH_2020-2024__ptimo.pdf

SEMARNAT (2021, noviembre). PROGRAMA Especial de Cambio Climático 2021-2024. Diario Oficial de la Federación el 8 de noviembre de 2021. Available at: https://www.gob.mx/cms/uploads/attachment/file/685848/SEMARNAT_081121_EV.PDF

SEMARNAT-INECC (2018). Sexta Comunicación Nacional y Segundo Informe Bienal de Actualización ante la Convención Marco de las Naciones Unidas sobre el Cambio Climático (Issue c). Available at: https://cambioclimatico.gob.mx/sexta-comunicacion/

SEMARNAT-INECC (2016). Contribuciones Previstas y Determinadas a Nivel Nacional (INDC) para Adaptación. Available at: https://www.gob.mx/inecc/acciones-y-programas/contribuciones-previstas-y-determinadas-a-nivel-nacional-indc-para-adaptacion#:~:text=Las%20Contribuciones%20Previstas%20y%20Determinadas%20a%20Nivel%20Nacional%20(INDC%2C%20por,de%20reducir%20las%20emisiones%20de

SEMARNAT-INECC (2016). Contribuciones Previstas y Determinadas a Nivel Nacional (INDC) para Adaptación. Available at: https://www.gob.mx/inecc/acciones-y-programas/contribuciones-previstas-y-determinadas-a-nivel-nacional-indc-para-adaptacion#:~:text=Las%20Contribuciones%20Previstas%20y%20Determinadas%20a%20Nivel%20Nacional%20(INDC%2C%20por,de%20reducir%20las%20emisiones%20de

INECC. 2019. Atlas Nacional de Vulnerabilidad al Cambio Climático México. 1ª. Edición (libro electrónico). Instituto Nacional de Ecología y Cambio Climático. México. Available at: https://atlasvulnerabilidad.inecc.gob.mx/page/fichas/ANVCC_LibroDigital.pdf

Gobierno de México-SEMARNAT-INECC (2022). México: Inventario Nacional de Emisiones de Gases y Compuestos de Efecto Invernadero 1990-2019. Available at: https://unfccc.int/sites/default/files/resource/InventarioGEI_Mexico_1990_2019.pdf

SEMARNAT (2020). Programa Sectorial de Medio Ambiente y Recursos Naturales 2020-2024. Diario Oficial de la Federación del 7 de julio de 2020. Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5596232&fecha=07/07/2020#gsc.tab=0

SENER (2018). Atlas Nacional de Biomasa. Available at: https://www.gob.mx/sener/articulos/atlas-nacional-de-biomasa#:~:text=El%20Atlas%20Nacional%20de%20Biomasa,potenciales%20de%20Biomasa%20en%20M%C3%A9xico

SENER (2018). Prospectiva de energías renovables: 2018 -2032, México. Available at: https://base.energia.gob.mx/Prospectivas18-32/PER_18_32_F.pdf

SENER (2020, julio). Programa Sectorial de Energía 2020-2024. Diario Oficial del 8 de julio de 2020. Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5596374&fecha=08/07/2020#gsc.tab=0

SENER-Fondo de Sustentabilidad Energética-IMP (2017). Cartera de Necesidades de Innovación y Desarrollo Tecnológico. Energía del Océano. Instituto Mexicano del Petróleo. Available at: https://www.gob.mx/cms/uploads/attachment/file/279711/NT_OCEANO_VERSION_251017__rev1.pdf

SENER (2022). Programa para el Desarrollo del Sistema Eléctrico Nacional (PRODESEN): 2022-2036. Available at: https://www.cenace.gob.mx/Docs/16_MARCOREGULATORIO/Prodecen//16%202022-2036%20Cap%C3%ADtulos%201%20al%206.pdf

ECONOMIC SECTOR

1.3 CONSTRUCTION

The construction sector in Mexico is relevant for the economic development since it provides basic elements for well-being in society by building homes, schools, hospitals, and infrastructure. Equally, this sector uses inputs from other industries, such as steel, cement, aluminum, and energy, integrating productive chains between various sectors and becoming a very relevant source of employment (INEGI, 2019). Moreover, according to the analysis carried out by the Sustainable Taxonomy Working Group of the existing links between the targets of the SDGs and the NDCs with the economic sectors, it was identified that the construction sector has a direct impact on the SDGs 6 "Clean Water and Sanitation", SDG 7 "Affordable and Clean Energy", SDG 9 "Industry, Innovation and Infrastructure", SDG 11 Sustainable Cities and Communities", and SDG 13 "Climate Action". The economic impact analysis identified that within the 2010-2020 period, the sector contributed an average of 7.38% of the GDP.

In the construction sector, the traditional processes require fossil fuels and a high energy demand, causing heavy releases of CO_2, thus, a strong environmental impact. According to the INEGyCEI in 2017, the construction sector contributed to a GHG emission in the atmosphere of 3.48%, which equals 25,516 GgCO2e; and between 2010 and 2020, GHG emissions from this sector increased by 37.23%, with a growing trend given the increase in the population in cities and rural areas.

In this context, the NDC committed by Mexico in 2015 estimates that the construction sector, particularly, residential and commercial, has a reduction potential of 5 million tCO_2e (Mexico Government, 2015). The 2022 NDC update recognizes a large area of opportunity in programs and actions designing to optimize energy consumption and to promote mechanisms and regulations that encourage the inclusion of best practices in new constructions and renewals (INECC, 2022).

Although the construction sector has a high potential to mitigate climate change, it is also exposed and vulnerable to climate change. Therefore, not only is it important to encourage investment in infrastructure

that helps reduce GHG emissions but also measures that reduce vulnerability and climate change risks; for example, through strengthening the resilience of buildings.

Sustainability in the construction sector is becoming increasingly relevant, developers and users are gradually demanding safe and efficient functional buildings that do not harm the environment. In recent years, diverse national and international sustainable construction certifications have emerged, establishing requirements to prove the sustainability of certain buildings. These certifications constitute a beneficial guide to improve power and resource efficiency in buildings, considering power demand, water management, and carbon footprint of their structures, in their methodologies, among other factors that contribute to climate change adaptation and mitigation through construction. In addition, these certifications constitute an appropriate accreditation mechanism to account for the degree of a construction's sustainable development.

The construction sector was included in this taxonomy based on its potential to mitigate climate change by reducing GHG emissions; its potential for adaptation to climate change; its direct contribution to the SDGs, and its impact on the economy.

The Construction Sector Technical Group counted with the participation of Liliana Campos Arriaga from GIZ as the main advisor. Work meetings were held with experts from local governments, environmental authorities, the private sector, international cooperation organizations, and academia, for the ten eligible economic activities for this sector's TEC. There was the active participation of entities such as GIZ, BANOBRAS, the National Chamber of Housing Development and Promotion Industry (CANADEVI), Three Environmental Consulting, IFC, the National Commission for the Efficient Use of Energy (CONUEE), Ibalca Consultants, Revitaliza Consultants and Bioconstrucción Y Energía Alternativa (BEA), SEMARNAT and INECC.

Economic Activities:

- **236111.** Single-family Housing Construction (new building)
- **236111.** Single-family Housing Construction (building renovation)
- **236112.** Multifamily Housing Construction (new building)
- **236112.** Multifamily Housing Construction (building renovation)
- **236211.** Industrial Plants and Buildings Construction, except construction supervision
- **236221.** Industrial Plants and Buildings Construction, except construction supervision (new building)
- **236221.** Commercial and Service Building Construction, except construction supervision (building renovation)
- **238222.** Central Air Conditioning and Heating System Installations
- **237312.** Highway, Bridge and Similar Structures Construction
- **237993.** Railway and Electrical Transportation Construction Works

Economic Activity	236111	Single-Family Housing Construction (new building)
Description	Includes	Economic units dedicated primarily to single-family home construction (homes separated by floor-to-ceiling walls and no houses are built above or below each home). It can be new works, extensions, remodeling, single-family home maintenance or repairs. It also includes the operational construction of a single-family home (construction of buildings for its own account and on its own land to later be sold), and single-family prefabricated houses onsite assembly.
	Excludes	Supervision during the construction of a single-family home (236113, Construction Supervision of Residential Buildings); the division of land (237211, Land Division); the construction of urbanization works (237212, Urbanization Works); carrying out specialized works for construction (238, Specialized Construction Works); the manufacture of prefabricated wooden houses (321999, All Other Miscellaneous Wood Product Manufacturing); intermediating in real estate sales and rental operations (531210, Offices of Real Estate Agents and Brokers), and providing engineering or architectural services when they do not involve construction (5413, Architectural, Engineering, and Related Services).
	Products	New single-family homes.

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG).

SUBSTANTIAL CONTRIBUTION

Metrics	Primary energy demand (TPED) expressed in kWh/m² per year.
Threshold	

Criterios mínimos para determinar si la actividad económica se considera sostenible

1. For the construction of a new single-family home to be eligible, the performance of the home in TPED (kWh/m2 a) or the percentage savings must be those indicated in Table 236111_1 in which the following parameters are listed:

- Thermal zone in which the project is located.
- Cost of sale.
- Calculation method that defines the performance of the home (TPED kWh/m²a) or the percentage savings.
  - Calculation methods for determining performance in TPED kWh/(m²a):
    - o Energy balance: DEEVi Tool 1.1. (Energy Efficient Home Design, Version 1.1)
    - o Dynamic calculation: Any dynamic calculation tool.
  - Calculation methods to determine the savings percentage:
    - o Quasi-stationary: EDGE Software (Excellence in Design for Greater Efficiencies).
    - o Calculation used for compliance with the EDGE Certification energy category.

2. Equivalence with sustainable construction certifications: If the project has a sustainable construction certification with percentage savings or performance criteria in TPED equivalent to or higher than the thresholds indicated in Table 236111_1, the project is considered eligible.

- o Potentially equivalent certifications:
  - NMX-AA-164-SCFI-2011 and half the required efficiency percentage.
  - LEED (Leadership in Energy & Environmental Design) – any level of certification.
  - EDGE (Excellence in Design for Greater Efficiencies) – from EDGE Advance.
  - Others (e.g., Living Building Challenge)

Table 236111_1 Compliance Thresholds of New Single-family Home Construction.

Typology	Thermal zone		Economic/Popular/ Residential/Medium (Sale cost up to 2.2 million pesos)		Residential and Residential plus (Sale cost > 2.2 million pesos)	
			TPED kWh/m²a		DEP kWh/m²a	Percentage saved
Single-family / Detached	Z1	Humid Warm Subhumid Warm	490	30%	470	40%
	Z2	Very Arid and semiarid	415	40%	400	45%
	Z3 y Z4	Humid Temperate Subhumid Temperate	355	35%	340	40%
		High mountain cold				

Additional considerations:

- Eligible homes comply with NOM-020-ENER-2011 and the Base Line for water furniture in the housing sector (BL of water applicable only to homes with a sale cost of up to 2.2 million pesos).
- The Final Energy Demand (electrical and thermal) must be reported for the quantification and reporting of mitigation of CO_2e emissions to be considered in the Nationally Determined Contributions (NDC).
- Compliance or non-compliance with the requirements of this Sustainable Taxonomy, during the housing operation, will represent a consequence issued by the financing entity.

Economic Activity		236111	Construction of single-family home (renovation of existing home)
Description	Includes	Economic units dedicated primarily to single-family home construction (homes separated by floor-to-ceiling walls and no houses are built above or below each home). These are extensions, remodeling, single-family home maintenance or repairs. Also includes: Operational construction of single-family housing (construction of buildings on own account and on own land to be later sold) and on-site assembly of single-family prefabricated houses.	
	Excludes	Economic units mainly dedicated to supervision during the construction of a single-family home (236113, Construction Supervision of Residential Buildings); the division of land (237211, Land Subdivision); the construction of urbanization works (237212, Urbanization Works); carrying out specialized works for construction (238, Specialized Construction Works); manufacturing of prefabricated wooden houses (321999, All Other Miscellaneous Wood Product Manufacturing); intermediating in real estate sales and rental operations (531210, Offices of Real Estate Agents and Brokers), and providing engineering or architectural services when they do not involve construction (5413, Architectural, Engineering, and Related Services).	
	Products	Single-family home extensions, remodeling, maintenance or fixtures.	

MAIN PARAMETER	
Contribution from the Mitigation of Greenhouse Gases (GHG).	
SUBSTANTIAL CONTRIBUTION	
Metrics	Primary energy demand (TPED) expressed in kWh/m² per year.
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

1. The savings percentage with respect to the billing of electricity consumption with respect to the previous year, must be indicated in Table **236111_2**, depending on the thermal zone in which the project is located and housing price.
2. Equivalence with sustainable construction certifications: If the project has a sustainable construction certification with criteria for percentage savings in TPED equivalent to or greater than the thresholds indicated in Table **236111_2**, the project is considered eligible.

- Potentially equivalent certifications:
  - o NMX-AA-164-SCFI-2011 and half the required efficiency percentage
  - o LEED (Leadership in Energy & Environmental Design)
  - o EDGE (Excellence in Design for Greater Efficiencies)
  - o Other certifications for building existing sustainable housing (e.g., Living Building Challenge)

Table 236111_2. Compliance thresholds for single-family home additions, remodels, maintenance, or fixtures:

Typology	Thermal zone		Economic/Popular/ Residential/ Medium (Sale cost up to 2.2 million pesos)	Residential and Residential plus (Sale cost > 2.2 million pesos)
			Percentage savings compared to electricity billing of the previous year.	
Single-family / Detached	Z1	Humid Warm Subhumid Warm	20%	30%
	Z2	Very Arid Arid Semiarid		
	Z3 y Z4	Humid Temperate Subhumid Temperate		
Multifamily / Attached	Z1	Humid Warm Subhumid Warm		
	Z2	Very Arid Arid Semiarid		
	Z3 y Z4	Humid Temperate Subhumid Temperate		
Multifamily / Vertical	Z1	Humid Warm Subhumid Warm		
	Z2	Very Arid Arid Semiarid		
	Z3 y Z4	Humid Temperate		
		Subhumid Temperate High mountain cold		

Additional considerations:

- Eligible homes comply with NOM-020-ENER-2011 (in its current version) and Base Line for water furniture in the housing sector (BL of water applicable only to homes with a sale cost of up to 2.2 million pesos). When applicable.
- For the quantification and reporting of mitigation of CO_2e emissions to be considered in the Nationally Determined Contributions (NDC), the Final Energy Demand (electrical and thermal) must be reported.
- Compliance or non-compliance with the requirements of this Taxonomy, during the operation of the home, will represent a consequence issued by the financing entity.

Economic Activity		236112	Multifamily Housing Construction (new building)
Description	Includes	Economic units mainly dedicated to multifamily housing construction (dwellings that are separated by floor-to-ceiling walls or a crawl space), such as condominiums and apartments. These are new multifamily housing works. It also includes the operational construction of multifamily housing (construction of buildings on own account and on own land to be later sold), and on-site assembly of multifamily prefabricated houses.	
	Excludes	Economic units mainly dedicated to supervision during the construction of multifamily housing (236113, Construction Supervision of Residential Buildings); the division of land (237211, Land Subdivision); the construction of urbanization works (237212, Urbanization Works); carrying out specialized works for construction (238, Specialized Construction Works); the manufacturing of prefabricated wooden houses (321999, All Other Miscellaneous Wood Product Manufacturing); intermediating in real estate sales and rental operations (531210, Offices of Real Estate Agents and Brokers), and providing engineering or architectural services when they do not involve construction (5413, Architectural, Engineering, and Related Services).	
	Products	New multifamily housing.	
MAIN PARAMETER			
Contribution from the Mitigation of Greenhouse Gases (GHG).			
SUBSTANTIAL CONTRIBUTION			
Metrics		Primary energy demand (TPED) expressed in kWh/m² per year.	
Threshold			

Minimum criteria to determine if the economic activity is considered sustainable

1.For the construction of a new multifamily home to be eligible, the performance of the home in TPED (kWh/m² a) or the percentage savings must be those indicated in Table 236112_1, depending on:

- Typology
- Thermal zone in which the project is located
- Cost of sale
- Calculation method that defines the performance of the home (TPED kWh/m²a) or the savings percentage

- Calculation methods to determine performance in DEP kWh/(m²a):
  - o Energy balance: DEEVi Tool 1.1. (Energy Efficient Home Design, Version 1.1)
  - o Dynamic Calculation: Any dynamic calculation tool.
- Calculation methods to determine the savings percentage
  - o Quasi-stationary: EDGE Software (Excellence in Design for Greater Efficiencies).
  - o Calculation used for compliance with the EDGE Certification energy category.

2. Equivalence with sustainable construction certifications: If the project has a sustainable construction certification with savings percentage or performance criteria in DEP equivalent to or greater than the thresholds indicated in Table 236112_1, the project is considered eligible.

- o NMX-AA-164-SCFI-2011 and half the required efficiency percentage
- o LEED (Leadership in Energy & Environmental Design) – any level of certification
- o EDGE (Excellence in Design for Greater Efficiencies) – from EDGE Advance
- o Other (e.g. Living Building Challenge)

Table 236112_1. Compliance thresholds for new single-family home construction:

Typology	Thermal zone		Economic/Popular/ Residential/Medium (Sale cost up to 2.2 million pesos)		Residential and Residential plus (Sale cost > 2.2 million pesos)	
			TPED kWh/m²a	Percentage Saving	TPED kWh/m²a	Percentage Saving
Multifamily / Attached	Z1	Humid Warm Subhumid Warm	465	40%	445	45%
	Z2	Very Arid Arid Semiarid	360	35%	340	40%
	Z3 y Z4	Humid Temperate Subhumid Temperate	210	30%	200	40%
Multifamily / Vertical	Z1	Humid Warm Subhumid Warm	435	40%	415	45%
	Z2	Very Arid Arid Semiarid	215	40%	200	45%
	Z3 y Z4	Humid Temperate Subhumid Temperate High mountain cold	220	35%	210	40%

Additional considerations:

- Eligible homes comply with NOM-020-ENER-2011 (in its current version) and Base Line for water furniture in the housing sector (BL of water applicable only to homes with a sale cost of up to 2.2 million pesos).
- For the quantification and reporting of mitigation of CO2e emissions to be considered in the Nationally Determined Contributions (NDC), the Final Energy Demand (electrical and thermal) must be reported.
- Compliance or non-compliance with the requirements of this Sustainable Taxonomy, during the operation of the home, will represent a consequence issued by the financing entity.

Economic Activity		236112	Multifamily Housing Construction (building renovation)
Description	Includes	Economic units dedicated primarily to the construction of multifamily housing (dwellings that are separated by floor-to-ceiling walls or a crawl space), such as condominiums and apartments. These are extensions, remodeling, maintenance or multifamily housing repairs. It also includes: the operational construction of multifamily housing (construction of buildings for its own account and on its own land to be later sold), and the assembly on the site of multifamily prefabricated houses.	
	Excludes	Economic units mainly dedicated to supervision during the construction of multifamily housing (236113, Construction Supervision of Residential Buildings); the division of land (237211, Land Subdivision); the construction of Urbanization Works (237212, Urbanization Works); carrying out specialized works for construction (238, Specialized Construction Works); manufacturing prefabricated wooden houses (321999, All Other Miscellaneous Wood Product Manufacturing); intermediating in real estate sales and rental operations (531210, Offices of Real Estate Agents and Brokers), and providing engineering or architectural services when they do not involve construction (5413, Architectural, Engineering, and Related Services).	
	Products	Multifamily housing additions, remodeling, maintenance or fixtures.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG).

SUBSTANTIAL CONTRIBUTION

Metrics	Primary energy demand (TPED) expressed in kWh/m^2 per year.
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

In order for extensions, remodeling, maintenance or fixtures of multifamily dwellings to be eligible, the savings in billing for electrical energy consumption must be as indicated in Table 236112_2, depending on:

- Thermal zone in which the project is located and bank appraisal value of the home.
- Equivalence with sustainable construction certifications: If the project has a sustainable construction certification with criteria in TPED equivalent to or greater than the thresholds indicated in the table, the project is considered eligible.
- Potentially equivalent certifications:
  - o NMX-AA-164-SCFI-2011 and half the required efficiency percentage
  - o LEED (Leadership in Energy & Environmental Design)
  - o EDGE (Excellence in Design for Greater Efficiencies)
  - o Other certifications for building existing sustainable housing (e.g., Living Building Challenge)

Typology	Thermal zone		Economic/Popular/ Residential/ Medium (Sale cost up to 2.2 million pesos)	Residential and Residential plus (Sale cost > 2.2 million pesos)
			Percentage Savings compared to billing for electricity consumption of the previous year.	
Unifamiliar/ Detached	Z1	Humid Warm Subhumid Warm	20%	30%
	Z2	Very Arid Arid Semiarid		
	Z3 y Z4	Humid Temperate Subhumid Temperate		
Multifamily / Attached	Z1	Humid Warm Subhumid Warm		
	Z2	Very Arid Arid Semiarid		
	Z3 y Z4	Humid Temperate Subhumid Temperate		
Multifamily/ Vertical	Z1	Humid Warm Subhumid Warm		
	Z2	Very Arid Arid Semiarid		
	Z3 y Z4	Humid Warm		
		Subhumid Temperate High mountain cold		

Additional considerations:

- Eligible homes comply with NOM-020-ENER-2011 (in its current version) and Base Line for water furniture in the housing sector (BL of water applicable only to homes with a sale cost of up to 2.2 million pesos).
- For the quantification and reporting of mitigation of CO_2e emissions to be considered in the Nationally Determined Contributions (NDC), the Final Energy Demand (electrical and thermal) must be reported.
- Compliance or non-compliance with the requirements of this Sustainable Taxonomy, during the operation of the home, will represent a consequence issued by the financing entity.

Economic Activity		236211	Industrial Plants and Buildings Construction, except construction supervision
Description	Includes	Economic units mainly dedicated to the construction of warehouses and industrial plants, such as chemical, food, fertilizer, assembly, and paper plants. It can be new works, extensions, remodeling, warehouses and industrial plants maintenance or fixtures. It also includes: the operational construction of warehouses and industrial plants (the construction of buildings on their account and on their land for later sale), and the construction of structures whose construction is similar to that of industrial warehouses and plants, such as incinerators, plants cement kilns, blast furnaces, and waste disposal plants.	

	Excludes	Supervision during the construction of warehouses and industrial plants (236212, Construction Supervision of Industrial Plants and Buildings); the construction of refinery and petrochemical plants (237122, Refinery and Petrochemical Plants Construction); intermediating in real estate sales and rental operations (531210, Offices of Real Estate Agents and Brokers), and providing engineering or architectural services when they do not involve construction (5413, Architectural, Engineering, and Related Services).
	Products	Industrial plants and buildings, such as chemical, food, fertilizer, assembly, and paper plants. New works, extensions, remodeling, warehouse and industrial plants maintenance or fixtures.

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG).

SUBSTANTIAL CONTRIBUTION

Metrics	Primary energy demand (TPED) expressed in kWh/m² per year.
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

For the construction of warehouses and industrial plants to be eligible, the performance of the warehouse in TPED (kWh/ m²a) or the percentage savings in TPED must be those indicated in Table 236211, depending on:

- Type of industrial building (Warehouse/Light Manufacturing or Without process). The types of building that correspond to the typologies included in Table 236211 must be analyzed on a case-by-case basis.
- Thermal zone in which the project is located.
- Compliance method: by building performance (TPED kWh/m²a) or percentage savings.
  - o Calculation methods for determining performance in TPED kWh/(m²a) or percentage savings in TPED kWh/(m²a): dynamic thermal simulation.

- Potentially equivalent certifications: NMX-AA-164-SCFI-2013
  1. LEED (Leadership in Energy and Environmental Design)
  2. PCES (Green Building Certification Program)
  3. WELL Building Standard
  4. Earth Check
  5. EDGE (Excellence in Design for Greater Efficiencies)
  6. Living Building Challenge
  7. NZEB (Net Zero Energy Building)
  8. BREEAM
  9. Parksmart
  10. Passivhaus

Table 236211. Compliance thresholds for the Industrial Plants and Buildings Construction

Thermal Zone	Industrial Warehouses (Warehouse/Light Manufacturing)		Industrial Warehouses (without process)	
	TPED kWh/m²a	TPED Percentage Savings	TPED kWh/m²a	TPED Percentage Savings
1A	190	25%	50	25%
1B	190	25%	50	25%
2A	180	25%	40	25%
2B	180	25%	40	20%
3A	100	30%	30	20%
3B	110	20%	40	20%
3C	140	20%	40	20%
4A	120	25%	40	25%

Additional considerations:

- For the quantification and reporting of mitigation of CO_2e emissions to be considered in the Nationally Determined Contributions (NDC), the Final Energy Demand (electrical and thermal) must be reported.
- Compliance or non-compliance with the requirements of this Sustainable Taxonomy, during the operation of the building, will represent a consequence issued by the financing entity.

Economic Activity		236221	Commercial and Service Buildings Construction, except construction supervision (building renovation)
Description	Includes	Economic units mainly dedicated to the construction of buildings for commercial and service purposes, such as shops, warehouses, shopping centers, restaurants, offices, hospitals, libraries, theaters, movie theaters, and sports facilities in buildings. It can be new work on commercial real estate and services. It also includes: the operational construction of commercial and service real estate (construction of buildings on its own account and on its own land to be sold later).	
	Excludes	Supervision during the construction of commercial and service real estate (236222, Construction Supervision of Commercial and Service Buildings); the construction of outdoor sports facilities (237999, Other Civil Engineering Construction Works); carrying out specialized works for construction (238, Specialized Construction Works); the construction of outdoor swimming pools (238990, Other Specialized Construction Works); intermediating in real estate sales and rental operations (531210, Offices of Real Estate Agents and Brokers), and providing engineering or architectural services when they do not involve construction (5413, Architectural, Engineering, and Related Services).	
	Products	Properties renovated for commercial and service purposes, such as shops, warehouses, shopping malls, restaurants, offices, hospitals, libraries, theaters, movie theaters, and sports facilities in buildings.	

MAIN PARAMETER	
Contribution from the Mitigation of Greenhouse Gases (GHG).	
SUBSTANTIAL CONTRIBUTION	
Metrics	Primary energy demand (TPED) expressed in kWh/m² per year.
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

For the renovation of existing commercial and service properties to be eligible, the building's performance in TPED (kWh/m²a) or the pin TPED must be as indicated in Table 236221_2, depending on:

- Type of building (Offices, Health Center, Education, Retail or Hotels). The types of buildings that do not correspond to the typologies included in Table 236221_2, must be analyzed on a case-by-case basis.
- Thermal zone in which the project is located.
- Compliance method: by Building Performance (TPED kWh/m²a) or savings percentage.
  - o Calculation methods for determining performance in TPED kWh/(m²a) or percentage savings in TPED kWh/(m²a): dynamic thermal simulation.

  Equivalence with sustainable construction certifications: If the project has a sustainable construction certification with performance or savings thresholds in DEP equivalent to or higher than the indicated eligibility criteria, the building is considered eligible.
- Certifications with equivalence potential:
  1. NMX-AA-164-SCFI-2013
  2. LEED (Leadership in Energy and Environmental Design)
  3. PCES (Programa de Certificación de Edificaciones Sustentables)
  4. WELL Building Standard
  5. EarthCheck
  6. EDGE (Excellence in Design for Greater Efficiencies)
  7. Living Building Challenge
  8. NZEB (Net Zero Energy Building)
  9. BREEAM
  10. Parksmart
  11. Passivhaus

Table 236221_2. Compliance Thresholds for Commercial and Service Buildings Renovations.

Thermal Zone	Offices		Health Centers		Education		Retail		Hotels	
	TPED kWh/m²a	TPED Percentaje Saving	TPED kWh/m²a	TPED Percentaje Saving	TPED kWh/m²a	TPED Percentaje Saving	TPED kWh/m²a	TPED Percentaje Saving	TPED kWh/m²a	TPED Percentaje Saving
1A	180	30%	350	20%	120	25%	290	20%	20	20%
1B	180	30%	350	20%	120	25%	290	20%	20	20%
2A	160	20%	140	20%	80	20%	280	20%	190	20%
2B	160	20%	140	20%	80	20%	280	20%	170	20%
3A	130	20%	220	20%	70	20%	170	20%	120	20%
3B	130	15%	260	20%	80	20%	200	20%	170	20%
3C	130	15%	280	20%	100	25%	200	20%	190	20%
4A	140	20%	320	20%	100	25%	290	20%	190	20%

Additional considerations:

- Eligible buildings comply with NOM-008-ENER-2001 (in its current version).
- The Final Energy Demand (electrical and thermal) must be reported, for the quantification and reporting of mitigation of CO_2e emissions to be considered in the Nationally Determined Contributions (NDC).
- Compliance or non-compliance with the requirements of this Sustainable Taxonomy, during the operation of the building, will represent a consequence issued by the financing entity.

Economic Activity	238222	Instalaciones de sistemas de aire acondicionado y calefacción
Includes	Economic units mainly dedicated to the installation of central air conditioning and heating systems. It can be new work, extensions, remodeling, installations of central air conditioning and heating systems maintenance or repairs.	
Excludes	The specialized wholesale trade of domestic heating, ventilation and air conditioning appliances (433510, Wholesale trade of minor household appliances and white goods); specialized retail trade of new domestic heating, ventilating and air conditioning appliances (466112, Retail Trade of Small and Major Electrical Appliances); to the cleaning of ventilation ducts (561790, Other Cleaning Services), and the repair and maintenance of household and personal electrical appliances, such as fans (811410, Commercial and Service Industry Machinery and Equipment Repair and Maintenance).	
Products	Installations of central air conditioning and heating systems. These can be new, under maintenance, under remodeling, or repair.	
MAIN PARAMETER		
Contribution from the Mitigation of Greenhouse Gases (GHG).		
SUBSTANTIAL CONTRIBUTION		
Metrics	Efficiencies expressed in: (Wt/We) or BTU/Wh	
Threshold		
Minimum criteria to determine if the economic activity is considered sustainable In order for the air conditioning and/or heating equipment and systems to be eligible, they must comply with the minimum efficiencies established in the Energy Conservation Code for Buildings in Mexico - IECC Mexico in its sections NR403 and R403, as well as those indicated in the current regulations: NOM-011-ENER, NOM-021-ENER, NOM-023-ENER and NOM-026-ENER		

Additional considerations:

- Compliance with thermal comfort levels must be documented in accordance with NMX-C-7730-ONNCCE-2018.

Economic Activity	237312	Construction of Highways, Bridges, and Similar Works
Description	Includes	Economic units mainly dedicated to the construction of roads, highways, dirt roads, bridges, overpasses and runways. It can be new works, extensions, remodeling, maintenance or repairs of roads, bridges and similar. It also includes: the performance of specialized work that requires specific skills and equipment exclusively for the construction of roads, bridges and the like.
	Excludes	The division of land (237211, Land Subdivision); the construction of urbanization works (237212, Urbanization Works); the supervision during the construction of roads, bridges and the like (237313, Supervision of Land Subdivision and Urbanization Construction Works), and the construction of works for electric and rail transportation (237993, Railway and Electrical Transportation Construction Works).
	Products	Roads, highways, dirt roads, bridges, overpasses and airstrips (these can be new, extensions or renovations).

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG).

SUBSTANTIAL CONTRIBUTION

Metrics	Direct emissions defined in the corresponding activity tonne-kilometer (gCO_2e/tkm) or CO_2e emissions per passenger-kilometer (gCO_2e/pkm).

Threshold

Minimum criteria to determine if the economic activity is considered sustainable

The construction and operation of transportation infrastructures is eligible for subsidy in the following cases:

1. Infrastructure necessary for transportation with zero direct emissions (for example, electric charging points, improvements in the connection to the electric grid, hydrogen refueling stations or electric highways).
2. Infrastructure and equipment (including fleets) for active mobility (on foot, by bicycle, on e-bikes and e-scooters).
3. Infrastructure that is predominantly used for low carbon transportation if the fleet using the infrastructure meets the direct emissions thresholds defined in the corresponding activity - measured in CO_2 emissions per kilometer (gCO_2/km), carbon emissions CO_2e per ton-kilometer (gCO_2e/tkm), or CO_2e emissions per passenger-kilometer (gCO_2e/pkm).
4. Non-electrified railway infrastructure with an existing plan for electrification or the use of reciprocating engine trains.

Economic Activity	237993	Railway and Electrical Transportation Construction Works
Description	Includes	Economic units mainly dedicated to the construction of railway networks, both for railways and for light rail, tram and metro, and the laying of sleepers, tracks or rails, bridges, platforms for track changes, stations and facilities for cable cars. It can be new works, extensions, remodeling, works for electric and rail transportation maintenance or fixtures. It also includes carrying out specialized work that requires specific skills and equipment for the construction of works exclusively for electric and rail transportation.
	Excludes	Construction of electric power generation and transmission works (237131, Construction Works for Electric Power Generation and Transmission); the installation of signs and protections at road works (237311, Installation of Roadwork Signs and Protections); supervision during the construction of works for electric and railway transportation (237994, Supervision of Other Civil Engineering Construction Works), and providing engineering or architectural services when they do not involve construction (5413, Architectural, Engineering, and Related Services).
	Products	Railway networks, both for the railway and for the light rail, the tram and the metro, and the placement of sleepers, tracks or rails, bridges, platforms for track changes, stations and cable car facilities. These can be new, under maintenance, remodeling, expansion, or repair.

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG).

SUBSTANTIAL CONTRIBUTION

Metrics	Direct emissions defined in the corresponding activity tonne-kilometer (gCO_2e/tkm) or CO_2e emissions per passenger-kilometer (gCO_2e/pkm).

Threshold

Minimum criteria to determine if the economic activity is considered sustainable

The construction and operation of transportation infrastructures is eligible for subsidy in the following cases:

1. Infrastructure necessary for transportation with zero direct emissions (for example, electric charging points, improvements in the connection to the electric grid, hydrogen refueling stations or electric highways).
2. Infrastructure and equipment (including fleets) for active mobility (on foot, by bicycle, on e-bikes and e-scooters).
3. Infrastructure that is predominantly used for low carbon transportation if the fleet using the infrastructure meets the direct emissions thresholds defined in the corresponding activity - measured in CO_2 emissions per kilometer (gCO_2/km), carbon emissions CO_2e per tonne-kilometer (gCO_2e/tkm), or CO2e emissions per passenger-kilometer (gCO_2e/pkm).
4. Non-electrified railway infrastructure with an existing plan for electrification or the use of reciprocating engine trains.

DO NO SIGNIFICANT HARM ASSESSMENT

Environmental	Water	**Section A.1** The following activities must include the guidelines indicated in this section: 236111. Single-family Housing Construction (new building construction) 236111. Single-family Housing Construction (building renovation) 236112. Multifamily Housing Construction (new housing construction) 236112. Multifamily Housing Construction (housing renovation) • Compliance with NMX-AA-164-SCFI-2013 - Sustainable Building - Criteria and Minimum Environmental Requirements in the sections: o 5.2.3.1: Materials and products used in hydraulic installations must be certified based on current Official Standards. • Complying with the Base Line of water equipment applicable to Economic/ Popular/Residential/Medium single-family housing (cost of sales of up to 2.2 million pesos): o NOM-002-CONAGUA-2021- Appliances and accessories for sanitary use. o NOM-008-CNA-1998 - Shower with ecological grade (3.8lpm). o NMX-C-415-ONNCCE - Saving faucets in kitchen and bathroom (6lpm). o NOM-001-CONAGUA - Sectioning valves. o Compliance with NMX-AA-176-SCFI-2015, on plumbing installations for housing construction. **Section B.1** The following activities must include the guidelines indicated in this section: 236211. Industrial Plants and Buildings Construction, except construction supervision 236221. Commercial and Service Building Construction, except construction supervision (new building) 236221. Commercial and real estate construction, except construction supervision (real estate renovation). • Compliance with NMX-AA-164-SCFI-2013 - Sustainable Building - Criteria and Minimum Environmental Requirements in the sections: o 5.2.3.1: Materials and products used in hydraulic installations must be certified based on current Official Standards • Regulatory compliance: o NOM-002-CONAGUA-2021- Appliances and accessories for sanitary use. o NOM-008-CNA-1998 - Shower with ecological grade (3.8lpm). o NMX-C-415-ONNCCE - Saving faucets in kitchen and bathroom (6lpm). o NOM-001-CONAGUA - Sectioning valves.

Environmental	Water	**Section C.1** The following activities must include the guidelines indicated in this section: 236111. Single-family Housing Construction (new building). 236112. Multifamily Housing Construction (new building). ● Compliance with NMX-AA-164-SCFI-2013 - Sustainable Building - Criteria and Minimum Environmental Requirements in the sections: o 5.2.1.8: Free areas greater than the minimum value established in local regulations by 10%, which allow the infiltration of water into aquifers. o 5.2.3.4: Design requirements and regulatory compliance for projects with groundwater or surface water supply sources. o 5.2.3.5: Installation for the collection, storage and use of rainwater. **Section D.1** The following activities must include the guidelines indicated in this section: 236211. Industrial Plants and Buildings Construction, except construction supervision 236221. Commercial and Service Building Construction, except construction supervision (new building) 236221. Commercial and Service Building Construction, except construction supervision (building renovation) ● Regulatory compliance: o NOM-001-SEMARNAT-1996–Maximum permissible limits of contaminants in wastewater discharges in water or national assets. o NOM-002-SEMARNAT-1996-Maximum permissible limits of contaminants in wastewater discharges to sewerage systems. o NOM-003-SEMARNAT-1997 - Límites máximos permisibles de contaminantes para las aguas residuales tratadas que se rehúsan en servicios al público. oNOM-004-SEMARNAT-2002–Especificaciones y límites máximos permisibles de contaminantes en los lodos y biosólidos para su aprovechamiento y disposición final. o NOM-001-CONAGUA-2011 – Sistemas de agua potable, toma domiciliaria alcantarillado sanitario, Hermeticidad-Especificaciones y métodos de prueba. o NOM-003-CNA-1996 – Requisitos durante la construcción de pozos de extracción de agua para prevenir la contaminación de acuíferos. **Section E.1** The following activities must include the guidelines indicated in this section: 238222. Central Air Conditioning and Heating System Installations ● If the centralized systems have water-cooled condensers, through cooling towers, the non-use of potable water in these services must be guaranteed and a minimum of 10 cycles must be achieved. ● Comply with the minimum water quality requirements of agreement with each manufacturer of Evaporative Coolers.

Environmental	Water	**Section F.1** The following activities must include the guidelines indicated in this section: 237312. Highway, Bridge and Similar Structures Construction 237993. Railway and Electric Transportation Construction Works ● Comply with the requirements of the legislation regarding the use and reuse of water. ● Have wastewater discharge permits in national water bodies, duly registered in the Public Registry of Water Rights of the corresponding hydrological region (Art. 30, LAN), complying with the Official Mexican Standard NOM-001-SEMARNAT-2021 which establishes the permissible limits of contaminants in water discharges in receiving bodies owned by the nation. ● In the case of wastewater discharge into drainage or sewer ● Municipal, have the permits and authorizations required by law. ● Comply with the National Water Program 2020-2024, as well as state and municipal water management strategies and plans, and attend to the recommendations of the Basin Councils by hydrological basin or by hydrological region.
	Adaptation	**Section A.2** All economic activities in the construction sector must include the following guidelines: Develop criteria for risk management and adaptation to climate change in the design, construction, reconstruction, rehabilitation and maintenance of associated infrastructure. **Sección B.2** The following activities must include the guidelines indicated in Section A.2, plus those included in this section: 236111. Single-family Housing Construction (new building) 236112. Multifamily Housing Construction (new building) ● Compliance with the Housing Building Code (CEV) in its sections: o 401 to 406: Urban Development, Housing Complexes, Urban Structure, Subdivision and Donations. o 601 to 607: Urban Engineering. o 3103.2: Location and land use. The buildings should not be located in areas such as; Protected Natural Areas, Risk Zones, Flood Prone Zones, Federal Zones, Zones identified as Undeveloped or near properties for risky activities in accordance with NMX-AA-164-SCFI-2013. o 3110.1 to 3110.4: Green areas. Consider recommendations of the National Atlas of Climate Change Vulnerability in its chapters: o Chapter 5: Vulnerability of human settlements due to floods. o Chapter 6: Vulnerability of human settlements due to landslides

	Adaptation	**Section C.2** The following activities must include the guidelines indicated in Section A.2, plus those included in this section: 236211. Industrial Plants and Buildings Construction, except construction supervision 236221. Commercial and Service Building Construction, except construction supervision (new building) 236221. Commercial and Service Buildings Construction, except construction supervision (building renovation). • Provide a water treatment plant at least for use in bathrooms and irrigation. **Section D.2** The following activities must include the guidelines indicated in Section A.2, plus those included in this section: 237312. Construction of Highways, Bridges and Similar Works 237993. Railway and Electric Transportation Construction Works • Indicating the scale of the project, considering whether the project is located in risk areas, such as canyon walls, stream beds and channels, geological fault zones, landslides, flooding, as well as coastal areas exposed to storm surges and erosion processes, in river mouths and rivers, in areas identified as highly vulnerable to climate change, including the surrounding urban and peri-urban areas when there are any. • Identifying the availability of water and the risks of water contamination, both of surface waters and aquifers, and in particular the sources of water used for human consumption, in the hydrological basin and in the hydrological region in question. • Establishing adaptation measures, with a focus on gender equity and human rights and with the fundamental and essential criterion of reducing vulnerability to climate change: • Adaptation based on human communities: having approaches with formal and informal workers, and with local communities, to train and inform about climate risks, and increase the adaptive capacity of people to new and changing climate challenges and ensure that adaptation activities should not have adverse effects on efforts of adaptation of other communities, infrastructure or neighboring ecosystems. • Ecosystem-based adaptation: identify the sensitivity of the ecosystems to reduce vulnerability and increase the resilience of surrounding ecosystems and contributing to the conservation and restoration of ecosystems. • Adaptation based on Disaster Risk Reduction: anticipate and reduce the risk of disasters, exposure to such risks and have plans for recovery after disasters occur. • Each project must demonstrate that it has evaluated the dimension of the disturbances and impacts that could affect municipalities

Environmenental		• Each project must demonstrate that it has evaluated the dimension of the disturbances and impacts that could affect municipalities vulnerable to climate change, reviewing, but not limited to, the following tools: • Nacional Atlas of Vulnerability[22] • National Risk Atlas[23]
	Biodiversity	**Section A.3** The following activities must include the guidelines indicated in this section: 236111. Single-family Housing Construction (new building construction) 236111. Single-family Housing Construction (building renovation) 236112. Multifamily Housing Construction (new building construction) 236112. Multifamily Housing Construction (building renovation) 236211. Industrial Plants and Buildings Construction, except construction supervision 236221. Commercial and Service Building Construction, except construction supervision (new building construction). 236221. Commercial and Service Building Construction, except construction supervision (building renovation) 238222. Central Air Conditioning and Heating System Installations • At the site and specific location level, consider what is established in the National Biodiversity Strategy of Mexico (ENBioMex), the 2016-2030 Action Plan and the National Strategy for the Conservation and Sustainable Use of Pollinators, as well as the corresponding State Biodiversity Strategies. • Each project must demonstrate that it has evaluated the dimension of the alterations and impacts that could affect the environmental protection of native Mexican species of wild flora and fauna in the risk category, reviewing, but not limited to, the following tools: • Atlas of Nature and Society[24] • Potential map of endangered species in Mexico[25] • At the site and specific location level, comply with the corresponding regulations for pruning and replacing trees during construction. • At the site and specific location level, the corresponding regulations regarding light pollution must be complied with, in accordance with the provisions of the General Law of Ecological Balance and Environmental Protection (LEGEEPA). • Compliance with NMX-AA-164-SCFI-2013 - Sustainable Building - Criteria • and Minimum Environmental Requirements in the sections: • 5.2.2.16: Mitigation actions to prevent external lighting from causing alterations in the natural environment or a change in the behavior of animals, when applicable. • 5.2.5.1.4: Protection of natural elements of the environment; flora, fauna, bodies of water, etc. • 5.2.5.1.11: In case of removing the vegetation from the land, fire or chemical agents must not be used.

[22]National Atlas of Vulnerabilty. First Edition. (SEMARNAT-INECC). Available at: https://atlasvulnerabilidad.inecc.gob.mx/page/fichas/ANVCC_LibroDigital.pdf

[23]National Risks Atlas (CENAPRED). Available at: http://www.atlasnacionalderiesgos.gob.mx/

[24]Atlas of Nature and Society (CONABIO). Available at: https://www.biodiversidad.gob.mx/atlas/extincion/

[25]Potential Map of Endangered Species in Mexico (CONABIO). Available at: http://ssig.conabio.gob.mx/

		Section B.3 The following activities must include the guidelines indicated in this section: 236111. Single-family Housing Construction (new building) 236111. Single-family Housing Construction (building renovation) 236112. Multifamily Housing Construction (new building) 236112. Multifamily Housing Construction (housing renovation). ● Compliance with NMX-AA-164-SCFI-2013 - Sustainable Building – Criteria and Minimum Environmental Requirements in the sections: ● 5.2.4.2: The forest products and resources used must prove their legal origin and comply with the provisions of the General Law on Sustainable Forest Development and its Regulations. **Section C.3** The following activities must include the guidelines indicated in this section: 236211. Industrial Plants and Buildings Construction, except construction supervision 236221. Commercial and Service Building Construction, except construction supervision (new building construction). 236221. Commercial and Service Building Construction, except construction supervision (building renovation) ● Compliance with the NMX-AA-164-SCFI-2013, on Sustainable Building – Materials and Waste, for particular requirements regarding forestry resources for construction (5.2.4.2). **Section D.3** The following activities must include the guidelines indicated in this section: 236111. Single-family Housing Construction (new building) 236112. Multifamily Housing Construction (new building) ● Compliance with the NMX-AA-164-SCFI-2013, Sustainable Building - Criteria and Minimum Environmental Requirements in the sections: ● 5.2.1.8: Free areas greater than the minimum value established in local regulations by 10%, which allow the infiltration of water into aquifers. ● 5.2.1.2: Location of buildings outside risk zones, protected natural areas, geological and topographic formations, flood zones, on mangroves and wetlands, etc.

Section E.3

The following activities must include the guidelines indicated in this section:
236211. Industrial Plants and Buildings Supervision, except construction supervision
236221. Commercial and Service Building Construction, except construction supervision (new building construction)
236221. Commercial and Service Building Construction, except construction supervision (building renovation)

- Compliance with NMX-R-046-SCFI-2011, on Industrial Parks – Specifications.

Section F.3

The following activities must include the guidelines indicated in this section:
237312. Construction of Highways, Bridges and Similar Works
237993. Railway and Electric Transportation Construction Works

- There is an environmental impact statement (MIA) authorized by the competent authority (federal or state), with validity and reports of compliance with environmental conditions. The MIA discloses, based on studies, the significant and potential environmental impact that a work or activity would generate, as well as the way to avoid or mitigate it.
- The delimitation of the project must be consistent with the magnitude of the environmental impacts, complying with existing planning instruments (Ecological Territory Planning Program (POET), Urban Development Plan (PDU), hydrological basins, among others). (See LGEEPA, LGEEPA Regulation on Environmental Impact and Environmental Impact Guides in accordance with Article 9 of the aforementioned Regulation).
- If applicable, have an authorization to change the use of land in forest areas, as well as jungles or arid zones, in accordance with Article 68 of the General Law of Sustainable Forest Development.
- Consider the actions and specifications established in the State Strategies of Biodiversity, the National Strategy for the Conservation and Sustainable Use of Pollinators, as well as the National Strategy of Mexico (ENBioMex) and Action Plan 2016-2030:
  - o Orderly use of the territory and sustainable urban development
  - o 4.7.6 Incorporate biodiversity conservation criteria in infrastructure construction works.
- Each project must demonstrate that it has evaluated the dimension of the alterations and impacts that could affect the environmental protection of native Mexican species of wild flora and fauna in the risk category, reviewing, but not limited to, the following tools:
  - o Atlas of Nature and Society[26]
  - o Potential map of endangered species in Mexico[27]
- Likewise, follow the following guidelines, among others applicable:
  - o Contribute to the restoration of degraded ecosystems.
  - o Monitor the most fragile ecosystems and species.

[26]Atlas of Nature and Society (CONABIO). Available at: https://www.biodiversidad.gob.mx/atlas/extincion/
[27]Potential Map of Endangered Species in Mexico (CONABIO). Available at: http://ssig.conabio.gob.mx/

	Pollution Prevention and Control	**Section A.4** All economic activities in the construction sector must include the following guidelines ● Comply with the provisions of the Official Mexican Standards regarding the industrial pollutants into the atmosphere. **Section B.4** The following activities must include the guidelines indicated in Section A.4, plus those included in this section: 236111. Single-family Housing Construction (new building) 236111. Single-family Housing Construction (building renovation) 236112. Multifamily Housing Construction (new building) 236112. Multifamily Housing Construction (building renovation) 236211. Industrial Plants and Buildings Construction, except construction supervision 236221. Commercial and Service Building Construction, except construction supervision (new building). 236221. Commercial and Service Building Construction, except construction supervision (building renovation) ● Compliance with NMX-AA-164-SCFI-2013 - Sustainable Building - Criteria and Minimum Environmental Requirements in the sections: o 5.2.5.3.12: Indoor air quality must remain at concentration levels below the standards established for outdoor environments, as well as the World Health Organization criteria. **Section C.4** The following activities must include the guidelines indicated in Section A.4, plus those included in this section: 236111. Single-family Housing Construction (new building) 236111. Single-family Housing Construction (building renovation) 236112. Multifamily Housing Construction (new building) 236112. Multifamily Housing Construction (building renovation) ● Compliance with the Housing Building Code (CEV) in its sections: o 3105.3.7.1: Volatile organic compounds in paints and coatings. **Section D.4** The following activities must include the guidelines indicated in Section A.4, plus those included in this section: 238222. Central Air Conditioning and Heating System Installations ● It must be fulfilled that refrigerants that damage the ozone layer (CFC) are not used in any of the equipment and systems. ● Only refrigerants with a Global Warming Index (GWP) < 1000 should be used.

		• Have a refrigerant management plan in accordance with NOM-161-SEMARNAT-2011. • In the event of removal of equipment with refrigerant, either by substitution or elimination, the refrigerant recovery process must be carried out, in accordance with NOM-162-SEMARNAT-2011 and check the final destination of the refrigerant at authorized centers for destruction. **Section E.4** The following activities must include the guidelines indicated in Section A.4, plus those included in this section: 237312 Construction of Highways, Bridges and Similar Works 237993. Railway and Electric Transportation Construction Works • Monitor and comply with the maximum permissible limits of polluting emissions established in the Official Mexican Standards (NOM) and in Mexican standards regarding: • **Water:** cleaning practices for vehicles, equipment and tools to support the construction and operation of the project should preferably use treated water and be carried out in places specifically designated for this task, taking care that wastewater is channeled into drainage and sewerage. If the wastewater is discharged into national bodies of water, have the permits and authorizations by law. • **Soil and odors:** have an inventory that includes classification and quantification detailed RSU and RME; avoid the incineration and burning of MSW in the open field, so as not to generate black carbon that causes warming of the atmosphere, damages ecosystems and affects human health. • **Noise and vibrations:** noise mitigation and prevention measures will be applied when the expected or measured noise impact of a project's facilities or operations exceeds the applicable noise level at the most sensitive point of reception (residential, institutional, educational, industrial, commercial; parks and nearby sensitive ecosystems), as well as the exposure of workers in the project. The combination of noise and vibrations accompanying noise, from stationary and mobile sources, should be measured. • **Landscape:** comply with the conditions established in the authorizations regarding federal and state environmental impact assessments. As part of the authorized MIA, assess the impact on the landscape, including visibility, landscape quality and visual fragility. (See LGEEPA, LGEEPA Regulation on Environmental Impact and Environmental Impact Guides in accordance with article 9 of the aforementioned Regulation). • **Thermal and light energy:** comply with the conditions established in the authorizations regarding federal and state environmental impact, as well as international best practices (See LGEEPA, LGEEPA Regulation on the Prevention and Control of Atmospheric Pollution).
	Circular Economy	**Section A.5** The following activities must include the guidelines indicated in this section: 236111. Single-family Housing Construction (new building) 236111. Single-family Housing Construction (building renovation) 236112. Multifamily housing Construction (new building) 236112. Multifamily Housing Construction (building renovation)

	Circular Economy	236211. Industrial Plants and Building Construction, except supervision 236221. Commercial and Service Building Construction, except construction supervision (new building construction) 236221. Commercial and Service Building Construction, except construction supervision (building renovation) ● Compliance with NMX-AA-164-SCFI-2013 - Sustainable Building - Criteria and Minimum Environmental Requirements in the sections: o 5.2.4.13: The management of waste generated during the construction of the building must be subject to local and federal regulations on integral management. o 5.2.4.14: A selection must be made of the waste generated during the work, separating the waste into those that can be reused, recyclable, non-reusable or recyclable, and toxic or hazardous waste. **Section B.5** The following activities must include the guidelines indicated in this section: 236111. Single-family Housing Construction (new building) 236111. Single-family Housing Construction (building renovation) 236112. Multifamily Housing Construction (new building) 236112. Multifamily Housing Construction (building renovation) ● Compliance with the Housing Building Code (CEV) in its sections: o 3105.2.1: Waste management. **Sección C.5** The following activities must include the guidelines indicated in this section: 238222. Central Air Conditioning and Heating System Installations. o A refrigerant management plan must be demonstrated in accordance with NOM-161-SEMARNAT-2011 for the cleaning and reuse of refrigerants from cooling and heating systems. **Sección D.5** The following activities must include the guidelines indicated in this section: 237312. Construction of roads, bridges and the like. 237993. Construction of works for electrical and rail transportation. ● Identify the type of waste generated during the different phases of the project, estimating the volume that could be generated. ● Based on the estimated useful life of the project, a dismantling and abandonment program will be presented, which includes the procedures, handling and destination of materials and equipment and the rehabilitation or restoration programs of the equipment. ● Identify and report the availability of infrastructure services for the management and final disposal of waste, in the locality and/or region, such as: sanitary landfills, municipal wastewater treatment plants, separation services, management, treatment, recycling or confinement of waste, among others. In case of making use of them, indicate if these services are sufficient to cover the present and future demands of the project and other projects present in the area.

REFERENCES

CENAPRED (2023). Atlas Nacional de Riesgos. Available at: http://www.atlasnacionalderiesgos.gob.mx/

CONAGUA-SEMARNAT (2018). Estadísticas del Agua en México. Available at: http://sina.conagua.gob.mx/publicaciones/EAM_2018.pdf

CONABIO. (2016). Estrategia Nacional sobre Biodiversidad de México y Plan de Acción 2016-2030. Available at: https://bioteca.biodiversidad.gob.mx/janium/Documentos/12890.pdf

Diario Oficial de la Unión Europea (2021). Reglamento Delegado (UE) 2021/2139 de la Comisión. Available at: https://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:32021R2139&from=EN

Energy Star (s.f.) What is Energy Use Intensity (EUI). Available at: https://www.energystar.gov/buildings/benchmark/understand_metrics/what_eui

Gobierno de Colombia (2022, marzo). Taxonomía Verde de Colombia. Available at: https://www. taxonomiaverde.gov.co/webcenter/ShowProperty?nodeId=/ConexionContent/WCC_CLUSTER-191401

Gobierno de México (2014, septiembre). Compromisos de mitigación y adaptación ante el cambio climático para el período 2020-2030. Available at: https://www.gob.mx/cms/uploads/attachment/file/162974/2015_ indc_esp.pdf

Gobierno de México-SEMARNAT-INECC (2022). México: Inventario Nacional de Emisiones de Gases y Compuestos de Efecto Invernadero 1990-2019. Available at: https://unfcc.int/sites/default/files/resource/InventarioGEI_mMexico_1990_2019.pdf

Grupo Experto Técnico en Finanzas Sostenibles de la Unión Europea (2020, marzo). Reporte técnico. Taxonomía: Informe final del Grupo Técnico de Expertos en Finanzas Sostenibles. Available at: https://finance.ec.europa. eu/system/files/2020-03/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf

GTS Construcción (2022). Bases de datos de proyectos certificados con ASHRAE Estándar 90.1.
Guerra, F. (2022, junio). Las 10 Principales Certificaciones de Edificios Sostenibles en México. Tecnológico de Monterrey. Available at: https://futurociudades.tec.mx/es/edificios-sostenibles-mexico

INEGI (2019). Actividades Económicas Secundarias: Construcción. Available at: https://cuentame.inegi.org. mx/economia/secundario/construccion/default.aspx?tema=e

INMUJERES (2020). PROIGUALDAD 2020-2024, Programa Nacional para la Igualdad Mujeres y Hombres 2020-2024. Diario Oficial de la Federación del 22 de diciembre de 2020. Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5608467&fecha=22/12/2020#gsc.tab=0

ONNCCE (s.f.). (Código de Conservación de Energía para las Edificaciones en México – IECC México. Available at: https://onncce.org.mx/es/codigos-y-publicaciones/366-mbeecdc

SEDATU-CONAVI (2017). Código de Edificación de Vivienda. Available at: https://www.gob.mx/cms/uploads/attachment/file/320345/CEV_2017 FINAL_.pdf

SEDATU-CONAVI (2017). NAMA apoyada para la Vivienda Nueva en México. Acciones de Mitigación y Paquetes Financieros. Actualización 2017. Available at: https://www.gob.mx/cms/uploads/attachment/file/350682/ NAMA_Vivienda_Nueva_M_xico-Actualizacion_2017.pdf

SEMARNAT (2015). Compromisos de Mitigación y Adaptación ante el Cambio Climático para el periodo 2020- 2030, Instrumentación. México. http://www.gob.mx/semarnat/articulos/compromisos-de-mitigacion-y-adaptacion-2020-2030

SEMARNAT-CONAGUA (2020). Decreto por el que se aprueba el Programa Nacional Hídrico 2020-2024. Publicado en el Diario Oficial de la Federación del 30 de diciembre de 2020. https://www.gob.mx/cms/uploads/attachment/file/642632/PNH_2020-2024 ptimo.pdf

SEMARNAT-INECC (2016, noviembre). Contribuciones Previstas y Determinadas a Nivel Nacional (INDC) para Adaptación. https://www.gob.mx/inecc/acciones-y-programas/contribuciones-previstas-y-determinadas-a- nivel-nacional-indc-para-adaptacion#:~:text=Las%20Contribuciones%20Previstas%20y%20Determinadas%20 a%20Nivel%20Nacional%20(INDC%2C%20por,de%20reducir%20las%20emisiones%20de

SEMARNAT-INECC (2018). Sexta Comunicación Nacional y Segundo Informe Bienal de Actualización ante la Convención Marco de las Naciones Unidas sobre el Cambio Climático (Issue c). Available at: http://189.240.101.244:8080/xmlui/handle/publicaciones/117

SEMARNAT-INECC (2021). Programa Especial de Cambio Climático 2021-2024. Diario Oficial de la Federación del 8 de noviembre de 2021. Available at: https://www.gob.mx/cms/uploads/attachment/file/681172/PECC- 2021-2024.pdf

SENER-CONUEE. (2019, abril). Consumo de electricidad de edificios no residenciales en México, la importancia del sector de servicios. Available at: https://www.conuee.gob.mx/transparencia/boletines/Cuadernos/cuaderno3nvociclo_2.pdf

ECONOMIC SECTOR

2.4 MANUFACTURING INDUSTRIES

The manufacturing industry is characterized as being a catalyst for economic growth and the development of a country since, as the sector through which raw materials are transformed into products that improve its citizens' life-quality, it also creates goods and services demand in the activities of other sectors of the economy, which translates into the generation of a significant number of jobs.

However, this industry emits millions of tons of GHG each year, which adversely affects the environment, natural resources, and people's health. For this reason, reducing the emissions associated with this economic sector is greatly important since, in addition to generating an immediate impact on climate, it also brings direct benefits to human health and society's general well-being.

According to the INEGyCEI, the emissions associated with cement production in 2019 were 19,411 $GgCO_2e$, representing an increase of 88% compared to 1990. Of the total emissions generated by the mineral industry, cement production is that with the highest contribution in all the years of the inventoried period (1990-2019), representing a participation of 63% for 2019.

On the other hand, the emissions associated with iron and steel production were 16,888 GgCO2e, 58% more than in 1990. Of the total emissions generated by the metals industry, the production of iron and steel is the one with the most significant contribution in all the whole period, representing a participation of 98% for 2019. It should be noted that the production of these metals has had an upward trend from 1990 to 1999, while in recent years it has been more stable.

In this context, the NDC committed by Mexico for 2015 estimates that the industry has a reduction potential of 12 million tCO_2 equivalent by 2030. For its part, in the 2022 NDC update, the following actions are mentioned for the industry strategy:

a) Implementing the Mexican Emissions Trading System, which will regulate emissions from the country's large industrial sources.
b) Actions are encouraged in micro, small, and medium-sized industries, through the MSME NAMA, with cost-effective measures, mainly energy efficiency.
c) Developing a National Circular Economy Strategy, as well as programs and incentives for energy efficiency. Through an efficient circular industry, greater competitiveness and a more sustainable use of materials, water and energy are generated resulting in the emission reduction.

In line with the aforementioned, manufacturing goods production, such as cement and steel, is considered a transition activity in various taxonomies, due to the need to generate new technologies that allow the creation of alternatives that help achieve low-emission production. In this context, the thresholds established for these sectors should serve as a transition guide for these industries and should be updated over time, to respond to technological changes and progress toward transformation.

On the other hand, from the analysis carried out in the Sustainable Taxonomy Working Group of the existing links between the targets of the SDGs and the NDCs with the economic sectors, it was identified that the manufacturing sector has a direct impact on SDG 9 “Industry, Innovation and Infrastructure”, and SDG 13 “Climate Action”. The economic impact analysis spotted that in the 2010-2020 period, the sector contributed an average of 16.62% of the GDP.

This sector was included in this taxonomy based on its potential to mitigate climate change through GHG emissions reduction, its potential contribution to climate change adaptation, its direct contribution to the SDGs, and its impact on the economy. In this way, the Manufacturing Sectoral Technical Group was integrated with the participation of Iraís Vázquez Cisneros from CBI as main advisor, in charge of conducting the investigation and carrying out suitable activities to back the discussion within the group. For the six eligible economic activities of this sector’s TEC, work meetings were held with experts from different institutions and organizations, such as CBI, National Chamber of the Aluminum Industry (CANALUM), National Chamber of the Iron and Steel Industry (CANACERO), the National Cement Chamber (CANACEM), SEMARNAT, INECC, IFC, and ECLAC.

Economic Activities:

- **327310.** Manufacturing of Cement and Products Based on Cement in Integrated Plants
- **331111.** Iron and Steel Mills
- **331310.** Basic aluminum industry
- **325120.** Industrial Gas Manufacturing
- **325180.** Other Basic Inorganic Chemical Products Manufacturing
- **325190.** Other Basic Organic Chemical Products Manufacturing

Economic Activity		327310	Manufacturing of Cement and Products Based on Cement in Integrated Plants
Description	Includes	Economic units mainly dedicated to the manufacturing of cement for construction and to the manufacturing of cement integrated with the manufacturing of cement-based products.	
	Excludes	The manufacturing of concrete from purchased cement (327320, Concrete Manufacturing); manufacturing of pipes and blocks from purchased cement or concrete (327330, Manufacturing of Cement and Concrete Pipes and Blocks), manufacturing of prestressed concrete products from purchased cement or concrete (327391, Prestressed Concrete Products Manufacturing).	
	Products	Construction cement and cement-based products.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases and Compounds (GHG).

SUBSTANTIAL CONTRIBUTION

Metric	GHG emissions per production unit expressed in tCO_2e/t

Threshold

Minimum criteria to determine if the economic activity is considered sustainable

Clinker cement thresholds (a) are applicable to industrial plants that only produce clinker and do not produce finished cement. All other plants must meet the thresholds for cement or alternative binder (b).

a. Cement clinker: The specific net direct emissions associated with clinker production processes are less than 0.8 net tCO2 / t of gray clinker.
b. Cement: The specific net direct emissions associated with cement production processes are less than

Economic Activity		331111	Iron and Steel Mills
Description	Includes	Economic units mainly dedicated to the primary smelting of raw iron and the manufacturing of steel, ferroalloys, finished products such as tubes, poles, profiles, wire rod, cables, rods and angles, and coke, made in steel complexes.	
	Excludes	Coal mining (212110, Coal Mining); iron palletization (212210, Iron Mining); the manufacturing of coke when it is carried out in establishments separate from the steel complex (324199, Coke and Other Products Derived From Refined Petroleum and Coal Manufacturing); manufacturing of tubes and poles from purchased iron and steel (331210, Iron and Steel Pipes and Tubes Manufacturing), and of other products from purchased iron and steel (331220, Other Iron and Steel Products Manufacturing).	
	Products	Iron and Steel Mills dedicated to the primary casting of raw iron and the manufacturing of steel, ferroalloys, finished products such as tubes, poles, profiles, wire rod, cables, rods and angles, and coke.	

MAIN PARAMETER
Contribution from the Mitigation of Greenhouse Gases and Compounds (GHG).

SUBSTANTIAL CONTRIBUTION	
Metric	GHG emissions per production unit expressed in tCO_2e/t
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

The manufacturing of iron and steel is eligible if it is carried out through the following technologies and if the GHG emissions associated with the production processes are less than the following values:

- Sintered mineral = 0.163 tCO_2e/t of product.
- Electric arc furnace (EAF) = 0.24 tCO_2e/t of product.
- Coke (excluding lignite coke) = 0.144 tCO_2e/t of product.

Economic Activity	331310	Basic Aluminum Industry
Description	Includes	Economic units mainly dedicated to the refining of alumina, to the production of aluminum alloys and primary forms, such as ingots, plates, bars, and to the manufacturing of products derived from secondary lamination, such as laminates, tubes, profiles, angles and wire rods. It also includes the recovery of aluminum and its alloys for its secondary lamination, and the manufacturing of aluminum foil.
	Excludes	Casting of all kinds of parts from purchased aluminum (331520, Nonferrous Metallic Parts Molding by Casting).
	Products	Refining of alumina, production of aluminum alloys and primary forms, such as ingots, plates, bars, and manufacturing of products derived from secondary lamination, such as laminates, tubes, profiles, angles, and wire rods.

MAIN PARAMETER
Contribution from the Mitigation of Greenhouse Gases and Compounds (GHG).

SUBSTANTIAL CONTRIBUTION	
Metric	GHG emissions expressed in tCO_2e/t.
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- Secondary aluminum manufacturing (i.e., the production of aluminum from recycled aluminum) is eligible. No additional mitigation criteria needed.
- In the event that Mexico was to manufacture primary aluminum:
- Primary aluminum fabrication is eligible if criterion a is met, in combination with criteria b or c:

a. The direct GHG emission associated with the primary aluminum production process is equal to or less than 1.5 tCO_2e/t.
b. The average Carbon intensity of the electricity used for the primary aluminum production process (electrolysis) is equal to or less than 100 g CO2e/kWh.
c. Electricity consumption for electrolysis is equal to or less than 15.3 MWh/t.

Economic Activity		325120	Industrial Gas Manufacturing
Descripción	Includes	Economic units mainly dedicated to the manufacturing of Hydrogen, Carbon Dioxide (solid, liquid or gas), Argon, Helium, Nitrogen, Oxygen (medical and industrial), compressed air, Acetylene, Fluorocarbon gases, dry ice and other industrial gases.	
	Excludes	The manufacturing of ice (312113, Ice Manufacturing), and the production of Chlorine (325180, Other Basic Inorganic Chemical Products Manufacturing).	
	Products	Industrial Gases Manufacturing (mainly Hydrogen).	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases and Compounds (GHG).

SUBSTANTIAL CONTRIBUTION

Metric	GHG emissions per production unit expressed in tCO_2e/t
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- Hydrogen production must have direct CO_2 emissions equal to or less than 3 tCO_2e/t of Hydrogen in line with the energy thresholds of the taxonomy. This threshold must be reviewed periodically to seek neutrality by 2050. Hydrogen produced from fossil fuels or natural gas is not eligible.

Economic Activity		325180	Other Basic Inorganic Chemical Products Manufacturing
Description	Includes	Economic units mainly dedicated to the manufacturing of acids, bases and inorganic salts, and to the production of chlorine and Carbon Black. Also includes: enrichment of radioactive minerals.	
	Excludes	N/A	
	Products	Acids, bases and inorganic salts, and production of Chlorine and Carbon Black.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases and Compounds (GHG).

SUBSTANTIAL CONTRIBUTION

Metric	GHG emissions expressed in tCO_2e/t
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- The manufacturing of other basic inorganic chemical products is eligible if the GHG emissions associated with the production processes are less than the following values:
  - o Carbon Black is eligible if the GHG emissions associated with production processes are less than 1,141 tCO_2e/t.
  - o Soda Ash is eligible if GHG emissions associated with production processes are less than 0.789 tCO_2e/t.
  - o The use of electricity for the manufacturing of Chlorine is equal to or less than 2.45 MWh/t Chlorine (includes both electrolysis and Chlorine treatment, threshold subject to periodic updating). The average Carbon intensity of the electricity used to manufacture it is 100 gCO_2e/kWh.

Economic Activity		325190	Other Basic Organic Chemical Products Manufacturing
Description	Includes	Economic units mainly dedicated to the manufacturing of basic organic chemical products, such as acids, anhydrides, alcohols for industrial use, ketones, aldehydes, fatty acids, white spirit, rosin, inedible natural dyes, distilled products of wood such as gums and resins, and other organic commodities not elsewhere classified. Also includes: manufacturing of synthetic materials for perfumes and cosmetics, and synthetic sweeteners.	
	Excludes	The production of natural colorings and flavorings for food (311930, Manufacturing of Flavoring Concentrates, Powders, Syrup, and Essences for Beverages); obtaining potable ethyl alcohol (312143, Portable Ethyl Alcohol Manufacturing); the manufacturing of basic petrochemicals (325110, Manufacturing of Basic Petrochemicals from Natural Gas and Refined Petroleum); of non-edible synthetic dyes (325130, Synthetic Dyes and Pigments Manufacturing); of raw materials for the pharmaceutical industry (325411, Manufacturing of Raw Materials for the Pharmaceutical Industry), and the extraction and processing of essential oils of vegetable origin for industrial use (325999, Other Chemical Products Manufacturing).	
	Products	Basic organic chemicals, such as acids, anhydrides, industrial use alcohols, ketones, aldehydes, fatty acids, white spirit, rosin, inedible natural colorants, distilled products of wood such as gums and resins, and other basic organic products not classified elsewhere.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases and Compounds (GHG).

SUBSTANTIAL CONTRIBUTION

Metric	GHG emissions per production unit expressed in tCO_2e/t
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- For the manufacturing of organic chemical products, the following criteria will be applied:
  - o The manufacturing of organic chemical products must be, totally or partially, based on renewable raw materials.
  - o The Carbon footprint will be substantially less than the Carbon footprint of the same chemical made from fossil feedstocks; the latter, will be calculated in accordance with ISO 14067:2018 or a similar protocol, and will be validated by a third party.
- For the purposes of applying these criteria, renewable raw material refers to biomass, industrial bio-waste or municipal bio-waste.

Environmental	Water	**Section A.1** Il economic activities in the manufacturing sector must include the following guidelines:: • Complying with Mexican legislation on the use and reuse of water. o National Water Law (LAN): Water is a vital, vulnerable and finite federal public domain good, with social, economic and environmental value, whose preservation in quantity and quality and sustainability is a fundamental task of the State and Society, as well as priority and matter of national security (TITLE "National Water Policy", Article 14 BIS 5).

Environmental	**Water**	o NOM-001-SEMARNAT-2021, which establishes the permissible limits of contaminants from wastewater discharges in receiving bodies owned by the nation. https://www.dof.gob.mx/nota_detalle.php?code=5645374&date=03/11/2022#gsc.tab=0 o NOM-002-ECOL-1996, which establishes the maximum permissible limits of contaminants in wastewater discharges to urban or municipal sewage systems. https://dof.gob.mx/nota_detalle.php?code=4881304&date=06/03/1998#gsc.tab=0 o NOM-003-ECOL-1997, which establishes the maximum permissible limits of contaminants for treated wastewater that is reused in services to the public. http://www.ordenjuridico.gob.mx/Documentos/Federal/wo69207.pdf • Having a water concession title, issued by CONAGUA for use in • hydraulic power generation and duly registered in the Public Registry of Water Rights of the corresponding hydrological region (Articles 30 and 78, LAN). • Having wastewater discharge permits in national water bodies, duly registered in the Water Rights Public Registry of the corresponding hydrological region (Article 30, LAN). • In the case of wastewater discharge into municipal drainage or sewerage, • having the permits and authorizations required by law. • In particular, monitor the temperature of the water that is discharged, as a water quality criterion for the protection of aquatic life and for drinking water supply sources. It is also a parameter established as the maximum limit allowed in wastewater discharges and an important specification in energy and heat balance calculations for industrial processes (NMX-AA-007). • Complying with the National Water Plan, as well as with the strategies and management plans, state and municipal water resources, and attending to the recommendations of the Basin Councils by hydrological basin or by hydrological region. • The collection of rainwater and the reuse of water in the facilities are relevant. • Identifying the availability of water and the risks of water contamination, both of surface waters and aquifers, and in particular the sources of water used for human consumption, in the hydrological basin and in the hydrological region in question.
	Adaptation	**Section A.2** All economic activities in the manufacturing sector must include the following guidelines: • Developing criteria for risk management and adaptation to climate change in the design, construction, reconstruction, rehabilitation and maintenance of the associated infrastructure. • Establishing adaptation measures, with a focus on gender equity and human rights and with the fundamental and essential criteria of reducing vulnerability to climate change: o Adaptation based on human communities: Having approaches with formal workers and with local communities, to train and inform about climate risks, and increase the adaptive capacity of people to new and changing climate challenges. Ensuring that adaptation activities do not have adverse effects on the adaptation efforts of other communities, infrastructure or neighboring ecosystems. o Ecosystem-based adaptation: Identify the sensitivity of ecosystems to reduce vulnerability and increase the resilience of surrounding ecosystems, and contributing to the conservation and restoration of ecosystems.

Environmental		o Adaptation based on Disaster Risk Reduction: Anticipating and reducing the risk of disasters, exposure to said risks and have plans for recovery after disasters have occurred. ● Each project must demonstrate that it has evaluated the dimension of the alterations and impacts that could affect municipalities vulnerable to climate change, reviewing, but not limited to, the following tools: o National Atlas of Vulnerability to Climate Change o National Risk Atlas **Section B.2** The following activities must include the guidelines indicated in Section A.2, plus those included in this section: Activities: 331111. Iron and Steel Mills 325120. Industrial Gas Manufacturing ● Indicating the scale of the project considering whether the project is located in risk areas such as canyon walls, stream beds and channels, geological fault zones, landslides, flooding, as well as coastal areas exposed to storm surges and erosion processes, in river mouths and rivers, areas identified as highly vulnerable to climate change, including the surrounding urban and peri-urban areas when these exist.
	Biodiversity	**Section A.3** All economic activities in the manufacturing sector must include the following guidelines: ● Having an environmental impact statement (MIA) or preventive environmental report, authorized by the competent authority (federal and/or local), in force, and reports of compliance with environmental conditions. Based on studies, the MIA discloses, the Significant and potential Environmental Impact that a work or activity would generate, as well as the way to avoid or mitigate it. ● The delimitation of the project must be consistent with the magnitude of the environmental impacts, complying with existing planning instruments (Ecological Land Management Program (POET), Urban Development Plan (PDU), hydrological basins, among others). (See the General Law for Ecological Balance and Environmental Protection (LGEEPA), the LGEEPA Regulations on Environmental Impact and Environmental Impact Guides in accordance with Article 9 of the aforementioned Regulation). ● If applicable, having authorization to change the land use of forest areas, as well as jungles or arid zones, in accordance with Article 68 of the General Law on Sustainable Forest Development. ● At the site level and specific location, considering the National Biodiversity Strategy of Mexico (ENBioMex), Action Plan 2016-2030 and the National Strategy for the Conservation and Sustainable Use of Pollinators, as well as the corresponding State Biodiversity Strategies. **Section B.3** The following activities must include the guidelines indicated in Section A.3, plus those included in this section: 327310. Manufacturing of Cement and Products Based on Cement in Integrated Plants 331111. Iron and Steel Mills

		• Geographic mapping of the sites and assessment of their proximity to areas of high biodiversity value. • Categorization of overlapping industry sites with global, regional and national importance and development of management plans to improve biodiversity management.
	Pollution prevention and control	**Section A.4** All activities in the manufacturing sector must include the guidelines indicated in this section: • All activities in the manufacturing sector must include the guidelines indicated in this section: **Air:** Complying with the maximum permissible limits of pollutants to the atmosphere permitted by applicable regulations. These include, among others, the following regulations: • Ecological Balance and Environmental Protection General Law (LGEEPA). In its title IV, Chapter I and II, it establishes the articles on prevention and pollution of the atmosphere, indicating the mechanisms and procedures to control, reduce or avoid contamination of the atmosphere. • General Law on Climate Change. Establishes provisions to mitigate GHG emissions and adapt to the adverse effects of climate change. • LGEEPA Regulations on Prevention and Control of Atmospheric Pollution. • LGEEPA Regulations of the regarding the Registry of Emissions and Transfer of Pollutants (RETC). **Soil and Odors:** Having an inventory that includes MSW and RME detailed classification and quantification; avoiding the incineration and burning of MSW in the open field so as not to generate Carbon Black that causes warming of the atmosphere, damages ecosystems and affects human health. These include, among others, the following regulations: • General Law for the Prevention and Integral Management of Waste (LGPGIR). • Regulation of the LGPGIR regarding Waste Management. **Noise and Vibrations:** Noise mitigation and prevention measures will be applied when the expected or measured noise impact of the facilities or operations of a project exceeds the applicable noise level at the most sensitive point of reception (residential, institutional, educational, industrial, commercial; parks and nearby sensitive ecosystems) as well as the exposure of workers in the project. The combination of noise and vibrations accompanying noise from stationary and mobile sources, should be measured. **Landscape:** Complying with the conditions established in the federal and state environmental impact authorizations. As part of the authorized MIA, assess the impact on the landscape, including visibility, landscape quality and visual fragility. (See LGEEPA, LGEEPA Regulation on Environmental Impact and Environmental Impact Guides in accordance with Article 9 of the aforementioned Regulation). **Thermal and light energy:** Complying with the conditions established in the federal and state environmental impact authorizations, as well as international best practices.

Environmental		**Section B.4** The following activities must include the guidelines indicated in Section A.4, plus those included in this section: Activities: 327310. Manufacturing of Cement and Products Based on Cement in Integrated Plants 331111. Iron and Steel Mills • Strict compliance with standards: o NOM-025-SSA1-2021 o NOM-022-SSA1-2019 o NOM-021-SSA1-2021 o NOM-026-SSA1-2021 o NOM-043-SEMARNAT-1993 **Section C.4** The following activities must include the guidelines indicated in Section A.4, plus those included in this section: 331310. Basic aluminum industry • Controlling air emissions from coke manufacturing and smelting operations, especially particulates (dust), Nitrogen oxides, Sulfur dioxide, Carbon Monoxide, chlorides, fluorides, volatile organic compounds, PAHs, Dibenzo, dioxins, polychlorinated furans and heavy metals. • Carrying out preventive and corrective maintenance of the equipment that operates within the company, so that the equipment works correctly, and air pollution is avoided. • o Monitoring the proper functioning of the gas scrubber equipment, thus ensuring that the maximum limits established within the regulations are not exceeded and verifying it through the emissions study that is carried out annually. • Carrying out activities that generate noise within the facilities, the walls of the establishment, reducing these emissions. • Containers will be installed for the proper control and management of solid and hazardous waste (soil contamination) which will be sent to the suppliers that the company has for its proper control and management until its final disposal, which must provide a waste transportation delivery manifest specifying the final destination of the waste. • Sending hazardous waste received within the company for recycling, to the company warehouse with a concrete floor, to prevent any leachate from infiltrating the soil and contaminating it, due to any contingency. • Applying an Environmental Surveillance Plan to control and guarantee compliance with the prevention, mitigation and compensation measures, proposed to minimize the negative environmental impacts caused by the development of the project.

Environmental	**Circular Economy**	**Section A.5** The following activities must include the guidelines indicated in this section: 327310. Manufacturing of Cement and Products Based on Cement in Integrated Plants ● Changing in the cement's composition (substitution cement by secondary products). These products must derive from waste or by-products of activities of nearby companies. ● Extending of the useful life of the construction (improves the structural resistance to deterioration). ● Carbon capturing (concentration of cement residues). ● Using residual industry by-products that are reactive in an alkaline environment to replace some of the clinker in cement, known as supplemental cementitious materials. ● Promoting the potential for the urban reuse of construction and demolition waste. ● Mapping of the flow of raw materials, energy, and waste in the construction sector, which makes it possible to identify the benefits expected by including circularity in the various phases of the life of the infrastructure, as well as for the actors involved. **Section B.5** The following activities must include the guidelines indicated in this section: 331111. Iron and Steel Mills 331310. Basic Aluminum Industry 325120. Industrial Gas Manufacturing 325180. Other Basic Inorganic Chemical Products Manufacturing 325190. Other Basic Organic Chemical Products Manufacturing ● Ensuring that steel facilities and plants have been designed and built for high durability, easy disassembly, restoration and recycling. ● Identifying the type of waste generated during the different phases of the project, estimating the volume that could be generated. **Section C.5** The following activities must include the guidelines indicated in this section: 331111. Iron and Steel Mills 331310. Basic Aluminum Industry ● Identifying and reporting the availability of infrastructure services for the management and final disposal of waste, in the locality and/or region, such as: sanitary landfills, municipal wastewater treatment plants, separation services, management, treatment, recycling or confinement of waste, among others. And, in case of making use of them, indicating if these services are sufficient to cover the present and future demands of the project and other projects present in the area.

Environmental		**Section D.5** The following activities must include the guidelines indicated in this section: 325120. Industrial Gas Manufacturing 325180. Other Basic Inorganic Chemical Products Manufacturing 325190. Other Basic Organic Chemical Products Manufacturing • The waste and by-products of the manufacturing process must be treated according to the waste hierarchy, and ideally recycled in the same process (closed cycle). **Sección E.5** The following activities must include the guidelines indicated in this section: 331310. Basic Aluminum Industry • Controlling waste and products from coking and foundry operations, including tar and Benzene.

REFERENCES

Centro de Normalización y Certificación de Productos, A.C. Organismo Nacional de Normalización (2016, agosto). Listado de Normas Mexicanas de las series NMX-E "Plásticos y sus productos"; NMX-K "Productos Químicos"; NMX-Q "Productos y Equipos para su uso Doméstico". Available at: http://www.cncp.org.mx/descargables/listado-de-normas-nmx.pdf

CONABIO (2016). Estrategia Nacional sobre Biodiversidad de México y Plan de Acción 2016-2030. Available at: https://bioteca.biodiversidad.gob.mx/janium/Documentos/12890.pdf

Diario Oficial de la Unión Europea (2021). Reglamento Delegado (UE) 2021/2139 de la Comisión. Available at: https://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:32021R2139&from=EN

Gobierno de Colombia. (2022). Taxonomía Verde de Colombia. Available at: https://www.taxonomiaverde.gov.co/webcenter/ShowProperty?nodeId=/ConexionContent/WCC_CLUSTER-191401

Gobierno de México-SEMARNAT-INECC (2022). Contribución Determinada a nivel Nacional, actualización 2022. Available at: https://unfccc.int/sites/default/files/NDC/2022-11/Mexico_NDC_UNFCCC_update2022_FINAL.pdf

Gobierno de México-SEMARNAT-INECC (2022). México: Inventario Nacional de Emisiones de Gases y Compuestos de Efecto Invernadero 1990-2019. Available at: https://unfccc.int/sites/default/files/resource/InventarioGEI_Mexico_1990_2019.pdf

Grupo Experto Técnico en Finanzas Sostenibles de la Unión Europea (2020, marzo). Taxonomy: Final report of the Technical Expert Group on Sustainable Finance. Available at: https://finance.ec.europa.eu/system/files/2020-03/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf

INMUJERES (2020). PROIGUALDAD 2020-2024, Programa Nacional para la Igualdad Mujeres y Hombres 2020-2024. Diario Oficial de la Federación del 22 de diciembre de 2020. Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5608467&fecha=22/12/2020#gsc.tab=0

SEMARNAT-CONAGUA (2020, diciembre). Decreto por el que se aprueba el Programa Nacional Hídrico 2020-2024. Publicado en el Diario Oficial de la Federación del 30 de diciembre de 2020. Available at: https://www.gob.mx/cms/uploads/attachment/file/642632/PNH_2020-2024__ptimo.pdf

SEMARNAT (2020, mayo). Diagnóstico Básico para la Gestión Integral de los Residuos. Available at: https://www.gob.mx/cms/uploads/attachment/file/554385/DBGIR-15-mayo-2020.pdf

SEMARNAT (2021, noviembre). PROGRAMA Especial de Cambio Climático 2021-2024. Diario Oficial de la Federación el 8 de noviembre de 2021. Available at: https://www.gob.mx/cms/uploads/attachment/file/685848/SEMARNAT_081121_EV.PDF

SEMARNAT-INECC (2018). Sexta Comunicación Nacional y Segundo Informe Bienal de Actualización ante la Convención Marco de las Naciones Unidas sobre el Cambio Climático (Issue c). Available at: https://cambioclimatico.gob.mx/sexta-comunicacion/

SEMARNAT-INECC Contribuciones Previstas y Determinadas a Nivel Nacional (INDC) para Adaptación. https://www.gob.mx/inecc/acciones-y-programas/contribuciones-previstas-y-determinadas-a-nivel-nacional-indc-para-adaptacion#:~:text=Las%20Contribuciones%20Previstas%20y%20Determinadas%20a%20Nivel%20Nacional%20(INDC%2C%20por,de%20reducir%20las%20emisiones%20de

SEMARNAT (2015). Compromisos de Mitigación y Adaptación ante el Cambio Climático para el periodo 2020-2030, Instrumentación. México. http://www.gob.mx/semarnat/articulos/compromisos-de-mitigacion-y-adaptacion-2020-2030

INECC. 2019. Atlas Nacional de Vulnerabilidad al Cambio Climático México. 1ª. Edición (libro electrónico). Instituto Nacional de Ecología y Cambio Climático. México. Available at: https://atlasvulnerabilidad.inecc.gob.mx/page/fichas/ANVCC_LibroDigital.pdf

Gobierno de México-SEMARNAT-INECC (2022). México: Inventario Nacional de Emisiones de Gases y Compuestos de Efecto Invernadero 1990-2019. Available at: https://unfccc.int/sites/default/files/resource/InventarioGEI_Mexico_1990_2019.pdf

SEMARNAT (2020, julio). Programa Sectorial de Medio Ambiente y Recursos Naturales 2020-2024. Diario Oficial de la Federación del 7 de julio de 2020. Available at: https://www.gob.mx/cms/uploads/attachment/file/566832/PROMARNAT-2020-2024.pdf

SENER (2018). Atlas Nacional de Biomasa. Available at: https://www.gob.mx/sener/articulos/atlas-nacional-de-biomasa#:~:text=El%20Atlas%20Nacional%20de%20Biomasa,potenciales%20de%20Biomasa%20en%20M%C3%A9xico

World Trade Organization (s.f.). Climate Change Adaptation and Trade, Policity Brief. Available at: https://www.wto.org/english/news_e/news22_e/dgo_ted_climate_change_sept22.pdf

ECONOMIC SECTOR

2.5 TRANSPORTATION

The transportation sector in Mexico is one of the main sources of GHG and air pollutants, which, in addition to contributing to global warming, generates significant impacts on the health of the population. Additionally, this sector causes problems for society as it brings noise, traffic congestion, accidents, waste generation and risks associated with the transfer of materials like waste (among others). Reducing emissions associated with this sector is of great importance since, in addition to generating an immediate impact on climate, it also brings direct benefits to human health and the society's well-being.

According to INECC, the transportation sector reported 147,934 GgCO2e of emissions in 2019, representing an increase of 57% compared to 1990. Of the total emissions generated in 2019, motor transportation ranked second with 18.5%. A trend in the evolution of emissions over time for this type of transportation stands out, due to the consumption of fossil fuels (mainly gasoline since it is the most used fuel in the country's vehicle fleet).
In this context, the NDC committed by Mexico for 2015 estimates that the transportation sector has a reduction potential of 48 million tons of CO2 equivalent by 2030. On its own, in the 2022 NDC update, the following actions are mentioned for the strategy of this sector:

a) Work is underway to consolidate the National Electric Mobility Strategy, while promoting transformation in public transportation.
b) Lithium has been decreed as a strategic mineral for energy transition, technological innovation, and national development.
c) In addition to the promotion of electromobility, regulations regarding vehicle energy efficiency will be strengthened to reduce the carbon footprint of the vehicle fleet, promoting the transition towards more efficient vehicles, as well as the promotion of clean transportation programs.
d) The expansion and rehabilitation of the national railway network is contemplated. This type of transportation allows reducing GHG emissions due to its greater energy efficiency.
e) The National Remote Work Strategy is included in the NDC. Remote work contributes to reducing the carbon footprint, as well as other air pollutants.
f) The transportation sector has a high potential to contribute to climate change mitigation and also to generate actions in favor of adaptation to climate change. For example, through the disintegration of obsolete vehicles, which produce an excess of solid waste, vehicle parts and materials can be recovered; these same materials if produced from their initial form, would

generate greater energy consumption and an increase in direct emissions, resulting in a negative impact on the environment.

Although the transportation sector has a high potential to contribute to climate change mitigation, it also has potential to generate actions to favor adaptation to climate change. For instance, through obsolete vehicles disintegration (which produce excess solid waste), parts and materials can be recovered, which, if produced from the initial way, would generate a higher energy consumption and a direct emissions increase, resulting in a negative impact on the environment.

On the other hand, from the analysis of the existing links between the SDGs and the NDCs targets with the economic sectors, carried out by the Sustainable Taxonomy Working Group, it was recognized that the transportation sector has a direct impact on SDG 11 "Sustainable Cities and Communities" and SDG 13 "Climate Action". The economic impact analysis spotted that in the 2010-2020 period, the sector contributed an average of 6.05% of the GDP.

Due to the potential for climate change mitigation through the reduction of GHG emissions, its potential contribution to climate change adaptation, its direct contribution to the SDGs, and its impact on the economy, the transportation sector. The Transportation Sectoral Technical Group had Ernesto Infante Barbosa from IFC, as the main advisor in charge of conducting the investigation and carrying out appropriate activities to back the discussion within the group.

For this sector's 18 eligible economic activities' TEC development, work meetings were held with different experts from local governments, environmental authorities, the private sector, international cooperation organizations, and academia. BANOBRAS, SEMARNAT, INECC, NAFIN, BANCOMEXT, ANPACT, IFC, IMT and NADBANK actively participated. In addition, the following six subgroups were created:

1. Rail transportation
2. Inland water transportation
3. Freight trucking
4. Fixed route passengers foreign collective and land tourist transportation
5. Fixed route passengers urban and suburban collective transportation
6. Taxis and private vehicles in general

Economic activities:

- **482110.** Rail Transportation (passengers)
- **482110.** Rail Transportation (freights)
- **483210.** Inland Water Transportation (passengers)
- **483210.** Inland Water Transportation (freights)
- **484231.** Construction Materials Trucking, long distance
- **484232.** Hazardous Material and Waste Trucking, long distance
- **484233.** Refrigerated Trucking, long distance
- **484234.** Wood Trucking, long distance
- **484239.** Other Specialized Freight Trucking, long distance
- **485111.** Urban and Suburban Collective Passenger Transportation by Fixed Route Buses
- **485112.** Urban and Suburban Collective Passenger Transportation by Fixed Route Automobiles
- **485113.** Urban and Suburban Collective Passenger Transportation by Trolleybus and Light Rail
- **485114.** Urban and Suburban Collective Passenger Transportation by Subway
- **485115.** Urban and Suburban Collective Transportation of Passengers in Buses with Exclusive Bus Lanes (BRT)
- **485210.** Long-distance Collective Passenger Transportation, fixed route
- **485311.** Taxi Stands Passenger Transportation
- **485311 (2).** Light vehicles (Taxi Services)
- **487110.** Sightseeing Transportation by Land

Economic Activity	482110	Rail Transportation (passengers)
Description – Includes	Economic units mainly dedicated to the transportation of passengers and cargo by rail.	
Description – Excludes	Urban and suburban collective passenger transportation in electric traction vehicles, such as trolleybuses and light rail, with regular schedules and fixed routes which circulate in the urban or metropolitan area of a population (485113, Urban and Suburban Collective Passenger Transportation by Trolleybus and Light Rail); the collective transportation of passengers in the metropolitan train (485114, Urban and Suburban Collective Passenger Transportation by Subway); tourist transportation by rail (487110, Sightseeing Transportation by Land), and loading and unloading services of railway merchandise and luggage (488210, Services related to rail transportation).	
Description – Products	Transportation of passengers by rail.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG).

SUBSTANTIAL CONTRIBUTION

Metric	CO_2e emissions per passenger-kilometer (gCO_2e/pkm)

Threshold

Minimum criteria to determine if the economic activity is considered sustainable

- Trains with zero direct emissions are eligible.
- Other trains are eligible if direct emissions are less than 50g CO_2e emissions per passenger-kilometer (gCO_2e/pkm) until 2025 (not eligible thereafter).

Economic Activity	482110	Rail Transportation (freights)
Description – Includes	Economic units mainly dedicated to the transportation of passengers and cargo by rail.	
Description – Excludes	Urban and suburban collective transportation of passengers in electric traction vehicles, such as trolleybus and light rail, with regular schedules and fixed routes, which circulate in the urban zone or metropolitan area of a population (485113, Urban and Suburban Collective Passenger Transportation by Trolleybus and Light Rail); the collective transportation of passengers in the metropolitan train (485114, Urban and Suburban Collective Passenger Transportation by Subway); tourist transportation by rail (487110, Sightseeing Transportation by Land), and loading and unloading services of railway merchandise and luggage (488210, Services related to rail transportation).	
Description – Products	Transportation of passengers by rail.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG).

SUBSTANTIAL CONTRIBUTION

Metric	Direct emissions per ton-km **(gCO_2e/tkm)**

Threshold

Minimum criteria to determine if the economic activity is considered sustainable

- Trains with zero direct emissions (e.g., electric, hydrogen) are eligible.
- Railroads engaged in transportation of fossil fuels or fossil fuels blended with alternative fuels are not eligible.

o Infrastructure and rolling stock of railway lines built with the primary objective of transporting fossil fuels, are not eligible. The above is considered if any of the following conditions is met:

a. The main purpose of the line is clearly described as transportation of fossil fuel goods by authorized government sources; or, failing that:

b. More than 25% of the cargo in t-km transported by the line consists of fossil fuels; or

c. More than 25% of rolling stock is dedicated to the transportation of fossil fuels.

- Rail freight transportation is eligible if direct emissions are less than 25 gCO_2/tkm until 2025 (not eligible thereafter).

Economic Activity	483210	Inland Water Transportation (passengers)
Description	Includes	Economic units mainly dedicated to the transportation of passengers and cargo through lakes, rivers, dams, canals and other inland waterways.
	Excludes	The transportation of passengers and cargo in vessels that make trips from national ports to abroad and vice-versa, and between national ports (48311, Maritime Transportation); tourist transportation by water (487210, Tourist transportation by water), and river rafting (713998, Other Recreational Services, private sector).
	Products	Passenger transportation units by lakes, rivers, dams, canals and other inland waterways.

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG).

SUBSTANTIAL CONTRIBUTION

Metric	CO_2e emissions per passenger-kilometer **(gCO_2e/pkm)**, or per passenger nautical mile **(gCO_2e/pnm)**.

Threshold

Minimum criteria to determine if the economic activity is considered sustainable

- Inland waterway passenger transportation is eligible if direct emissions are less than 50 gCO_2e/pkm or 92.6 gCO_2e/pnm [criteria based on actual occupancy (passenger-km) and not on capacity offered (seats- km or square-km)].
- River vessels, such as hybrid vessels, are eligible if direct CO_2e emissions per ton-kilometer (tCO_2e/tkm) or per ton-nautical mile (tCO_2e/tnm) are 50% below the average reference value for heavy vehicles, as defined in the corresponding regulation (see Pollution Control and Prevention Section of Do No Significant Harm).

Economic Activity	483210	Inland Water Transportation (freights)
Description	Includes	Economic units mainly dedicated to the transportation of passengers and cargo through lakes, rivers, dams, canals and other inland waterways.
	Excludes	The transportation of passengers and cargo in vessels that make trips from national ports to abroad and vice versa, and between national ports (48311, Maritime Transportation); tourist transportation by water (487210, Sightseeing Transportation by Water), and river rafting (713998, Other Recreational Services, private sector).
	Products	Cargo transportation units by lakes, rivers, dams, canals and other inland waterways.

MAIN PARAMETER	
Contribution from the Mitigation of Greenhouse Gases (GHG).	
SUBSTANTIAL CONTRIBUTION	
Metric	CO_2e emissions per passenger-kilometer **(gCO_2e/pkm)**, or per passenger nautical mile **(gCO_2e/pnm)**.
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- River vessels, such as hybrid vessels, are eligible if direct CO2e emissions per ton-kilometer (tCO2e/tkm) or per ton-nautical mile (tCO2e/tnm) are 50% below the average reference value for heavy vehicles, as defined in the corresponding regulation (see Pollution Control and Prevention Section of Do No Significant Harm).
- Infrastructures and vessels with the primary objective of transporting fossil fuels are not eligible. The above is considered if any of the following conditions are met:
  a. The primary purpose of the transportation unit is clearly described as transportation of fossil fuel goods by authorized government sources; or otherwise:
  b. More than 25% of the cargo in t-km transported by the line consists of fossil fuels, Or
  c. More than 25% of rolling stock is dedicated to the transportation of fossil fuels.

Economic Activity		484231	Construction Materials Trucking, long distance
Description	Includes	Economic units mainly dedicated to the trucking of construction materials through vehicles designed and equipped for that purpose, such as sand, gravel, bulk ready-mix concrete, partitions, pre-constructed parts, bags of cement and plaster, metal materials and wood for construction, between cities, national metropolitan areas, or abroad.	
	Excludes	The local and foreign motor transportation of packaged or loose products that do not require specialized equipment for their transportation (4841, General Freight Trucking); foreign motor transportation of wood except for construction (484234, Wood Trucking, long distance), and foreign transportation of oversized products and other foreign specialized cargo transportation (484239, Other Specialized Freight Trucking, long distance).	
	Products	Auto transportation of construction materials between national cities or metropolitan areas, or abroad.	

Economic Activity		484232	Hazardous Material and Waste Trucking, long distance
Description	Includes	Economic units mainly dedicated to the transportation of hazardous materials and waste in vehicles designed and equipped for that purpose, such as refined petroleum products; corrosive, toxic, poisonous, or reactive substances; explosive, flammable, biologically infectious, irritating materials; or any other material type that could represent a threat for health, the environment, the safety of the population or third-party properties; between cities or national metropolitan areas, or abroad.	
	Excludes	Foreign transportation of oversized products and other specialized long-distance cargo trucking (484239, Other Specialized Freight Trucking, long distance), and hazardous or non-hazardous waste collection and handling (562, Waste Management and Remediation Services).	
	Products	Units for the transportation of hazardous materials and waste between cities, national metropolitan areas, or abroad.	

Economic Activity		484233	Refrigerated Trucking, long distance
Description	Includes	Economic units mainly dedicated to the transportation of products that require refrigeration or freezing in vehicles designed and equipped for that purpose, such as milk, fruits, vegetables, and meats, between cities, national metropolitan areas, or abroad. Also includes: Economic units mainly dedicated to foreign motor transportation of cargo that requires controlled temperature based on heat.	
	Excludes	The local and foreign motor transportation of packaged or loose products that do not require specialized equipment for their transportation (4841, General Freight Trucking); foreign motor transportation of hazardous materials and waste that require refrigeration (484232, Hazardous Material and Waste Trucking, long distance), and foreign transportation of oversized products and other foreign specialized cargo transportation (484239, Other Specialized Freight Trucking, long distance).	
	Products	Transportation units of products that require refrigeration or freezing between cities or national metropolitan areas, or abroad.	

Economic Activity		484234	Wood Trucking, long distance
Description	Includes	Economic units mainly dedicated to the transportation of wood and its derivatives, such as logs in vehicles designed and equipped for that purpose, such as sawn wood and rolls of laminated paper, between cities, national metropolitan areas, or abroad.	
	Excludes	The local and foreign motor transportation of packaged or loose products that do not require specialized equipment for their transportation (4841, General Freight Trucking); Wood Trucking, long distance for construction (484231, Construction Materials Trucking, long distance), and foreign transportation of oversized products and other foreign specialized cargo transportation (484239, Other Specialized Freight Trucking, long distance).	
	Products	Units for the transportation of wood and its derivatives between national cities, metropolitan areas, or abroad.	

Economic Activity		484239	Other Specialized Freight Trucking, long distance
Description	Includes	Economic units mainly dedicated to the motor transportation of other products that due to characteristics such as size, weight, or danger, require specialized motor conveyance equipment for their transportation, such as platforms and other equipment to transport heavy or oversized machinery, standing animals, unrolled cars, and non-hazardous waste, between cities or national metropolitan areas, or abroad.	
	Excludes	The local and foreign motor transportation of packaged or loose products that do not require specialized equipment for their transportation (4841, General Freight Trucking); moving services (484210, Moving Services); foreign motor transportation of construction materials (484231, Construction Materials Trucking, long distance); hazardous materials and waste transportation (484232, Hazardous Material and Waste Trucking, long distance); the transportation of products that require refrigeration (484233, Refrigerated Trucking, long distance); transporting wood and its derivatives (484234, Wood Trucking, long distance), and the collection and management of hazardous or non-hazardous waste (562, Waste Management and Remediation Services).	
	Products	Motor transportation units of other products that, due to characteristics such as size, weight or hazard, require specialized motor transportation equipment for their transportation between national cities, metropolitan areas, or abroad.	

MAIN PARAMETER	
Contribution from the Mitigation of Greenhouse Gases (GHG).	
SUBSTANTIAL CONTRIBUTION	
Metric	CO_2 emissions per vehicle kilo **(gCO_2 /km)**
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

- Vehicle fleets or rolling stock intended for inter-municipal cargo transportation whose direct emissions are 0 gCO_2 /km, for example, electric or low-carbon hydrogen, are automatically eligible.
- The fleet of vehicles or rolling stock, cargo that uses sustainable biofuels, uba diesel and/or synthetic and biogas, guaranteed by technological design or by continuous monitoring and third-party verification, are also eligible.
- Other foreign motor transportation is eligible if direct emissions are less than 50 gCO_2/tkm until 2025 (not eligible afterward).

Economic Activity		**485111**	**Urban and Suburban Collective Passenger Transportation by Fixed Route Buses**
Description	**Includes**	Economic units mainly dedicated to the urban and suburban collective transportation of passengers in buses and minibuses, with regular schedules and fixed routes, which circulate within the urban zone or metropolitan area of a population. It also includes urban and suburban transportation recognized as metropolitan routes collective transportation (considered as those routes connecting different points within the same metropolitan area but done between different federal entities) provided authorized buses and midibuses.	
	Excludes	The urban and suburban collective passenger transportation in fixed-route vans and vans (485112, Urban and Suburban Collective Passenger Transportation by Fixed Route Automobiles); urban and suburban collective transportation of passengers in rapid transit buses (485115, Urban and Suburban Collective Transportation of Passengers in Buses with Exclusive Bus Lanes (BRT)); the foreign collective transportation of passengers in buses (485210, Long-distance Collective Passenger Transportation, fixed route), and the transportation of passengers in taxis (48531, Taxi Services).	
	Products	Urban and suburban collective passenger transportation in buses and minibuses, with regular schedules and fixed routes circulating within the urban area or metropolitan area of a population.	

Economic Activity		**485112**	**Urban and Suburban Collective Passenger Transportation by Fixed Route Automobiles**
Description	**Includes**	Economic units mainly dedicated to the urban and suburban collective transportation of passengers in microbuses, “combis” (vans) with regular schedules and fixed routes, circulating within the urban zone or metropolitan area of a population. It also includes urban and suburban transportation recognized as metropolitan routes collective transportation (considered as those routes connecting different points within the same metropolitan area but done between different federal entities) provided in microbuses and “combis” authorized for it.	
	Excludes	The urban and suburban collective passenger transportation in fixed-route buses and midibuses (485111, Urban and Suburban Collective Passenger Transportation by Fixed Route Buses); the foreign collective transportation of passengers in “combis” (vans) (485210, Long-distance Collective Passenger Transportation, fixed route), and the transportation of passengers in taxis (48531, Taxi Services).	
	Products	Urban and suburban collective passenger transportation in microbuses, minibuses and vans, with regular schedules and fixed routes, circulating within the urban zone or metropolitan area of a population.	

Economic Activity		485115	Urban and Suburban Collective Transportation of Passengers in Buses with Exclusive Bus Lanes (BRT)
Description	Includes	Economic units mainly dedicated to the urban and suburban collective transportation of passengers in rapid transit buses with regular schedules and fixed routes, circulating within the urban zone or metropolitan area of a population. Rapid transit buses generally run on exclusive lanes and passengers enter through stations where the service payment is done prior to boarding, and where level access is provided between the platform and the vehicle's floor.	
	Excludes	Urban and Suburban Collective Passenger Transportation on Fixed Route Buses (485111, Urban and Suburban Collective Passenger Transportation on Fixed Route Buses); the foreign collective transportation of passengers in buses (485210, Long-distance Collective Passenger Transportation, fixed route), and the transportation of passengers in taxis (48531, Taxi Services).	
	Products	Urban and suburban collective transportation of passengers in rapid transit buses with regular schedules, fixed routes, exclusive lanes, and on a prepaid system, circulating the urban area or metropolitan area of a population.	
Economic Activity		485210	Long-distance Collective Passenger Transportation, fixed route
Description	Includes	Economic units mainly dedicated to the collective transportation of passengers between cities, metropolitan areas or rural areas, in buses, "combis" (vans), among other vehicles, with regular schedules and fixed routes.	
	Excludes	The urban and suburban transportation recognized as metropolitan routes collective transportation (those routes connecting different points within the same metropolitan area but done between different federal entities) provided by vehicles authorized for this purpose, such as buses, midibuses, microbuses, "combis" and vans (48511, Urban and Suburban Collective Transportation of Fixed Route Passengers); urban and suburban collective transportation of passengers in rapid transit buses (485115, Urban and Suburban Collective Transportation of Passengers in Buses with Exclusive Bus Lanes (BRT)); the transportation of passengers in taxis (48531, Taxi Services); bus rental with driver (485510, Bus Rental with Driver); Tourist Transportation by Land in buses and panoramic vans (487110, Sightseeing Transportation by Land), and car rental without a driver (532110, Car rental without a driver).	
	Products	Collective passenger transportation between cities, metropolitan areas or rural areas, in buses, "combis" and vans, among other vehicles with regular schedules and fixed routes.	
Economic Activity		487110	Sightseeing Transportation by Land
Description	Includes	Economic units mainly dedicated to tourist transportation by land whose departure and arrival points are at the same place, in panoramic trains, scenic trams, carriages, human-drawn vehicles, wagons, buses and panoramic vans, which generally make round trips in a single day.	
	Excludes	Transportation of passengers by rail (482110, Rail Transportation); to the transportation of passengers in rented cars with a driver (485320, Car rental with driver); to the rental of buses with driver for the transportation of people (485510, Rental of buses with driver); to ground transportation of passengers in human-drawn vehicles (485990, Other ground transportation of passengers), and to providing tours for passengers for sporting purposes (71399, Other recreational services).	
	Products	Land tourist transportation in panoramic trains, scenic trams, carriages, human-drawn vehicles, carriages, buses or panoramic vans.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG).

SUBSTANTIAL CONTRIBUTION

Metric	CO_2e emissions per passenger-kilometer **(gCO_2e/pkm)**

Threshold

Minimum criteria to determine if the economic activity is considered sustainable

- New fleet: direct emissions are less than 20 gCO_2e/pkm until 2025 (not eligible thereafter).
- Fleet renewal: direct emissions from the new fleet are less than 30 gCO_2e/pkm.
- Renewal and disintegration: the direct emissions of the new fleet are less than 40 gCO_2e/pkm and the eligible project includes the physical disintegration of the renewed vehicle.
- The criteria are based on actual occupancy (passengers-km) and not on the capacity offered (seats-km or seats-km).

Economic Activity		**485113**	**Urban and Suburban Collective Passenger Transportation by Trolleybus and Light Rail**
Description	**Includes**	Economic units mainly dedicated to the urban and suburban collective transportation of passengers in electric traction vehicles, such as cable cars, trolleybuses and light rail, with regular schedules and fixed routes, which circulate in the urban area or metropolitan area of a population.	
	Excludes	Transportation of passengers by rail (482110, Rail Transportation); the transportation of passengers by metro or metropolitan train (485114, Urban and Suburban Collective Passenger Transportation by Subway), and tourist transportation in cable cars and other tourist and recreational transportation (487990, Other Sightseeing Transportation).	
	Products	Urban and suburban collective transportation of passengers in electric traction vehicles with regular schedules and fixed routes, which circulate in the urban area or metropolitan area of a population.	
Economic Activity		**485114**	**Urban and Suburban Collective Passenger Transportation by Subway**
Description	**Includes**	Economic units mainly dedicated to the urban and suburban collective transportation of passengers by subway with regular schedules and fixed routes, circulating in the urban zone or metropolitan area of a population. Also includes: collective passenger transportation by metropolitan train.	
	Excludes	Passenger transportation by rail (482110, Rail Transportation), and passenger transportation by light rail (485113, Urban and Suburban Collective Passenger Transportation by Trolleybus and Light Rail).	
	Products	Urban and suburban collective transportation of passengers by subway with regular schedules and fixed routes, circulating in the urban area or metropolitan area of a population.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG).

SUBSTANTIAL CONTRIBUTION

Metric	CO_2e emissions per passenger-kilometer **(gCO_2e/pkm)**

Threshold

Minimum criteria to determine if the economic activity is considered sustainable

- These are eligible if direct emissions are less than 50 gCO2e/pkm until 2025 (not eligible afterward). Criteria based on actual occupancy (passengers-km) and not on the capacity offered (seats-km or seats-km).

Economic Activity		**485311**	**Taxi Stands Passenger Transportation**
Description	**Includes**	Economic units mainly dedicated to the transportation of passengers in local taxis, with a central base or stand for better communication between taxi operators and users, without regular hours, with a route defined by the client, and a rate based on the distance traveled, time spent or specific destination. It also includes providing passenger transportation services by radio taxis.	
	Excludes	Urban and suburban collective passenger transportation provided in vehicles authorized for it, such as buses, midibuses, microbuses, "combis" and vans (48511, Urban and Suburban Collective Fixed-route Passenger Transportation); the transportation of passengers in wheeled taxis (485312, Street Taxis Passenger Transportation); the transportation of passengers in rented cars with a driver (485320, Car Rental with Driver), and the transportation of people in pedicabs (485990, Other Passenger Land Transportation).	
	Products	Site taxis	
Economic Activity		**485311 (2)**	**Light vehicles (Taxi Services)**
Descripction	**Includes**	Economic units mainly dedicated to the transportation of passengers in local taxis, with a central base for better communication between taxi operators and users, without regular hours, with a route defined by the client, and a rate based on the distance traveled, time spent or specific destination. It also includes providing passenger transportation services by radio taxis.	
	Excludes	Economic units mainly dedicated to urban and suburban collective passenger transportation provided in vehicles authorized for this purpose, such as buses, midibuses, microbuses, "combis" and vans (48511, Urban and Suburban Collective Passenger Transportation, fixed route); the transportation of passengers in rented cars with a driver (48532, Car rental with driver), and the transportation of people in pedicabs (48599, Other land passenger transportation).	
	Products	Private cars	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG).

SUBSTANTIAL CONTRIBUTION

Metric	CO_2 emissions per vehicle-kilo(gCO_2e/km).
Threshold	

Minimum criteria to determine if the economic activity is considered sustainable

o Private transportation vehicles with zero direct emissions (e.g., electricity or low-carbon hydrogen) are directly eligible. Conventional hybrid vehicle fleets will be eligible only until 2025 and plug-in hybrids until 2030.

o Diesel technologies are not eligible even in the case of hybrid vehicles.

DO NO SIGNIFICANT HARM ASSESSMENT

Environmental	**Water**	**Section A.1** All economic activities in the transportation sector must include the following guidelines: • Complying with the legislation requirements on the use and reuse of water, including official Mexican standards and Mexican standards (NOM-001-SEMARNAT-2021; NOM-002-SEMARNAT-1996; NOM-003-SEMARNAT-1997: NOM- 003-CNA-1996; NOM-008-CNA-1998; NOM-009-CNA-2001; NOM-010-CNA-2000; NMX-C-415-0NNCCE-2013).

DO NO SIGNIFICANT HARM ASSESSMENT		
Environmental	**Adaptation**	**Section A.2** All economic activities in the transportation sector must include the following guidelines ● The need to develop criteria for risk management and adaptation to climate change in the design, construction, reconstruction, rehabilitation and maintenance of transportation infrastructure is identified. All adaptation measures must have as a fundamental and essential criterion, to reduce the vulnerability of human populations, productive systems, and strategic infrastructure to climate change and/or favor the resilience of ecosystems. ● Developing criteria for risk management and adaptation to climate change in the design, construction, reconstruction, rehabilitation and maintenance of the associated infrastructure. ● Establishing adaptation measures with the fundamental and essential criteria, reducing vulnerability to climate change: o Human community-based adaptation: liaising with project workers and with local communities to train and inform about climate risks and increase the adaptive capacity of people to new and changing climate challenges, ensuring that adaptation activities must not have adverse effects on the adaptation efforts of other communities, infrastructure or neighboring ecosystems. o Ecosystem-based adaptation: identifying the ecosystems sensitivity to reduce vulnerability and increase the resilience of the surrounding ecosystems, contributing to the conservation and restoration of ecosystems. o Adaptation based on Disaster Risk Reduction: anticipating and reducing the risk of disasters, exposure to such risks and having plans for recovery after disasters occur. ● Each project must demonstrate that it has evaluated the dimension of the alterations and impacts that could affect municipalities vulnerable to climate change, reviewing, but not limited to, the following tools: o National Atlas of Vulnerability to Climate Change o National Risk Atlas **Section B.2** The following activities must include the guidelines indicated in Section A.2, plus those included in this section: 484231. Construction Materials Trucking, long distance 484232. Hazardous Material and Waste Trucking, long distance 484233. Refrigerated Trucking, long distance 484234. Wood Trucking, long distance 484239. Other Specialized Freight Trucking, long distance ● Inducing changes in the main actors' behavior, results in a logistics practices improvement, in the use of land and in incentives for the improvement in the use of energy.

DO NO SIGNIFICANT HARM ASSESSMENT		
Environmental	**Biodiversity**	**Section A.3** All economic activities in the transportation sector must include the following guidelines: • Having an environmental impact statement (MIA) or preventive environmental report, authorized by the competent (federal) authority, in force and reports of compliance with environmental conditions. The MIA discloses, based on technical studies, the Significant and potential Environmental Impact that a labor or activity would generate, as well as the way to avoid or mitigate it. • Considering, at the site level and specific location, the National Biodiversity Strategy of Mexico (ENBioMex), the 2016-2030 Action Plan, and the National Conservation and Sustainable Use of Pollinators Strategy, as well as the corresponding State biodiversity strategies. **Section B.3** The following activities must include the guidelines indicated in Section A.3, plus those included in this section: 484231. Construction Materials Trucking, long distance 484232. Hazardous Material and Waste Trucking, long distance 484233. Refrigerated Trucking, long distance 484234. Wood Trucking, long distance 484239. Other Specialized Freight Trucking, long distance 485113. Urban and Suburban Collective Passenger Transportation by Trolleybus and Light Rail 485114. Urban and Suburban Collective Passenger Transportation by Subway 487110. Sightseeing Transportation by Land 485111. Urban and Suburban Collective Passenger Transportation by Fixed Route Buses 485115. Urban and Suburban Collective Transportation of Passengers in Buses with Exclusive Bus Lanes (BRT) 485210. Long-distance Collective Passenger Transportation, fixed route 485112. Urban and Suburban Collective Passenger Transportation by Fixed Route Automobiles 485311. Taxi Stands Passenger Transportation 485311 (2). Light vehicles (Taxi Service) • Applying urban mobility programs in all cities through the use of sufficient, efficient, safe, economical, financially feasible, and environmentally friendly public transportation. **Section C.3** The following activities must include the guidelines indicated in Section A.3, plus those included in this section: 483210. Inland Water Transportation (passengers) 483210. Inland Water Transportation (goods transportation)

DO NO SIGNIFICANT HARM ASSESSMENT		
Environmental		• The activity must not give rise to ballast water discharges containing invasive aquatic species, including prevention, control and eradication of such invasive species. **Section D.3** The following activities must include the guidelines indicated in Section A.3, plus those included in this section: 484234. Wood Trucking, long distance • Only timber products will be transported with documents proving the legal origin of the forest products (forest remittances) (General Law of Sustainable Forest Development). **Section E.3** The following activities must include the guidelines indicated in Section A.3, plus those included in this section: 485113. Urban and Suburban Collective Passenger Transportation by Trolleybus and Light Rail 485114. Urban and Suburban Collective Passenger Transportation by Subway 487110. Sightseeing Transportation by Land 485111. Urban and Suburban Collective Passenger Transportation by Fixed Route Buses 485115. Urban and Suburban Collective Transportation of Passengers in Buses with Exclusive Bus Lanes (BRT) 485210. Long-distance Collective Passenger Transportation, fixed route 485112. Urban and Suburban Collective Passenger Transportation by Fixed Route Automobiles 485311. Taxi Stands Passenger Transportation 485311 (2). Light vehicles (Taxi Services) • Taking measures to monitor and protect urban ecosystems, particularly public spaces, urban green areas and urban trees.
	Pollution prevention and control	**Section A.4** All economic activities in the transportation sector must include the following guidelines: • Monitoring and complying with the maximum permissible emission limits • contaminants established in the Official Mexican Standards (NOM) and in Mexican standards regarding: **Air:** the vehicles used in the collection must comply with the allowable pollutant limits in the atmosphere. • Concerning air legislation for the establishment of maximum permissible limits on the emission of atmospheric pollutants, such as total or non-methane Hydrocarbons, Carbon Monoxide, Nitrogen Oxides and particles emitted by vehicles with internal combustion engines, NOM-042, NOM-044 and NOM-076, are included, among others. • In the case of transportation by rail and inland waterways (passengers and merchandise), compliance with the maximum permissible limits of pollutants from the US EPA test cycles must be demonstrated, as long as there are no national regulations.

Environmental		**Water:** cleaning practices for vehicles, equipment, and collection tools should preferably use treated water, and be done in places specifically designated for this task, making sure that wastewater is channeled into drainage and sewerage. If the wastewater is discharged into national bodies of water, making sure of counting with the permits and authorizations by law. **Soil and odors:** having an inventory that includes classification and detailed quantification of RSU and RME; avoiding the MSW incineration and burning in the open field, so as not to generate Black Carbon that causes the atmospheric warming, damages ecosystems and affects human health. **Noise and vibrations:** Noise mitigation and prevention measures will be applied when the expected or measured noise impact of the facilities or operations of a project exceed the applicable noise level at the most sensitive reception point (residential, institutional, educational, industrial, commercial, parks and nearby sensitive ecosystems), as well as the exposure of workers in the project. The combination of noise and vibrations accompanying noise, from stationary and mobile sources should be measured. **Landscape:** complying with the conditions established in the authorizations regarding federal and state environmental impact. As part of the authorized MIA, assessing the impact on the landscape, including visibility, landscape quality and visual fragility. (See General Law of Ecological Balance and Environmental Protection (LGEEPA), Regulation of the LGEEPA in Matters of Environmental Impact and Environmental Impact Guides in accordance with article 9 of the aforementioned Regulation). **Thermal and light energy:** complying with the conditions established in federal and state environmental impact authorizations, as well as international best practices. **Section B.4** The following activities must include the guidelines indicated in Section A.4, plus those included in this section: 485111. Urban and Suburban Collective Passenger Transportation by Fixed Route Buses 485115. Urban and Suburban Collective Transportation of Passengers in Buses with Exclusive Bus Lanes (BRT) 485210. Long-distance Collective Passenger Transportation, fixed route ● Promoting compliance with EPA 2010 or Euro VI certifications in: o Regions and “Corridors” where there is a UBA Diesel supply. o Regions where low sulfur diesel is not distributed. o Regions where there is Natural Gas availability.
	Circular Economy	**Section A.5** All economic activities in the transportation sector must include the following guidelines: ● Identifying the type of waste generated during the different phases of the project, estimating the volume that could be generated. ● Identifying and reporting the availability of infrastructure services for the management and final disposal of waste, in the locality and/or region, such as: sanitary landfills, municipal wastewater treatment plants, separation services, management, treatment, recycling or confinement of waste, among others. In case of making use of them, indicating if these services are sufficient to cover the present and future demands of the project and other projects present in the area.

	Circular Economy	• Contemplating the scrapping of vehicles when applicable. In the case of passenger transportation, improve the modal split and maintain the number of passengers. • Considering measures to manage waste in the activity, in accordance with the General Law for the Prevention and Integral Management of Waste (LGPGIR), as well as the applicable regulations. • Based on the estimated useful life of the project, presenting a program for dismantling and abandonment, which includes the procedures, handling and destination of materials and equipment, and rehabilitation programs or equipment restoration **Section B.5** The following activities must include the guidelines indicated in Section A.5, plus those included in this section: 482110. Rail Transportation (freight transportation) • Consolidating shipments, last mile efficiency measures, and delivery scheduling. • Developing open and global logistics systems that integrate complex information in real time, to bring efficiency improvements at the system level.

REFERENCES

Agencia Reguladora del Transporte Ferroviario (2021). Dirección de Estadística Ferroviaria. Anuario Estadístico Ferroviario 2020. Available at: https://www.gob.mx/cms/uploads/attachment/file/675317/Anuario_Estadistico_2020_VF2_compressed.pdf

CONABIO (2016). Estrategia Nacional sobre Biodiversidad de México y Plan de Acción 2016-2030. Disponible en: https://bioteca.biodiversidad.gob.mx/janium/Documentos/12890.pdf

Gobierno de México (2015, marzo). Decreto por el que se fomenta la renovación del parque vehicular del autotransporte. Diario Oficial de la Federación del 26 de marzo de 2015. Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5386771&fecha=26/03/2015#gsc.tab=0

Diario Oficial de la Unión Europea (2021). Reglamento Delegado (UE) 2021/2139 de la Comisión. Available at: https://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:32021R2139&from=EN

Gobierno de Colombia (2022, marzo). Taxonomía Verde de Colombia. Available at: https://www.taxonomiaverde.gov.co/webcenter/ShowProperty?nodeId=/ConexionContent/WCC_CLUSTER-191401

Gobierno de México (2014, septiembre). Compromisos de mitigación y adaptación ante el cambio climático para el período 2020-2030. Available at: https://www.gob.mx/cms/uploads/attachment/file/162974/2015_indc_esp.pdf

Gobierno de México- SEMARNAT-INECC (2022). Contribución Determinada a nivel Nacional, actualización 2022. Available at: https://unfccc.int/sites/default/files/NDC/2022-11/Mexico_NDC_UNFCCC_update2022_FINAL.pdf

Gobierno de México-SEMARNAT-INECC (2022). México: Inventario Nacional de Emisiones de Gases y Compuestos de Efecto Invernadero 1990-2019. Available at: https://unfcc.int/sites/default/files/resource/InventarioGEI_mMexico_1990_2019.pdf

Grupo Experto Técnico en Finanzas Sostenibles de la Unión Europea. (2020, marzo). Reporte de la Taxonomía: Anexo Técnico. Available at: https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy-annexes_en.pdf

INEGI (2022). Directorio Estadístico Nacional de Unidades Económicas 2022, Información para la actualización e incorporación de unidades económicas al DENUE. Available at: https://www.inegi.org.mx/rnm/index.php/catalog/764

INEGI y CANACAR (2019, marzo). Colección de estudios sectoriales y regionales. Conociendo la Industria del Autotransporte de Carga. Available at: https://canacar.com.mx/app/uploads/2019/03/Autotrans2019_con-la-norma-institucional-para-internet.pdf

INMUJERES (2020, diciembre). PROIGUALDAD 2020-2024. Programa Nacional para la Igualdad Mujeres y Hombres 2020-2024. Diario Oficial de la Federación del 22 de diciembre de 2020. Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5608467&fecha=22/12/2020#gsc.tab=0

INECC-CONACYT. (2020). Criterios para el monitoreo y evaluación de las medidas de adaptación al cambio climático. Proyecto "Construcción de esquemas de monitoreo y evaluación de la adaptación en México para la formulación de políticas públicas basadas en evidencia". Available at: https://www.gob.mx/cms/uploads/attachment/file/561621/2_Criterios_monitoreo_y_evaluacion.pdf

Medina Ramírez, S. (2013, julio). El transporte ferroviario en México. Comercio Exterior, Vol. 63, Núm. 4. Available at: http://revistas.bancomext.gob.mx/rce/magazines/157/2/el_transporte.pdf

Programas ProAire vigentes en México (14 al 2017 y 7 programa más en elaboración).

SEMARNAT (2013). Actualización de Guía para establecer programas de verificación vehicular en los estados y municipios. INFORME FINAL. Available at: https://dsiappsdev.semarnat.gob.mx/datos/portal/publicaciones/2020/Guia_PVV.pdf

SEMARNAT-INECC (2021). Programa Especial de Cambio Climático 2021-2024. Available at: https://www.gob.mx/semarnat/documentos/programa-especial-de-cambio-climatico-2021-2024

SEMARNAT-INECC (2018). Sexta Comunicación Nacional y Segundo Informe Bienal de Actualización ante la Convención Marco de las Naciones Unidas sobre el Cambio Climático (Issue c). Available at:http://189.240.101.244:8080/xmlui/handle/publicaciones/117

SEMARNAT-INECC (2016, noviembre). Contribuciones Previstas y Determinadas a Nivel Nacional (INDC) para Adaptación. https://www.gob.mx/inecc/acciones-y-programas/contribuciones-previstas-y-determinadas-a-nivel-nacional-indc-para-adaptacion#:~:text=Las%20Contribuciones%20Previstas%20y%20Determinadas%20a%20Nivel%20Nacional%20(INDC%2C%20por,de%20reducir%20las%20emisiones%20de

SEMARNAT (2015). Compromisos de Mitigación y Adaptación ante el Cambio Climático para el periodo 2020-2030, Instrumentación. México. Available at: http://www.gob.mx/semarnat/articulos/compromisos-de-mitigacion-y-adaptacion-2020-2030

SEMARNAT-INECC (2019). Atlas Nacional de Vulnerabilidad. Primera edición. Available at: https://atlasvulnerabilidad.inecc.gob.mx/page/fichas/ANVCC_LibroDigital.pdf

Toral Luna, M.A. y Betanzo Quezada, E. (2017, septiembre). Transporte Urbano de Carga. Aspectos Normativos en Materia Ambiental y Análisis de Reglamentos de Tránsito. Clave de Proyecto CONACYT: PDCPN2013-01-2212975. Centro Queretano de Recursos Naturales. Reporte Técnico No. 19

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ECONOMIC SECTOR

1.6 WASTE MANAGEMENT AND COLLECTION SERVICES

Society's generation of waste in the world has been significantly affected in volume and composition due to factors like urban growth, industrial development, and the implementation of economic models that lead to change in the population's consumption patterns. Regardless of their composition, generation rate and management, they can have different effects on the population and the environment.

Comprehensive waste management is of vital importance since, in addition to reducing its generation and achieving adequate final disposal, it brings positive impacts on the resources used for its extraction and processing, such as water and energy, at the same time that it decreases the emission of GHG, resulting in important benefits for the economy, society, and the environment.

According to the INEGyCEI of INECC, in 2019, emissions from the waste sector were 54,257.55 $GgCO_2e$, equivalent to 7.37% of the total emissions generated. Although this percentage could be considered a minor proportion of total GHG emissions in Mexico, advanced waste management has great potential to trigger GHG emission reductions in other sectors of the economy through its prevention, selective collection, reuse and recycling.

The NDC committed by Mexico for the year 2015 estimates that the waste sector has the potential to reduce 14 million tons of CO_2e by 2030. On the other hand, in the 2022 NDC update, Mexico considers the following improvement measures for this sector: a) improvement in the comprehensive management of municipal solid waste, b) treatment of both municipal and industrial wastewater and c) other activities related to the final disposal of waste, reuse, recycling, composting and bio digestion. In addition, progress will be made in the

capture of biogas, both in landfills and wastewater treatment plants, as well as for its use in the generation of clean energy.

Although the waste sector has a high potential to contribute to climate change mitigation, it also has it to generate actions in favor of climate change adaptation. For example, through the treatment and final disposal of non-hazardous waste, compost contributes to the adaptation of soils to climate change, since it can serve as soil fertilizer, thus displacing synthetic fertilizers while increasing carbon sequestration in the soil.

On the other hand, from the analysis of the existing links made between the SDG and NDC targets, and the economic sectors by the Sustainable Taxonomy Working Group, it was identified that the waste sector contributes to the fulfillment of SDG 11 "Sustainable Cities and Communities". Whereas, from the economic impact analysis, it was identified that in the period 2010-2020 this sector contributed an average of 3.4% of the GDP.

The waste management sector was included in the Sustainable Taxonomy of Mexico due to the potential of climate change mitigation that this sector has, its possible contribution to climate change adaptation, its direct contribution to the SDGs, and its impact on the economy. Herewith, the Waste Technical Sector Group was formed, with the participation of Gloria Marina Godínez from SustainLuum Consulting as the main advisor in charge of conducting the investigation and carrying out suitable activities to justify the discussion within the group. For the TEC's development of the 10 economic activities eligible for this sector, work meetings were held with different experts from local governments, environmental authorities, the private sector, international cooperation organizations, and academia, with the outstanding participation of SustainLuum Consulting, SEMARNAT, INEEC, SEDEMA, GIZ, IFC, FONADIN and BANOBRAS.

Economic activities:

- **562121.** Nonhazardous Waste Collection by the private sector
- **562122.** Nonhazardous Waste Collection by the public sector
- **562221.** Nonhazardous Waste Treatment and Final Disposal by the private sector (anaerobic digestion)
- **562222.** Nonhazardous Waste Treatment and Final Disposal by the public sector (anaerobic digestion)
- **562221.** Nonhazardous Waste Treatment and Final Disposal by the private sector (Composting)
- **562222.** Nonhazardous Waste Treatment and Final Disposal by the public sector (Composting)
- **562911.** Waste Remediation Services by the private sector
- **562912.** Waste Remediation Services by the public sector
- **562921.** Waste Recovery by the private sector
- **562922.** Waste Recovery by the public sector

Economic activity		562121	Nonhazardous Waste Collection by the private sector
Description	Includes	Economic units of the private sector mainly dedicated to the collection of non-hazardous waste, urban solid waste and special handling waste, including recyclable materials (used PET bottles, used aluminum cans, used cardboard, etc.), coming from residential and non-residential sources. Also includes: economic units of the private sector mainly dedicated to the consolidation, temporary storage and preparation of non-hazardous waste for transport (transfer stations), and the collection of construction and demolition waste.	
	Excludes	The wholesale trade of metallic waste (434311, Wholesale Trade of Metallic Waste); paper and cardboard waste (434312, Wholesale Trade of Paper and Cardboard Waste); waste glass (434313, Wholesale Trade of Glass Waste); plastic waste (434314, Wholesale Trade of Plastic Waste); other waste materials (434319, Wholesale Trade of Other Waste Materials); the motor transport of non-hazardous waste (484229, Other Specialized Local Freight Trucking, local; 484239, Other Specialized Local Freight Trucking, long-distance); private sector economic units mainly dedicated to the collection of hazardous waste (562111, Hazardous Waste Collection by the private sector), and the recovery of usable materials from waste (562921, Waste Recovery by	
	Products	Collection of non-hazardous waste, such as urban solid waste and special handling waste, including recyclable materials (used PET bottles, used aluminum cans, used cardboard, etc.), from residential and non-residential sources by private entities..	
Economic activity		562122	Nonhazardous Waste Collection by the public sector
Description	Includes	Economic units of the public sector mainly dedicated to the collection of non-hazardous waste, such as garbage and recyclable materials (used PET bottles, used aluminum cans, used cardboard, etc.), coming from residential and non-residential sources. Also includes: economic units of the public sector mainly dedicated to the consolidation, temporary storage and preparation of non-hazardous waste for transport (transfer stations), and the collection of construction and demolition waste.	
	Excludes	The metallic waste wholesale (434311, Wholesale Trade of Metallic Waste); paper and cardboard waste (434312, Wholesale Trade of Paper and Cardboard Waste); waste glass (434313, Wholesale Trade of Glass Waste); plastic waste (434314, Wholesale Trade of Plastic Waste); other waste materials (434319, Wholesale Trade of Other Waste Materials); the motor transport of non-hazardous waste (484229, Other Specialized Local Freight Trucking, local; 484239, Other Specialized Local Freight Trucking, long-distance); economic units of the public sector mainly dedicated to the Hazardous Waste Collection (562112, Hazardous Waste Collection by the public sector), and the recovery of usable materials from waste (562922, Waste Recovery by the public sector).	

	Products	Collection of non-hazardous waste, such as trash and recyclable materials (used PET bottles, used aluminum cans, used cardboard, etc.), from residential and non-residential sources by public entities.

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG)

SUBSTANTIAL CONTRIBUTION

Metric	Amount of RSU and RME managed CO_2 emissions

Mexico Threshold

Minimum criteria to determine if the economic activity is considered sustainable:

The collection and transportation of Urban Solid Waste (MSW) and Special Management Waste (SMR) is eligible when all of the following conditions are met:

a) MSW and RME are collected and transported separately from the source as a minimum: organic and inorganic.
b) The separation will be made from the generation source.
c) Collection and transportation must comply with the minimum characteristics (equipment and transportation) for collection and transportation to the different points in the waste recovery and use chain.
d) For volumes and waste flows that due to their characteristics are classified as RME, the generation, separation, collection and transportation processes must be linked to a waste management plan (and their corresponding collaboration agreements and/or conventions) and therefore comply with the regulations and standards applicable to management plans.

Additionally, optionally and to contribute to transparency and better information for the market and investors, the following may be disclosed, if possible

a) Generation data by type of waste and by stage.
b) Scope 1 and 2 GHG emissions, and from 2025 scope 3 emissions due to its economic activity.

Economic activity		**562221**	**Nonhazardous Waste Treatment and Final Disposal by the private sector (anaerobic digestion)**
Description	**Includes**	Economic units of the private sector mainly dedicated to the treatment of non-hazardous waste through biological, chemical or physical procedures to reduce, eliminate or transform waste, and final disposal of non-hazardous waste through sanitary landfills, incineration and other methods.	
	Excludes	Private sector economic units mainly dedicated to wastewater treatment (221311, Water Collection, Treatment and Supply by the private sector), and the treatment and final disposal of hazardous waste (562211, Hazardous Waste Treatment and Final Disposal by the private sector).	
	Products	Non-hazardous waste treatment through biological, chemical or physical procedures to reduce, eliminate or transform waste, and final disposal of non-hazardous waste through sanitary landfills, incineration and other methods by private entities.	

Economic activity		562222	Nonhazardous Waste Treatment and Final Disposal by the public sector (anaerobic digestion)
Description	Includes	Economic units of the public sector mainly dedicated to the treatment of non-hazardous waste through biological, chemical or physical procedures to reduce, eliminate or transform waste, and final disposal of non-hazardous waste through sanitary landfills, incineration and other methods.	
	Excludes	Economic units of the public sector mainly dedicated to the treatment of residual waters (221312, Water Collection, Treatment and Supply of water carried out by the public sector), and the treatment and final disposal of hazardous waste (562212, Hazardous Waste Treatment and final disposal by the public sector).	
	Products	Treatment of non-hazardous waste through biological, chemical or physical procedures to reduce, eliminate or transform waste, and final disposal of non-hazardous waste through sanitary landfills, incineration and other methods by public entities.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG)

SUBSTANTIAL CONTRIBUTION

Metric	Amount of RSU and RME managed CO_2 emissions Net reduction of GHG emissions

Mexico Threshold

Minimum criteria to determine if the economic activity is considered sustainable:

Anaerobic digestion (AD) is a treatment option for the organic fraction of municipal solid waste and some special management waste groups or streams according to the waste management hierarchy in case there is no treatment option viable that allows a better use. It will be eligible if all the following conditions are met:

a) For the AD, the residual biomass from sources: food, agriculture, forestry and livestock are considered. The foregoing is based on the National Biomass Atlas (ANBIO).
b) In AD treatment plants, biowaste must constitute at least 70% of input raw material of organic fraction of urban solid waste (FORSU), measured by weight, as an annual average, considering a co-substrate that could increase biogas generation.
c) Co-digestion is only admissible with a minor part (up to 30% of sludge from wastewater treatment plants) and the rest with the FORSU, or other waste streams that meet the similar characteristics of the FORSU. Other favorable substrates for anaerobic digestion can be excreta, sargassum, bagasse, etc.
d) There must be a monitoring and control plan for biogas (CH4) emissions through an MRV (monitoring, reporting and verification) system.
e) For waste volumes and flows that due to their characteristics are classified as RME, the waste management process and therefore AD treatment must be linked to a waste management plan (and their corresponding collaboration agreements and/or contracts), as well as comply with the applicable regulations and standards.
f) The digestate will be used as fertilizer/soil improver or as raw material within another production chain.
g) The biogas produced must be used for power generation (thermal and/or electrical).

Additionally, optionally and to contribute to transparency, and better information for the market and investors, the following may be disclosed, if possible:

a) Data on the amount of organic waste managed and the flow of waste in each activity.
b) Scope 1 and 2 GHG emissions, and from 2025 scope 3 emissions due to its economic activity.
c) The AD must generate net GHG reductions compared to the business-as-usual option (BAU) (final disposition).

Economic activity		562221	Nonhazardous Waste Treatment and Final Disposal by the private sector (Composting)
Description	Includes	Economic units of the private sector mainly dedicated to the treatment of non-hazardous waste through biological, chemical or physical procedures to reduce, eliminate or transform waste, and final disposal of non-hazardous waste through sanitary landfills, incineration and other methods.	
	Excludes	Private sector economic units mainly dedicated to wastewater treatment (221311, Water Collection, Treatment and Supply by the private sector), and the treatment and final disposal of hazardous waste (562211, Hazardous Waste Treatment and Final Disposal by the private sector).	
	Products	Treatment of non-hazardous waste through biological, chemical or physical procedures to reduce, eliminate or transform waste, and final disposal of non-hazardous waste through sanitary landfills, incineration and other methods by private entities.	

Economic activity		562222	Nonhazardous Waste Treatment and Final Disposal by the public sector (Composting)
Description	Includes	Economic units of the public sector mainly dedicated to the treatment of non-hazardous waste through biological, chemical or physical procedures to reduce, eliminate or transform waste, and final disposal of non-hazardous waste through sanitary landfills, incineration and other methods.	
	Excludes	Economic units of the public sector mainly dedicated to the treatment of residual waters (221312, Water Collection, Treatment and Supply by the public sector), and the treatment and final disposal of hazardous waste (562212, Hazardous Waste Treatment and Final Disposal by the public sector).	
	Products	Treatment of non-hazardous waste through biological, chemical or physical procedures to reduce, eliminate or transform waste, and final disposal of non-hazardous waste through sanitary landfills, incineration and other methods by public entities.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG)

SUBSTANTIAL CONTRIBUTION

Metric	Amount of RSU and RME managed CO_2 emissions Net reduction of GHG emissions

Mexico Threshold

Minimum criteria to determine if the economic activity is considered sustainable:

The economic activity of composting is a treatment option when all the following conditions are met:

a) When composting is the main treatment for digestate, the result of the anaerobic digestion process. The waste management hierarchy must be taken into account, so if an organic waste has priority to be composted prior to AD processes, its use in composting processes should be encouraged.

b) For volumes and flows of waste that due to their characteristics are classified as RME, the waste management process and therefore the composting-type treatment must be linked to a waste management plan (and its corresponding collaboration agreements and/or or agreements), as well as comply with the applicable regulations and standards.

c) The compost product will be used as fertilizer/soil improver.

Additionally, optionally and to contribute to transparency and better information for the market and investors, the following may be disclosed if possible:

a) Data on the amount of waste managed and the flow of waste in each activity.

b) Scope 1 and 2 GHG emissions, and from 2025 scope 3 emissions due to its economic activity.

c) Composting activities must generate net GHG reductions compared to the BAU option (final disposal).

Economic activity		**562911**	**Waste Remediation Services by the private sector**
Description	**Includes**	Private sector economic units dedicated primarily to providing remediation services such as water, air, and soil cleanup at sites damaged by hazardous or non-hazardous materials or waste, and control, containment, and monitoring services for contaminated sites. Also includes: private sector economic units dedicated primarily to providing construction remediation services, and environmental emergency response services.	
	Excludes	Consulting on remediation services; evaluation of water, air and soil at a site; remediation services planning (541620, Environmental Consulting Services); private sector economic units mainly dedicated to wastewater treatment (221311, Water Collection, Treatment and Supply by the private sector); providing cleaning services for septic tanks, and cleaning and removing silt from wells, drains, and pipes (562998, Other Waste Management Services by the private sector).	
	Products	Remediation services such as water, air and soil cleanup at sites damaged by hazardous or non-hazardous materials or waste, and control, containment and monitoring services for sites contaminated by private entities.	
Economic activity		**562912**	**Waste Remediation Services by the public sector**
Description	**Includes**	Public sector economic units dedicated primarily to providing remediation services such as water, air, and soil cleanup at sites damaged by hazardous or non-hazardous materials or waste, and control, containment, and monitoring services for contaminated sites. Also includes: public sector economic units primarily engaged in providing construction remediation services, and environmental emergency response services.	
	Excludes	Consulting on remediation services; evaluation of water, air and soil at a site; remediation services planning (541620, Environmental Consulting Services); economic units of the public sector dedicated to the treatment of residual waters (221312, Water Collection, Treatment and Supply by the public sector), and cleaning and desilting services from pits, drains and pipes (562999, Other Waste Management Services by the public sector).	
	Products	Remediation services such as water, air and soil cleanup at sites damaged by hazardous or non-hazardous materials or waste, and control, containment and monitoring services for sites contaminated by public entities.	

MAIN PARAMETER	
Contribution from the Mitigation of Greenhouse Gases (GHG)	
SUBSTANTIAL CONTRIBUTION	
Metric	Amount of RSU and RME managed CO_2 emissions Net reduction of GHG emissions
Mexico Threshold	

Minimum criteria to determine if the economic activity is considered sustainable:

For this activity to be eligible:

a) The corresponding federal authorization must be obtained in the case of hazardous waste.

b) In the case of an anaerobic water, sludge and soil cleaning/treatment process that could generate GHG emissions, an emissions monitoring and control plan must be in place through an MRV system (monitoring, reporting and verification).

c) For volumes and flows of waste that due to their characteristics are classified as RME, the waste management process and therefore the remediation treatment, including bioremediation, must be linked to a management plan (and its corresponding collaboration agreements and/or or agreements) and comply with the applicable regulations and standards.

Additionally, optionally and to contribute to transparency and better information for the market and investors, the following may be disclosed if possible:

a) Data on the amount of waste managed and the flow of waste by type in each activity.

b) Scope 1 and 2 GHG emissions, and from 2025 scope 3 emissions due to its economic activity.

c) The remediation should result in net GHG reductions compared to the BAU option (final disposal or no action at the impacted site).

Economic activity		**562921**	**Waste Recovery by the private sector**
Description	**Includes**	Economic units of the private sector mainly dedicated to the recovery of usable materials from waste, such as used PET bottles, used aluminum cans, used cardboard, used paper, used glass, old iron, used textiles, electronic scrap and other recyclable materials. The recovery implies carrying out activities such as the collection, classification, selection and compaction of materials.	
	Excludes	The manufacturing of recycled textile products (314993, Recycled Textile Product Manufacturing); of paper, cardboard and paperboard from pulp from recycled materials (3221, Pulp, Paper and Paperboard Manufacturing); of recycled plastic resins (325993, Resins of Recycled Plastic Manufacturing); wholesale trade of metal waste (434311, Wholesale Trade of Metallic Waste); paper and cardboard waste (434312, Wholesale trade of paper and cardboard waste); waste glass (434313, Wholesale Trade of Glass Waste); of plastic waste (434314, Wholesale Trade of Plastic Waste); of other waste materials (434319, Wholesale Trade of Other Waste Materials), and non-hazardous waste transfer stations operated by the private sector (562121, Nonhazardous Waste Collection by the private sector).	
	Products	Recovery of usable materials from waste, such as used PET bottles, used aluminum cans, used cardboard, used paper, used glass, old iron, used textiles, electronic scrap and other recyclable materials. The recovery implies carrying out activities such as the collection, classification, selection and compaction of materials by private entities.	

Economic activity		562922	Waste Recovery by the public sector
Description	Includes	Economic units of the public sector mainly dedicated to the recovery of usable materials from waste, such as used PET bottles, used aluminum cans, used cardboard, used paper, used glass, old iron, used textiles, electronic scrap and other recyclable materials. The recovery implies carrying out activities such as the collection, classification, selection and compaction of materials.	
	Excludes	Manufacture of recycled textile products (314993, Recycled Textile Product Manufacturing); of paper, cardboard and paperboard from pulp from recycled materials (3221, Manufacture of pulp, paper and cardboard); of recycled plastic resins (325993, Resins of Recycled Plastic Manufacturing); wholesale trade of metal waste (434311, Wholesale Trade of Metal Waste); paper and cardboard waste (434312, Wholesale Trade of Paper and Paperboard Waste); waste glass (434313, Wholesale Trade of Glass Waste); of plastic waste (434314, Wholesale trade of plastic waste); of other waste materials (434319, Wholesale Trade of Other Waste Materials), and non-hazardous waste transfer stations operated by the public sector (562122, Non-hazardous Waste Collection by the public sector).	
	Products	Recovery of usable materials from waste, such as used PET bottles, used aluminum cans, used cardboard, used paper, used glass, old iron, used textiles, electronic scrap and other recyclable materials. The recovery implies carrying out activities such as the collection, classification, selection and compaction of materials by public entities.	

MAIN PARAMETER

Contribution from the Mitigation of Greenhouse Gases (GHG)

SUBSTANTIAL CONTRIBUTION

Metric	Amount of RSU and RME managed CO_2 emissions Net reduction of GHG emissions

Mexico Threshold

Minimum criteria to determine if the economic activity is considered sustainable:

The economic activity of recovering materials from MSW and RME is eligible when all of the following conditions are met:

a) When there is separation from the source of origin of the materials to be recovered.
b) Secondary raw materials or suitable by-products are produced to replace virgin raw materials in production processes. And therefore the recovered waste (by-products) has a traceability system for its rapid identification and use.
c) At least 50%, in terms of weight, of the MSW and RME separately collected and processed becomes secondary raw materials.
d) For volumes and flows of waste that due to their characteristics are classified as RME, the waste management process and therefore the recovery process of these materials must be linked to a management plan (and its corresponding collaboration agreements and / or contracts) and comply with the applicable regulations and standards.

Additionally, optionally and to contribute to transparency and better information for the market and investors, the following may be disclosed if possible:

a) Data on the quantity managed and the flow of waste by type in each activity.
b) Scope 1 and 2 GHG emissions, and from 2025 scope 3 emissions due to its economic activity.
c) Recovery actions must generate net GHG reductions compared to the BAU option (final disposal).

DO NO SIGNIFICANT HARM ASSESSMENT		
Environmental	**Water**	**Section A.1** All economic activities in the waste sector must include the following guidelines: ● Complying with Mexican legislation on the use and reuse of water. o National Waters Law (LAN): Water is a vital, vulnerable and finite federal public domain good, with social, economic and environmental value, whose preservation in quantity and quality and sustainability is a fundamental task of the State and Society, as well as priority and matter of national security (TITLE "National Water Policy", Art. 14 BIS 5). ● Carrying out the management of wastewater, sludge and leachate associated with the management of urban solid waste (MSW) and special handling waste (RME), complying with Mexican legislation. ● Having the permits and authorizations required by law, in the case of wastewater discharge into national water bodies and/or in municipal drainage or sewerage. ● Complying with the National Water Plan, as well as with the strategies and plans of state and municipal water management and address the recommendations of the Basin Councils by hydrological basin or by hydrological region. ● Identifying the availability of water and the risks of water contamination, both surface water and aquifers, and in particular the water sources used for human consumption, in the hydrological basin and in the hydrological region in question. ● The collection of rainwater and the reuse of water in the facilities is relevant, as well as compliance with NOM-001-SEMARNAT-2021, which establishes the permissible limits of pollutants in wastewater discharges in receiving bodies owned by the nation. **Section B.1** The following activities must include the guidelines indicated in Section A.1, plus those included in this section. 562221. Nonhazardous Waste Treatment and Final Disposal by the private sector (anaerobic digestion) 562222. Nonhazardous Waste Treatment and Final Disposal by the public sector (anaerobic digestion) ● The anaerobic digestion process generates leachates, which is why an On-site wastewater treatment plant is required.
	Adaptation	All economic activities in the waste sector must include the following guidelines: ● Developing criteria for risk management and adaptation to climate change in the design, construction, reconstruction, rehabilitation, and maintenance of the associated infrastructure. ● Evaluating the potential impact of climatic events such as floods and landslides in urban and peri-urban areas. ● Evaluating and prevent the increase in the generation of disease vectors.

Environmental		• Identifying the risks of water contamination, both of surface waters and aquifers, and in particular the sources of water used for human consumption. • Establishing adaptation measures with the fundamental and essential criteria, reduce vulnerability to climate change: • Human community-based adaptation: Engaging with formal and informal workers, and with local communities to train and inform about climate risks and increase the adaptive capacity of people to new and changing climate challenges and ensure that adaptation activities should not have adverse effects on the adaptation efforts of other communities, infrastructure or neighboring ecosystems. • Ecosystem-based adaptation: Identifying ecosystems sensitivity to reduce vulnerability and increase the resilience of surrounding ecosystems and contributing to the conservation and restoration of ecosystems. • Adaptation based on Disaster Risk Reduction: Anticipating and reducing the risk of disasters, exposure to such risks and have plans for recovery after disasters occur. Each project must demonstrate that it evaluated the dimension of the disturbances and impacts that could affect municipalities vulnerable to climate change reviewing, including but not limited to, the following tools: • National Atlas of Vulnerability to Climate Change. • National Risk Atlas.
	Biodiversity	**Section A.3** All economic activities in the waste sector must include the following guidelines: • Having an environmental impact statement (MIA) or preventive environmental report authorized by the competent authority (federal or state), with validity and reports of compliance with environmental conditions. The MIA discloses, based on studies, the Significant and potential Environmental Impact that a work or activity would generate, as well as the way to avoid or mitigate it. • At the site and location-specific level, considering the National Strategy on Biodiversity of Mexico (ENBioMex), Action Plan 2016-2030 and the National Strategy for the Conservation and Sustainable Use of Pollinators, as well as the corresponding State Biodiversity Strategies. • Avoid the deposit of vegetation and residual organic matter (e.g., sargassum or agricultural residues) in priority sites for biodiversity. • In the case of hazardous waste, there must be hazardous waste management programs and efficient and comprehensive systems for cleaning, collection, recycling, and final disposal of urban and rural solid waste. **Section B.3** The following activities must include the guidelines indicated in Section A.3, plus those included in this section:

Environmental		562221. Nonhazardous Waste Treatment and Final Disposal by the private sector (anaerobic digestion) 562222. Nonhazardous Waste Treatment and Final Disposal by the public sector (anaerobic digestion) 562221. Nonhazardous Waste Treatment and Final Disposal by the private sector (Composting) 562222. Nonhazardous Waste Treatment and Final Disposal by the public sector (Composting) 562911. Waste Remediation Services by the private sector 562912. Waste Remediation Services by the public sector ● Promoting in the federal entities and local governments the valorization (through the use by compost or anaerobic digestion) of organic waste that represents 50% of the total mix of generated waste and that must be properly disposed of.
	Pollution prevention and control	**Section A.4** All economic activities in the waste sector must include the following guidelines: ● Monitoring and complying with the maximum permissible limits of polluting emissions established in the Official Mexican Standards (NOM) and in Mexican standards regarding: **Air:** The vehicles used in the collection must comply with the allowable pollutants' limits into the atmosphere. Water: Cleaning practices for vehicles, equipment and collection tools should preferably use treated water, and be carried out in places specifically designated for this task, taking care that wastewater is channeled into drainage and sewerage. Having the permits and authorizations by law if the wastewater is discharged into national bodies of water. **Soil and Odors:** Having an inventory that includes detailed classification and quantification of RSU and RME; avoiding the incineration and burning of MSW in the open field, so as not to generate Black Carbon that causes atmospheric warming, damages ecosystems, and affects human health. **Noise and Vibrations:** Noise mitigation and prevention measures will be applied when the expected or measured noise impact of project facilities or operations exceeds the applicable noise level at the most sensitive point of reception (residential, institutional, educational, industrial, commercial, parks, and nearby sensitive ecosystems) as well as the exposure of workers in the project. The combination of noise and vibrations accompanying it, from stationary and mobile sources, should be measured. **Landscape:** Complying with the conditions established in the federal and state environmental impact authorizations. As part of the authorized MIA, assessing the impact on the landscape, including visibility, landscape quality and visual fragility. (See General Law for Ecological Balance and Environmental Protection (LGEEPA), LGEEPA Regulations on Environmental Impact and Environmental Impact Guides in accordance with Article 9 of the aforementioned Regulation). **Thermal and light energy:** Complying with the conditions established in the federal and state environmental impact authorizations, as well as international best practices.

Environmental	**Circular Economy**	**Section A.5** All economic activities in the waste sector must include the following guidelines, included in this section: 562121. Nonhazardous Waste Collection by the private sector 562122. Nonhazardous Waste Collection by the public sector 562921. Waste Recovery by the private sector 562922. Waste Recovery by the public sector • Establishing and maintaining MSW and RME collection practices that make it possible to identify and to have information on MSW and RME types, as well as their quantification, ensuring that the components and materials maintain their utility and maximum value. • Inducing and promoting practices that allow disassembling, reusing (collaborative economy), remanufacturing, recycling, and retrieving products. **Section B.5** The following activities must include the guidelines indicated in this section: 562221. Treatment and final disposal of non-hazardous waste by the private sector (Anaerobic digestion) 562222. Treatment and final disposal of non-hazardous waste by the public sector (Anaerobic digestion) 562221. Treatment and final disposal of non-hazardous waste by the private sector (Composting) 562222. Treatment and final disposal of non-hazardous waste by the public sector (Composting) 562911. Waste remediation services by the private sector 562912. Waste remediation services by the public sector • By providing an alternative use for FORSU, the circular economy of the organic fraction of MSW is being influenced and new technological alternatives for energy generation are being developed.

REFERENCES

Centro de Normalización y Certificación de Productos, A.C. Organismo Nacional de Normalización. (2016, agosto) Listado de Normas Mexicanas de las series NMX-E "Plásticos y sus productos"; NMX-K "Productos Químicos"; NMX-Q "Productos y Equipos para su uso Doméstico". Available at: http://responsabilidad.anipac.com/wp-content/uploads/2018/02/Listado-NMX-Edicio%CC%81n-Agosto-2016.pdf

CONABIO (2016). Estrategia Nacional sobre Biodiversidad de México y Plan de Acción 2016-2030. Available at: https://bioteca.biodiversidad.gob.mx/janium/Documentos/12890.pdf

Diario Oficial de la Unión Europea (2021). Reglamento Delegado (UE) 2021/2139 de la Comisión. Available at: https://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:32021R2139&from=EN

Gobierno de Colombia (2022, marzo). Taxonomía Verde de Colombia. Available at: https://www.taxonomiaverde.gov.co/webcenter/ShowProperty?nodeId=/ConexionContent/WCC_CLUSTER-191401

Gobierno de México (2014, septiembre). Compromisos de mitigación y adaptación ante el cambio climático para el período 2020-2030. Available at: https://www.gob.mx/cms/uploads/attachment/file/162974/2015_indc_esp.pdf

Gobierno de México-SEMARNAT-INECC (2022). Contribución Determinada a nivel Nacional, actualización 2022. Available at: https://unfccc.int/sites/default/files/NDC/2022-11/Mexico_NDC_UNFCCC_update2022_FINAL.pdf

Gobierno de México-SEMARNAT-INECC (2022). México: Inventario Nacional de Emisiones de Gases y Compuestos de Efecto Invernadero 1990-2019. Available at https://unfcc.int/sites/default/files/resource/InventarioGEI_mMexico_1990_2019.pdf

Grupo Experto Técnico en Finanzas Sostenibles de la Unión Europea (2020). Reporte de la Taxonomía: Anexo Técnico. Available at https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy-annexes_en.pdf

INMUJERES (2020, diciembre) PROIGUALDAD 2020-2024. Programa Nacional para la Igualdad Mujeres y Hombres 2020-2024. Diario Oficial de la Federación del 22 de diciembre de 2020. Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5608467&fecha=22/12/2020#gsc.tab=0

SEMARNAT (2015, abril). Compromisos de Mitigación y Adaptación ante el Cambio Climático para el periodo 2020-2030, Instrumentación. Available at: http://www.gob.mx/semarnat/articulos/compromisos-de-mitigacion-y-adaptacion-2020-2030

SEMARNAT (2020, julio). Programa Sectorial de Medio Ambiente y Recursos Naturales (Promarnat) 2020-2024. Publicado en el Diario Oficial de la Federación el 7 de julio de 2020. Available at: https://www.gob.mx/cms/uploads/attachment/file/566832/PROMARNAT-2020-2024.pdf

SEMARNAT (2021). Programa Nacional de Remediación de Sitios Contaminados 2021-2024. Available at: https://www.gob.mx/cms/uploads/attachment/file/681183/PNRSC-2021-2024.pdf

SEMARNAT. Diagnóstico Básico para la Gestión Integral de los Residuos. Mayo de 2020. Available at: https://www.gob.mx/cms/uploads/attachment/file/554385/DBGIR-15-mayo-2020.pdf

SEMARNAT-CONAGUA (2020). Decreto por el que se aprueba el Programa Nacional Hídrico 2020-2024. Publicado en el Diario Oficial de la Federación del 30 de diciembre de 2020. Available at: https://www.gob.mx/cms/uploads/attachment/file/642632/PNH_2020-2024__ptimo.pdf

SEMARNAT-INECC (2018). Sexta Comunicación Nacional y Segundo Informe Bienal de Actualización ante la Convención Marco de las Naciones Unidas sobre el Cambio Climático (Issue c). DAvailable at: http://189.240.101.244:8080/xmlui/handle/publicaciones/117

SEMARNAT-INECC (2019). Atlas Nacional de Vulnerabilidad. Primera edición. Available at: https://atlasvulnerabilidad.inecc.gob.mx/page/fichas/ANVCC_LibroDigital.pdf

SEMARNAT-INECC (2021). Programa Especial de Cambio Climático 2021-2024. Available at: https://www.gob.mx/semarnat/documentos/programa-especial-de-cambio-climatico-2021-2024

SEMARNAT-INECC. Contribuciones Previstas y Determinadas a Nivel Nacional (INDC) para Adaptación. Available at: https://www.gob.mx/inecc/acciones-y-programas/contribuciones-previstas-y-determinadas-a-nivel-nacional-indc-para-adaptacion#:~:text=Las%20Contribuciones%20Previstas%20y%20Determinadas%20a%20Nivel%20Nacional%20(INDC%2C%20por,de%20reducir%20las%20emisiones%20de

SENER (2018). Atlas Nacional de Biomasa. Available at: https://www.gob.mx/sener/articulos/atlas-nacional-de-biomasa#:~:text=El%20Atlas%20Nacional%20de%20Biomasa,potenciales%20de%20Biomasa%20en%20M%C3%A9xico

2 CLIMATE CHANGE ADAPTATION

The Sustainable Taxonomy of Mexico recognizes that the country is exposed to non-linear heterogeneous climate and environmental risks that have multiple transmission channels and, therefore, climate change affects all sectors of the economy to different degrees. Thus, through this taxonomy, it is sought that economic activities contribute substantially, not only to the mitigation, but also to the adaptation to climate change.[28]

Including adaptation to climate change in the specific objectives of this taxonomy intends to boost financial resources and investments aimed at improving the capacity of assets and systems to persist, adapt or transform in the face of climate-related impacts, in a timely and efficient manner, at the same time that economic and social co-benefits are generated for the country. It is worth mentioning that, for adaptation measures to be effective, these must respond specifically to the geographic, economic, and social context of each jurisdiction. This is even more relevant in a country like Mexico, which given its geographical orientation, its population's heterogeneity, its socioeconomic and orographic conditions, and its mega-diversity are considered particularly vulnerable to the effects of climate change.

In this context, it is of vital significance that economic activities generate adaptation measures capable of reducing the negative effects of climate change, to improve the resilience of their operations and to create enabling conditions for other economic activities. The foregoing, considering the differentiated climatic conditions faced by vulnerable regions, sectors and populations.

2.1 CLIMATE CHANGE ADAPTATION APPROACHES

The Technical Evaluation Criteria for the adaptation objective retake as a guiding principle, the qualitative approach proposed by the European Union Taxonomy to determine the substantial contribution in terms of adaptation to climate change of the different selected economic activities. This, based on the flexibility offered by this framework to adapt it to the Mexican context, which was done by incorporating criteria for adaptation to climate change previously developed by INECC.

The result of this approach will also facilitate interoperability between both instruments, as well as promoting the flow and exchange, not only of capital, but also of lessons learned in the near future.

2.2 SUBSTANTIAL CONTRIBUTION CRITERIA IDENTIFICATION

Determining whether an economic activity contributes substantially to climate change adaptation, involves a two-step process:

[28]This Taxonomy takes up the definition of adaptation from the Intergovernmental Panel on Climate Change (IPCC) that refers to ecological, social and economic system adjustments in response to real or expected climatic stimuli and their effects or impacts.

1. Assessing the potential and the negative[29] physical risks observed, related to climate change in the economic activity, throughout its useful life or duration. The evaluation should include:

a.The vulnerabilities and climatic risks to which the economic activity might be exposed, depending on its geographical location. This includes, but is not limited to, considering the use of the tools and sources of information developed by INECC.[30]
b. Scale of the project or economic activity.
c. Materiality and/or affectation degree caused by the identified negative physical risks
d. Information and climate projections availability, in accordance with the most recent reports from the IPCC and INECC.

2. Demonstrating how the economic activity will address these identified negative physical risks and prevent their increase or displacement to other sectors, activities, regions, or populations. To this end, adaptation solutions will focus on efforts to identify exposure, reduce sensitivity, and increase adaptive capacity.

Based on the information obtained, two types of economic activities could be classified considering their substantial contribution to the adaptation objective:

a. Adapted activities: An economic activity adapts to material physical climate risks, if it integrates measures and/or solutions to reduce them, while ensuring that the activity can function well in a changing climate. These adaptation activities are developed based on the evaluation of current and future risks, whether climatic, chronic and/or acute[31], as well as the temporal and geographical scale of the economic activity.

b. Activities that enable adaptation: An economic activity enables adaptation if it reduces material physical climate risk and vulnerability in other economic activities, communities, ecosystems or cities, and/or addresses systemic obstacles to adaptation. This is possible through technology and the specialized product or service creation.

The difference between the two types of activities can guide the Sustainable Taxonomy users to creating adaptation solutions that they find adequate to their context, either for the benefit of increasing their resilience, or for driving the development of adaptation-enabling solutions in other sectors or regions.

[29]Refers to the economic costs and financial losses resulting from the increasing severity and frequency of extreme weather events related to climate change (such as heat waves, landslides, floods, wildfires and storms), as well as long-term, progressive changes in climate (such as precipitation changes, extreme climate variability, ocean acidification, rising sea levels, and mean temperatures).

[30]These are:

- o National Atlas of Climate Change
- o National Atlas of Risks

[31]The United Nations Framework Convention on Climate Change (UNFCCC) defines chronic climate risks as those that are caused by climate change and their impact is gradual (such as sea level rise, ocean acidity, changes in precipitation, melting glaciers, and rising temperatures). Likewise, it defines acute risks as those that occur anyway, but climate change can change their frequency, severity and/or location; they tend to be in a short timeframe and of high severity (such as gales, storm surges, floods, droughts, fires, and heat waves).

2.3 SELECTION CRITERIA

The selection criteria are specific qualities and/or characteristics that make it possible to determine whether an economic activity substantially contributes to climate change adaptation. These elements depend on the activity classification, between the so-called adapted ones and those that enable adaptation.
In order to guide the design of both types of adaptation measures, the following criteria are proposed, based on the classification prepared by the European Union.

Table 2.1. Selection Criteria for Determining the Substantial Contribution of the Adapted Activities.

Criterion	Subcriterion
A1. Reduction of material physical climatic risks. The economic activity must reduce all of its material physical climate risks as far as possible and on best effort.	**A1.1.** The economic activity integrates measures aimed at reducing, as far as possible and on best effort, the material physical climate risks to that activity identified through a risk assessment.
	A1.2. The aforementioned assessment has the following characteristics: • It considers both current meteorological variability and future climate change, including climate scenarios, as well as uncertainty. • It is based on a solid data and information analysis available on the different climate scenarios and is consistent with the expected duration of the activity.
A2. Support for system adaptation. The economic activity and its adaptation measures do not negatively affect the adaptation efforts of other people, nature and goods.	**A2.1.** The economic activity and its adaptation measures do not increase the risks of an adverse climate impact on other people, nature and goods.
	A2.2. The economic activity and its adaptation measures are consistent with adaptation efforts at the sectoral, regional and/or national level.
A3. Adaptation Results Monitoring. The reduction of physical risks can be measured.	**A3.1.** Adaptation results can be monitored and measured based on indicators. Considering that physical risks evolve over time, the analysis of physical risks must be carried out with adequate frequency.

Source: Own elaboration.

Table 2.2. Selection Criteria for Determining the Substantial Contribution of Economic Activities that Enable Adaptation

Criterion	Subcriterion
B1. Support the adaptation of other economic activities The economic activity reduces the material physical climate risk in other economic activities and/or addresses the systemic obstacles for adaptation. Activities that enable adaptation include, but are not limited to, activities that promote a technology, a product, a practice, a governance process, or innovative uses of technologies, products or existing practices (including those related to natural infrastructures). These remove information, financial, technological and capacity barriers for the adaptation of others.	**B1.1.** The economic activity reduces or facilitates adaptation to physical climate risks beyond the limits of the activity itself. The activity will need to demonstrate how it supports the adaptation of others, by: • An assessment of the resulting risks, based on robust data from both, current weather variability and future climate change, including climate scenarios, and the uncertainty, which the economic activity will help address. • An evaluation of the effectiveness of the economic activity's contribution to the reduction of physical risks, contemplating the exposure scale and vulnerability to them.
	B1.2. In the case of infrastructure linked to an activity that allows adaptation, this infrastructure must also meet the selection criteria A1, A2 and A3.

Source: Own elaboration.

2.4 CLIMATE-RELATED RISKS CLASSIFICATION

The identification of climate risks might be based on, but is not limited to, the following classification, which allows users to be guided in the identification of the most relevant physical risks when determining present or potential vulnerabilities in the region.

This classification contemplates four groups of climate-related risks: 1) temperature, 2) wind, 3) water, and 4) movements of solid masses, which in turn are divided into extreme risks, which are considered acute, as well as those that occur gradually, classified as chronic (Table 2.3)

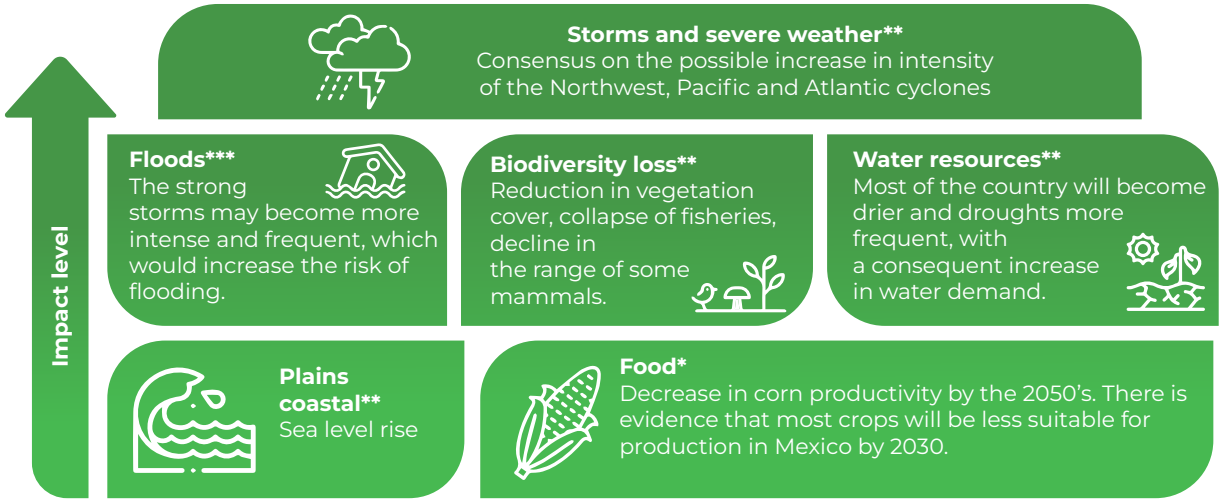
Table 2.3. Climate-Related Risks Classification

	Temperature-Related	Wind-Related	Water-Related	Solid Mass-Related
Chronic	• Temperature changes in air, fresh water, sea water • Heat stress • Temperature variability • Permafrost thaw	• Changing wind patterns	• Change in precipitation patterns or types (rain, hail, snow, or ice) • Hydrological variability • Ocean acidification • Saline intrusion • Sea level rise	• Coastal erosion • Land degradation • Slope instability • Desertification • Soil erosion • Solifluxion
Acute	• Heatwave • Cold snap/frost • Forest fire • Heatwave • Forest fire	• Cyclones, Hurricanes, Typhoons, Tidals • Thunderstorms (including blizzards, dust and sandstorms) • Tornadoes	• Drought • Extreme precipitation (rain, hail, snow/ice) • Floods (coastal, fluvial, pluvial, groundwater) • Burst of a glacial lake	• Avalanche • Landslide • Subsidence

Source: Adapted, based on information from the EU Taxonomy.

Additionally, it is recommended to take into consideration the projected impacts of climate change in Mexico identified by INECC (Figure 2.1), which will be presented in various forms throughout the country, according to the types of climate, the distribution of natural resources, infrastructure, economic development and demography (INECC, 2019). As can be seen in Table 2.4, the exercise led by INECC starts from the identification of the threats that cause climate problems and, subsequently, recognizes how social, productive, economic and natural systems can be affected.

Figure 2.1. Climate Change Projected Impacts in Mexico



**Level of trust*

Source: INECC, 2019[32]

[32]Mexican Atlas of Vulnerability to Climate Change. First edition. (SEMARNAT-INECC) Available at: https://atlasvulnerabilidad.inecc.gob.mx/page/fichas/ANVCC_LibroDigital.pdf

Table 2.4. Identified Problems Associated with Climate

Identified Climate Threats																
Sector	Sea level rising		Increase in precipitation			Decreased precipitation					Temperature Increase					
	Saline intrusion	Loss of space	Increase of earthflows	Increase of floods	Soil loss	Decrease in the production	Decrease in water availability	Increase of forest fires	Salinization	Increase in diseases	Decrease in performance	Increase in plagues	Decrease in water availability	Increase in invasive species	Change in climatic zones	Increase in diseases
Primary Sector																
Energy																
Population																
Health																
Water																
Infraestructure																
Tourism																
Natural Capital																

Affected sectors

Source: INECC, 2019[33]

2.5 TECHNICAL EVALUATION CRITERIA

The 124 activities contributing to climate change mitigation have the potential to contribute substantially to climate change adaptation. However, in the case of agricultural sector activities, and in particular, the agriculture and animal ranching and farming subsectors, specific practices must be addressed to ensure their contribution to adaptation.

To identify whether an economic activity is substantially contributing to adaptation to climate change, it must integrate the following guidelines or principles:

1. The economic activity applies adaptation solutions (see point 4) that significantly reduce the most important physical climatic risks considered as material for said activity. For this, it is recommended to consider the minimum criteria for adaptation measures design elaborated by the INECC, which establishes that an adaptation measure must have as a fundamental criterion, seeking to reduce the vulnerability to climate change of human populations, productive systems, infrastructure strategy, and/or promoting the resilience of ecosystems (INECC, 2020).
2. The physical climate risks relevant for the activity were identified based on the climate-related risk classification identified in Table 2.3 and the projected climate change impacts in Mexico described in Figure 2.1 and Table 2.4 of this Chapter, through an evaluation that meets the following characteristics:

a. It focuses on vulnerabilities and climate risks to which the activity may be exposed.
b. It is carried out according to the scale of the project or economic activity.
c. It understands the importance and degree of materiality and/or affectation of said risks.
d. The assessment of climate risk and vulnerability is proportional to the scale of the activity.

3. The climate scenarios and the impact evaluation are based on an illustrative way, but not limited to the following tools:
   a. National Atlas of Vulnerability to Climate Change[33]
   b. National Risk Atlas[34]

4. The adaptation solutions applied:
   a. are aligned with the national, sectoral and local strategies and plans on the matter, ensuring the feasibility of said actions.

   b. contemplate one or more of the three adaptation approaches contained in the NDC:
   - Community-Based Adaptation (CbA)
   - Ecosystem-based Adaptation (EbA)
   - Adaptation based on Disaster Risk Reduction (AbDRR).

   c. reduce climate material/physical risks as far as possible and on best effort.
   d. favor solutions based on nature and/or green infrastructure.
   e. take into account the social context, support the strengthening of governance, when having the population's approval is necessary, and, when possible, consider a gender approach.
   f. reduce the vulnerability of human populations with an emphasis on capacity-building.
   g promote the climatic resilience of ecosystems, populations or people, goods, cultural heritage,

[33]National Atlas of Vulnerability. First edition. (SEMARNAT-INECC) Available at: https://atlasvulnerabilidad.inecc.gob.mx/page/fichas/ANVCC_LibroDigital.pdf
[34]National Atlas of Risk (CENAPRED). Available at: http://www.atlasnacionalderiesgos.gob.mx/

and other economic activities.
h. do not negatively affect the adaptation efforts of other economic activities, goods, populations or people, nor the cultural patrimony, nor of nature.
i. promote co-benefits and favor their equitable distribution.
j. adaptation-related outcomes are clearly identifiable, measurable and traceable over time, based on robust evidence and adequate climate information.
k. allow corrective measures design and application when the results are not as expected.

5. In addition to the aforementioned guidelines and principles, the economic activities of the Agriculture and Animal Ranching and Farming subsector must integrate, at least, two of the practices below (for more detail, review the Substantial Contribution to Climate Change Mitigation section).

Table 2.5. Practices with an Impact on Adaptation to Climate Change for the Agriculture and Animal Farming and Ranching Subsectors.

Subsector	Practices with an impact on adaptation to climate change
Agricultural	1. Crop rotation 2. Integration of cover crops 3. Conservation of fragments and linear corridors of native vegetation and encourage diversified and multi-layer living fences. 4. Carrying out soil conservation works (terraces, gabion dams, contour lines, soil drainage). 5. Incorporation of organic matter into the soil (harvest residues, compost, etc.). 6. Integration of agroforestry system, polyculture or associated crops in permanent crops. 7. Application of minimum or reduced tillage (accessories and machinery). 8. Productive reconversion 9. Protected agriculture facility with recyclable materials. 10. Restoration of degraded soils. 11. Those eligible investment concepts or practices with an impact on adaptation to climate change.
Animal Ranching and Farming	1. Conservation actions 2. Increase in aerial and underground biomass 3. Diversification of productive activities 4. Grazing management 5. Recovery of degraded soils 6. Those eligible investment concepts or practices with an impact on adaptation to climate change.

Source: Own elaboration.

Do No Significant Harm

For the Do No Significant Damage (DNSH) assessment of each activity by economic sector, the criteria developed for the Mitigation TEC (water, biodiversity, pollution prevention and control, and circular economy) are taken up again. Additionally, activities with potential for adaptation to climate change must incorporate Climate Change Mitigation aspects in the DNSH section. That is, to ensure that the activities do not generate an impact on:

Subsector	Practices with an impact on adaptation to climate change
Agriculture, animal farming and ranching, and forestry	All activities must include the following guidelines: Do not affect the present and future ability of forests and farmlands to serve as carbon sinks. Do not reduce the levels of carbon reserves and sinks in forests in the long term. Avoid burning pre-harvest and agricultural residues. Do not promote the change of use, degradation and loss of soil, in accordance with the General Law of Sustainable Forest Development provisions. Using products for pest and disease control authorized by COFEPRIS and prioritizing the use of biological pesticides or organic insecticides. Carrying out adequate management of agricultural and livestock waste, in accordance with the NOM-161-SEMARNAT-2011 provisions.
Construction	All activities must include the following guidelines: Guaranteeing compliance with NOM-040-ECOL-200, which establishes the maximum permissible emission limits from fixed sources dedicated to the manufacturing of hydraulic cement, which use conventional fuels or their mixtures with other materials or residues that are fuels. Guaranteeing that the economic activity is carried out using the best technologies or materials available, in line with Mexico's commitments regarding the mitigation of greenhouse gases and compounds.
Electrical power and water supply (generation, transmission, distribution and commercialization) I	Those activities that are below the threshold of GHG emissions ≤ 100 gCO2e/ kWh, do not cause significant damage in terms of climate change mitigation. Those activities above the GHG threshold must ensure that, as a result of the climate change adaptation activity, the emission intensity of the economic activity does not increase.
Manufacturing Industries	All activities must include the following guidelines: Guarantee that the economic activity is carried out using the best available technologies and in line with Mexico's commitments regarding GHG mitigation.
Transportation	All activities must include the following guidelines: Guarantee that the economic activity is carried out using the best available technologies and in line with Mexico's commitments regarding GHG mitigation.
Waste	All activities must include the following guidelines: Methane leaks from waste recovery plants are controlled and have a monitoring plan.

REFERENCES

Banco de México (2020, febrero). Riesgos y Oportunidades Climáticas y Ambientales del Sistema Financiero de México, del Diagnóstico a la Acción. Available at: https://www.banxico.org.mx/sistema-financiero/d/%7B828DDC4B-D078-157F-8486-141F3103FA87%7D.pdf

Climate Bonds Initiative (2021, marzo). Principios de Resiliencia Climática: Marco para evaluar las inversiones en resiliencia climática. Available at: https://www.climatebonds.net/files/page/files/principios_de_resiliencia_climatica_spanish_0.pdf

Climate Change Committee (2023, enero). Investment for a well-adapted UK. Available at: https://www.theccc.org.uk/publication/investment-for-a-well-adapted-uk/

Comisión Europea (2019). EU Taxonomy Compass. Available at: https://ec.europa.eu/sustainable-finance-taxonomy/taxonomy-compass

Diario Oficial de la Unión Europea (2021, junio). Reglamento Delegado (UE) 2021/2139 de la Comisión. Available at: https://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:32021R2139&from=EN

Germanwatch (2021, enero). Índice de Riesgo Climático Global 2021, ¿Quiénes sufren más a causa de los eventos climáticos extremos?. Available at: https://www.germanwatch.org/sites/default/files/Resumen%20Indice%20de%20Riesgo%20Clim%C3%A1tico%20Global%202021_0.pdf

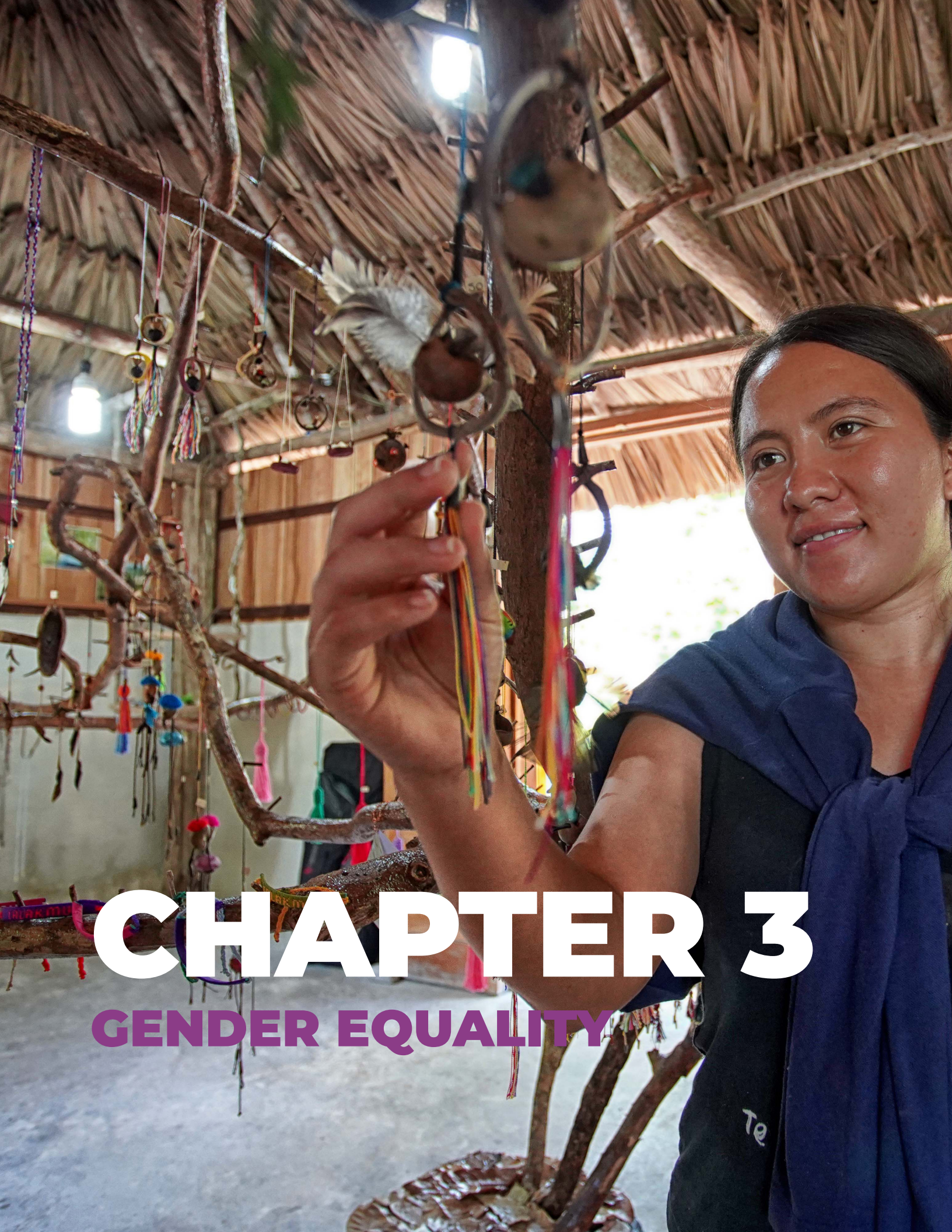
Grupo Experto Técnico en Finanzas Sostenibles de la Unión Europea (2020, marzo). Taxonomy: Final report of the Technical Expert Group on Sustainable Finance. Available at: https://finance.ec.europa.eu/system/files/2020-03/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf

INECC (2020). Criterios para el monitoreo y evaluación de las medidas deadaptación al cambio climático. Proyecto "Construcción de esquemas de monitoreo y evaluación de la adaptación en México para la formulación de políticas públicas basadas en evidencia" (INECC-CONACYT). Instituto Nacional de Ecología y Cambio Climático (INECC), México. Available at: https://www.gob.mx/cms/uploads/attachment/file/561621/2_Criterios_monitoreo_y_evaluacion.pdf

Red para Enverdecer el Sistema Financiero (2019, abril). Un llamado a la acción: el cambio climático como fuente de riesgo financiero. Available at: https://www.ngfs.net/sites/default/files/medias/documents/reporte-de-la-ngfs-una-llamada-a-la-accion_es_290719_0.pdf

SEMARNAT (2021, noviembre). PROGRAMA Especial de Cambio Climático 2021-2024. Diario Oficial de la Federación el 8 de noviembre de 2021. Available at: https://www.gob.mx/cms/uploads/attachment/file/685848/SEMARNAT_081121_EV.PDF

INECC. 2019. Atlas Nacional de Vulnerabilidad al Cambio Climático México. 1ª. Edición (libro electrónico). Instituto Nacional de Ecología y Cambio Climático. México. Available at: https://atlasvulnerabilidad.inecc.gob.mx/page/fichas/ANVCC_LibroDigital.pdf



CHAPTER 3

GENDER EQUALITY

1 ABOUT THE GENDER EQUALITY INDEX (IIG)

The Sustainable Taxonomy of Mexico considers a comprehensive concept of sustainable development that includes environmental and social objectives in its design. In this first stage of the Taxonomy's development, Gender Equality was considered as a priority objective and, through its development, Technical Evaluation Criteria were generated to identify investments that contribute to closing gender gaps. At the same time, the proposed metrics will serve as guidance for potential Taxonomy users, so that they can direct efforts to generate a substantial contribution to gender equality.

The development of this objective was carried out by the Gender Equality Thematic Technical Group (GTTIG), led by Marta Clara Ferreyra Beltrán, Director General of the National Policy for Equality and Women's Rights, at the National Institute for Women (INMUJERES). Likewise, the Group had the participation of experts from the Inter-American Development Bank (IDB), Banxico, FIRA, SHCP, UN Women, BANOBRAS, GIZ and WRI Mexico, among other institutions.

The approach for the development of the Gender Equality objective contemplated the existing work on the EU Social Taxonomy while generating metrics and thresholds conceptually similar to the criteria used for the climate goals. In the same way, elements of the gender gap analysis tool were considered, which were elaborated based on the Women's Empowerment Principles (WEPs), and which aims to support private sector organizations to assess their strategic approach on gender equality and identify gaps and opportunities for continuous improvement. Additionally, the Bloomberg Gender Index, the reference framework of the FIRA Gender Bond, and the Strategic Questionnaire for the Evaluation of the Performance of Multiple Banking Institutions of the SHCP, were reviewed.

On the other hand, the regulatory framework on Gender Equality and Equality in the Workplace of the Mexican government was taken as background. In this sense, the following elements outlined the action framework of this Taxonomy in matters of gender equality: the General Law for Equality between Women and Men (2006); the Constitutional Reform in matters of Human Rights (2011); the Mexican Standard NMX-R-025-SCFI-2015 on Labor Equality and Non-Discrimination; and the Official Mexican Standard NOM-035-STPS-2018; Psychosocial Risk Factors at Work, Identification, Analysis, and Prevention; the Protocol Model to Prevent, Address, and Eradicate Violence in the Workplaces of the Ministry of Labor and Social Welfare, and the National Development Plan 2019-2024.

Based on this background, the GTTIG developed a Gender Equality Index that will allow evaluating the contribution of companies and investment projects to close gender gaps. This objective was developed transversally to all activities of the Mexican economy, recognizing the transversal nature of the gender approach. Likewise, the criteria evaluation to determine a substantial contribution in terms of gender equality is considered at the productive organization level, unlike environmental objectives, which have an evaluation approach at the economic activity level.

For a productive organization or investment project to be eligible under the Sustainable Taxonomy's Gender Equality objective, it must adhere to the Do No Significant Harm criteria concerning its environmental objectives and to comply with the minimum social safeguards, similar to activities that contribute to the climate change mitigation and adaptation objectives.

This seeks to encourage good practices that promote gender equality within the organizations, in the productive chains, and in the impact towards the communities. All at once, it is guaranteed that a contribution to the Gender Equality objective does not generate environmental or social damage regarding the rest of the objectives considered within the Taxonomy.

At present, in the national and international markets, there are financing options of this type through gender bonds, social bonds with a gender perspective, or sustainable bonds that combine social and environmental objectives.

Other financing options can be obtained through loans and bank credits with a gender perspective, including development banking.

The central element to measuring the degree of contribution to the Gender Equality objective within the Sustainable Taxonomy of Mexico is the Gender Equality Index (IIG). On a numeric scale, this index reflects the contribution of organizations to three pillars of gender equality: 1) Decent Work, 2) Well-being, and 3) Social Inclusion. This makes it possible to translate the qualitative criteria of these three pillars into a quantitative metric to which assigning a threshold is possible to then determine a substantial contribution level to a social objective.

For each of the pillars, axes are set to serve as a guide to addressing specific aspects of gender equality that, as a whole, make it possible to fulfill the general objective. In addition, for each axis, criteria are established to determine organization commitments or actions that contribute to the proposed gender equality pillars. Figure 1.1 lists the dimensions that integrate the IIG.

Figure 1.1. Dimensions of the Gender Equality Index.

Source: Own elaboration.

The IIG is built with information obtained through a questionnaire, in which each answer corresponds to a score. The questionnaire poses questions at three levels to measure the evolution registered by organizations concerning their commitments and actions towards gender equality, over time.

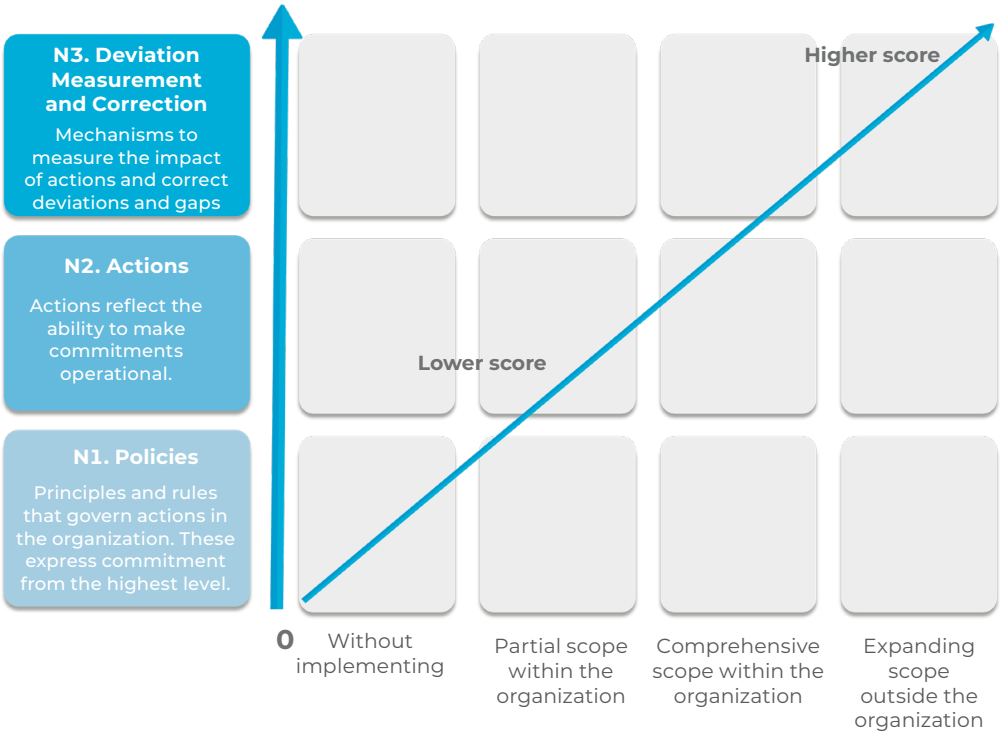
Questions at Level 1 refer to policies approved by the organization to promote gender equality. The questions at Level 2 are related to actions carried out by the organization to comply with its goals of promoting gender equality. At Level 3, questions are established, related to formal mechanisms that the organization has implemented for measurement and systematic correction of deviations from its gender equality goals.

In general terms, an organization is considered to having taken the first steps in the gender equality agenda when it declares formal commitments through policies. An organization advances when, in addition to implementing policies, it is able to deploy actions to meet gender equality goals. Finally, the organization reaches a level of maturity when it is able to measure the impact of its actions and correct, or adjust them, where appropriate, to close gender equality gaps.

The IIG assigns a differentiated score to each question, depending on whether the policies, actions, or measurement and correction mechanisms have a partial scope within the organization, a global scope within the organization, or even a scope outside the organization, for instance, in cases where the information is made public. In this way, the IIG questionnaire is built in a two-dimensional mode: on the one hand, considering the levels of evolution on gender matter practices, and on the other, the scope of these practices.

With this mechanism, the Index yields a quantitative measure whose score captures degrees of maturity in the organization, as well as the scope of its information practices and disclosure on gender equality at a particular date, allowing the recording and comparison of the organization's evolution over time (Figure 1.2).

Figure 1.2 Guiding Question and Weight Levels



Source: own elaboration

Based on the IIG, a threshold is delimited and measured in points, which represents an organization's expected substantial contribution, to be recognized within this Taxonomy's framework. Both the questions and the substantial contribution threshold may be adjusted over time, through Taxonomy updates, based on changes in market practices and improvements in gender equality.

With the above, organizations will be able to identify areas of opportunity in order to improve their contribution to close gender gaps and, in this way, accessing financing instruments with social or gender labels. At the same time, reputational recognition among investors and relevant actors who seek to generate positive impacts in this area is fostered.

In this first version of the IIG, there are 43 questions, with a maximum score of 174 units, and a threshold of 72 units to determine a substantial contribution to this Taxonomy's objective. Additionally, this threshold must meet a minimum score for each Pillar, segmented as follows:

a. 24 units for Pillar 1 "Decent Work"
b. 24 units for Pillar 2 "Well-being"
c.24 units for Pillar 3 "Social Inclusion"

On the one hand, the threshold of 72 units considers the implementation of gender equality policies throughout the organization. On the other hand, the actions implemented at a partial level are taken into account as the starting point to measure the progressivity and development of the organization over time.

In order to simplify the interpretation of the IIG score, the 174 units of the questionnaire score were normalized to a 100-point scale, thus establishing the threshold at 41%.

This Taxonomy's IIG considers representative pillars, axes and criteria for a wide group of organizations in different sectors of the Mexican economy, so its scoring scale allows for a homogeneous basis of comparison. Table 1.1 summarizes the integration of the IIG into three pillars, 9 axes, 14 criteria and 43 guiding questions, which are detailed in the following section.

Table 1.1. Number of Guiding Questions per Pillar.

Pillars	Axes	Criteria	Guiding Questions
3	9	14	43
1. Decent Work	3	8	25
	1.1 Equal pay	1	3
	1.2 Equality in access to work and development	5	16
	1.3 Care and co-responsibility	2	6
2. Wellbeing	3	3	9
	2.1. Promotion of equal access to goods and services	1	3
	2.2. Health with a gender perspective	1	3
	2.3. Economic and social empowerment	1	3
3. Social Inclusion	3	3	9
	3.1 Enabling Peace Contexts	1	3
	3.2 Inclusion in the value chain	1	3
	3.3 Social participation of women	1	3

Source: Own elaboration.

2. PILLARS, AXES AND GUIDING QUESTIONS OF THE IIG

Pillar 1: Decent Work and Labor and Productive Inclusion

Scope of Incidence: Women Workers and Men Workers

According to the International Labor Organization (ILO), Decent Work is the opportunity to have productive employment that generates a fair income, security in the workplace, social protection for all, better prospects for personal development and social integration, freedom for individuals to express their opinions, organize, and participate in decisions that affect their lives, and equal opportunities and treatment for all, women and men.

Pillar 1 focused on Decent Work and Labor and Productive Inclusion of Women, will make it possible to assess the policies carried out by productive organizations to contribute to equality between women and men.

Axis 1.1 Equal Pay

Criterion 1.1.1 Equal pay: It refers to the fact that there is no wage difference between women and men within the company or workplace for work of equal value.[36]

Level 1: Policies	Is there a policy and/or tabulator for all personnel that establishes equal remuneration for equivalent work, in accordance with the Federal Labor Law, and where the salary ranges for the different levels within the workplace can be consulted?
Level 2: Actions	Does the organization carry out a systematic and periodic analysis of the gender gaps in salaries, benefits and compensation of its staff?
Level 3: Measurement mechanisms and	Does the organization have a mechanism to correct cases where remuneration inequality is identified?

Axis 1.2 Access and Equal pay

Criterion 1.2.1 Possibilities of access, hiring, participation, permanence and promotion: : It refers to the existence of mechanisms so that women and men can have equal access to professional advancement within the company or workplace.

Level 1: Policies	Does the organization have a policy or mechanism that guarantees non-discrimination and equal opportunities in access, permanence and career development?
Level 2: Actions	Are there job profiles, vacancy announcements or job offers, documentation for structured entrance interview and/or exams or evaluations free of gender bias or discrimination?
	Are there transparent and accessible processes for horizontal and vertical mobility, free of sexist or discriminatory bias?
Level 3: Measurement and correction mechanisms	Does the organization carry out extensive training for candidate personnel or for the company itself as a correction mechanism (other than the training plan) on gender biases for job interviews, performance evaluations or for recruitment, mobility and promotion processes?

Criterion 1.2.2 Vertical and horizontal segregation: It refers to the fact that women and men occupy positions on an equal basis and equally at all hierarchical levels without discrimination.

Level 1: Policies	Does the organization have institutional goals on gender diversity in the different work teams?
Level 2: Actions	Does the organization have an action plan to close the work participation gap between men and women, between hierarchical levels, in the hiring process and in promotion opportunities?
Level 3: Measurement and correction mechanisms	Is the deployment of the correction mechanisms to close the participation gap carried out according to the continuous evaluation or measurement of the gender gaps?

Criterion 1.2.3 Equal representation of women and men in corporate governance bodies:
It refers to the fact that there is equal representation in senior management and corporate governance positions.

Level 1: Policies	Is there a parity policy between women and men (regulations, standards, documents, or internal protocols)[36] in the corporate governance body (governing board) or in decision-making positions?[37]
Level 2: Actions	Are there mechanisms or actions to promote rotation towards managerial or decision-making positions with a gender perspective, or, if applicable, does the appointment process not have gender biases?
Level 3: Measurement and correction mechanisms	Does the organization submit to an internal or external analysis of institutional gender parity in its senior management or corporate governance positions, in accordance with the transparency policy that governs it?

Criterion 1.2.4 Violence-free work environment and workplaces: It refers to actions that allow a safe work environment for women and men, and that, in the event of actions of gender violence, these can be reported and attended without revictimization.

Level 1: Policies	Does the organization have policies or specialized areas in diversity and inclusion that promote equal relationships accompanied by the implementation of prevention practices against gender violence (harassment, bullying or other)?
Level 2: Actions	Does the organization have a group, commission or committee in charge of monitoring the development and implementation of practices against violence and gender discrimination in the workplace?[38]

[36]See: https://www.redalyc.org/journal/290/29066223016/html/ y http://dx.doi.org/10.21511/ppm.15(4-1).2017.11.

[37]In the event that the total number of people employed by the company restricts the definition of a governing board or corporate governance, an organizational or decision-making structure balanced between men and women could be defined to have the minimum requirement.

[38]If the organization is defined as family-owned and/or managed, it is enough if its organizational structure allows having a person dedicated to the fulfillment of the aforementioned activity.

Criterion 1.2.5 Labor equality training: It refers to the promotion and training actions that are carried out to develop and reinforce the skills and abilities required to promote equality with the personnel of the company or workplace.

Level 1: Policies	Does the organization have a training, awareness and dissemination plan as part of its gender agenda objectives?
Level 2: Actions	Does the organization offer continuous training for the development of skills required for labor mobility, such as mentoring or sponsorship; including capacity building for new green jobs that promote just transition?
Level 3: Measurement and correction mechanisms	Does the organization have mechanisms for evaluating or improving its training, consulting or mentoring implementation plan, which are extensive to other actors that interact with the organization or to the external community (beyond the organization's staff)?

Axis 1.3 Care and co-responsibility

Criterion 1.3.1 Flexible work schemes and conciliation policies: It refers to the policies and actions that are implemented to allow people who work in the workplace to reconcile their work, family and personal lives on equal terms and respecting the diversity of family arrangements that exist.

Level 1: Policies	Are there work flexibility measures, such as flexible or staggered hours, compressed work weeks, teleworking, or paid and unpaid leaves?
Level 2: Actions	Is there a defined duration of the working day that is accompanied by a disconnection policy, regardless of whether the scheme is face-to-face, hybrid or teleworking?[39]
Level 3: Measurement and correction mechanisms	Does the organization deploy and disseminate internal and external correction mechanisms, based on the statistical information analyzed and disaggregated by sex, on compliance with work schedules in accordance with the workers' rights to disconnect?

Criterion 1.3.2 Complementary offer of care services (playroom, day houses, and additional children's rooms, among others): It refers to the actions carried out to offer quality care service options that make it possible to combine family, work and personal life.

Level 1: Policies	Does the organization have policies that allow it to develop a complementary offer of care services (own nurseries, lactation rooms, playrooms, etc.), affordable for all the organization's staff, including maternity and paternity leave, longer than the required by law?
Level 2: Actions	Are care services provided in addition to social security services (provided by IMSS, ISSSTE or others), or are leaves, with or without pay, offered to attend to care responsibilities?
Level 3: Measurement and correction mechanisms	Does the organization carry out and disseminate assessments of the care needs of its staff and their dependents, internally and externally?

[39]Considering the Federal Labor Law's Chapter II of the Working Hours and Chapter XII Bis on Teleworking, in order to comply with this question, it is necessary to accompany a disconnection strategy or policy along with the established working hours. This disconnection policy must be agreed and respected by both parties (employee and organization).

Pillar 2: Wellbeing

Main incidence area: Final consumers

It is a condition for people to fully enjoy human rights and, in this sense, it is a fundamental circumstance for the development of capacities. Pillar 2 on well-being will make it possible to measure the impact of organizations' goods and services on direct consumers and to determine the contribution of the companies' substantive activities for equality between women and men.

Axis 2.1 Promotion of equal access to goods and services

Criterion 2.1.1 Development and provision of infrastructure, goods and services with a positive social impact and gender perspective: It refers to the production of goods, services and infrastructure projects and others, generated to fulfill women's particular needs associated with the nature or conditions of their gender, unrelated to the imposition of roles or social stereotypes, which make the consumption, use, and enjoyment of goods, as well as services and infrastructure, not neutral to gender issues. (For instance, differentiated use of the infrastructure due to the exclusive needs of women or differences in the degree of vulnerability between men and women).

Level 1: Policies	Does the organization have a policy of carrying out diagnoses with a gender perspective for the design and operation of the project, activity, infrastructure development or the provision of goods and services?
Level 2: Actions	Does the infrastructure project, activity, good or service consider reasonable adjustments to meet the needs of women or contribute to the reduction or elimination of a situation of exclusion, inequality or gender violence, and favors their access at affordable prices based on gender?
Level 3: Measurement and correction mechanisms	Is there a plan of activities for equality between women and men, which includes a budget and compliance indicators on the impact on women's lives, and where appropriate, on the environment in the use of infrastructure, products, services, or services to be developed?

Axis 2.2 Health with a gender perspective

Criterion 2.2.1 Promotion and non-affectation of women's health: It refers to the fact that the products and/or services offered by the company do not affect the health of women users or as a consequence of externalities.

Level 1: Policies	Does the organization have, as a procedure, the preparation of diagnoses with a gender perspective on the potential impacts on health in the infrastructure project, activity, good or service, to support women's health or to ensure that it is not affected?
Level 2: Actions	Does the project, activity, good or service consider reasonable adjustments to meet the differentiated health needs of men and women and favor access from a gender perspective at affordable prices?
Level 3: Measurement and correction mechanisms	Are studies on the effects on health of the activity performed, products or services carried out, disaggregated by sex; and is there an activity plan for correction or improvement that includes budget and compliance indicators?

Axis 2.3 Economic and social empowerment

Criterion 2.3.1 Promotion of women's autonomy and flexible financing with a gender perspective: It refers to the fact that women can enjoy economic autonomy and can participate in decision-making at different levels, supported by innovative financial instruments aimed at the economic development of micro and small-scale producers. It also includes those companies ran by women that promote financial, productive and work inclusion in productive projects with a short and long-term perspective.

Level 1: Policies	Does the organization have a policy to make visible the differentiated needs between women and men in the marketing strategies of the products or services offered?
Level 2: Actions	Does the organization guarantee the accessibility to products or services for women, offering differentiated financing options?
Level 3: Measurement and correction mechanisms	Is there an evaluation of the differentiated effects of offered products and services, disaggregated by gender, making it visible that they are used by women and/or benefit women more than proportionally?

Pillar 3: Social Inclusion

Main Advocacy Area: Communities

It refers to the process of balancing the social disadvantages of groups in a situation of vulnerability.
Pillar 3 of Social Inclusion is crucial to assess the impact that organizations and projects have in enabling contexts of peace, their contribution to leveling inequalities between people and their impact on the territory. In this way, the responsibility efforts of the organizations are promoted with a gender perspective.

Axis 3.1 Enabling peace contexts

Criterion 3.1.1 Promotion of culture of peace and non-violence: It refers to efforts aimed at contributing to the eradication of violence against women, as well as influencing the construction of a culture of peace, founded on respect for life, freedom, justice, solidarity, tolerance, human rights and equality between men and women.[40]

Level 1: Policies	Does the organization or project consider within its objectives the reduction or eradication of violence against women or the development of spaces of peace and non-violence; or does it have a protocol or procedure for resolving conflicts with the community, which considers a gender and human rights perspective?
Level 2: Actions	Have actions been developed for the prevention, care, punishment, and eradication of violence against girls, boys, adolescents, and women in the community or public spaces?
Level 3: Measurement and correction mechanisms	Does the organization or project have evidence of its contribution to the reduction of violence against girls, boys, adolescents, and women; or has it documented and disseminated success stories on conflict resolution with the community or on the development of spaces for peace and non-violence in a participatory manner?

Axis 3.2 Inclusion in the value chain

Criterion 3.2.1 Linkage with local businesses owned or with women participation: It refers to activities aimed at developing the activity of companies run by women or that involve women in the company's production chain.

Level 1: Policies	Are there policies, processes or mechanisms for the acquisition of products and services that encourage the hiring of local companies owned or with a high participation of women?
Level 2: Actions	Is there evidence of business alliances and recurring or multi-year contracts with local companies with significant ownership or women participation?

[40]Yamoussoukro Declaration. International Congress on Peace in the Minds of Men in 1989.

Level 3: Measurement and correction mechanisms	Is there evidence that it contributes to strengthening the leadership of local companies headed by women or to the development of the sustainable strategy of local companies (for example, in access to financing, in the adoption of sustainable technology, etc.) owned or with women participation, beyond the purchase of goods and services?

Axis 3.3 Social participation of women

Criterion 3.3.1 Involvement of organizations and community networks that represent the interests of women: It refers to actions for the recognition and strengthening of the activities carried out by women and their communities in the care of the environment and the preservation of the territory.

Level 1: Policies	Is there a policy to encourage community participation, under the framework of free, prior and informed consent, for carrying out the project or economic activity, or in its planning and participatory management, which contributes to the preservation of the territory, to the well-being of them and their community, and/or to care for the environment, or to a just transition?
Level 2: Actions	Did the involvement and consultation actions consider a gender perspective in their implementation to ensure equal participation of women (adequate hours, dynamics to promote participation, childcare facilities, a place with easy access for them), and do they have a monitoring mechanism that follows up on the incorporation of women's opinions?
Level 3: Measurement and correction mechanisms	Is there evidence that the economic activity or project contributes to the formation or strengthening of alliances between women and organizations that work for their rights, gender equality, land or environmental conservation, and a just transition?

The score obtained from the answers to the guiding questions will depend on the level of dissemination or publicity given to the policies, actions, protocols or procedure in question. The maximum score is 172 points, and the substantial contribution threshold is reached with 72 points, which must be achieved with at least 24 points within each Pillar. Annex 1 of this Chapter consists of a schematization of the pillars, axes, criteria and questions reviewed in this section, together with the weights of each possible response. Additionally, Annex 2 presents a Glossary with the terms used in the IIG.

3. DO NO SIGNIFICANT HARM CRITERIA AND MINIMUM SAFEGUARDS

In order to ensure that the positive contribution of an organization or investment project to a social objective does not generate negative environmental effects, compliance with the No-Significant Harm (DNSH) criteria must be demonstrated. In this way, an organization or investment project that contributes positively to gender equality will not be able to undermine the objectives of climate change, biodiversity, circular economy, pollution prevention and water resources management.

In the same way, there must be compliance with the minimum safeguards in social and governance matters considered in the OECD Guidelines for Multinational Companies, the ILO Declaration on Fundamental Principles and Rights at Work, and the Guiding Principles for Business and Human Rights of the UN, for relevant activities.

Organizations and investment projects that carry out economic activities considered in the climate objectives of the previous chapter must identify the specific DNSH criteria for each of them and applicable to the six environmental objectives of the Taxonomy. Additionally, for activities that do not yet have NDS criteria for this

first stage, it must be demonstrated, through accreditation of monitoring national regulations or applicable international standards, specialized certifications, issuance of a second opinion or impact assessment, that the operation of the organization or investment project does not generate negative impacts on the six environmental objectives of the Taxonomy.

In line with the above, an organization or investment project considered aligned with the Sustainable Taxonomy of Mexico will demonstrate reaching the minimum substantial contribution threshold of the IIG, complying with the corresponding DNSH criteria and with the minimum social and governance safeguards. In this way, in case of partial compliance with the previous points, organizations will be able to align efforts towards their full compliance to have an alignment under the Sustainable Taxonomy of Mexico.

REFERENCES

Banco Mundial (s.f.). LAC Equity Lab: Igualdad de Oportunidades. Available at: https://www.bancomundial.org/es/topic/poverty/lac-equity-lab1/equality-of-opportunities

Brussevich, M. (2018). Does trade liberalization narrow the gender wage gap? The role of sectoral mobility. European Economic Review, 109, 305–333. Available at: https://doi.org/10.1016/j.euroecorev.2018.02.007

Cámara de Diputados del H. Congreso de la Unión (2006, agosto). Ley General para la Igualdad entre Mujeres y Hombres. Recuperado 27 de febrero de 2023, de https://www.diputados.gob.mx/LeyesBiblio/pdf/LGIMH.pdf

Cámara de Diputados del H. Congreso de la Unión (2007, febrero). Ley General de Acceso de las Mujeres a una Vida Libre de Violencia. Available at: https://www.senado.gob.mx/comisiones/desarrollo_social/docs/marco/Ley_GAMVLV.pdf

Cámara de Diputados del H. Congreso de la Unión (2021). Decreto por el que se reforma el artículo 311 y se adiciona el capítulo XII Bis de la Ley Federal del Trabajo, en materia de Teletrabajo. Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5609683&fecha=11/01/2021#gsc.tab=0

Cámara de Diputados del H. Congreso de la Unión (2022). Ley Federal del Trabajo. Available at: https://www.diputados.gob.mx/LeyesBiblio/pdf/LFT.pdf

Ceey, P. (2018, julio). ¿Qué tipos de movilidad social en México medimos? Centro de Estudios Espinosa Yglesias. Available at: https://ceey.org.mx/que-tipos-de-movilidad-social-en-mexico-medimos/

Centro de Estudios para el Logro de la Igualdad de Género (s.f.) Glosario General. Available at: http://archivos.diputados.gob.mx/Centros_Estudio/ceameg/participacion_politica/sipp3_2/datos/glos.htm.

Cepal (2001). El método de las necesidades básicas insatisfechas (NBI) y sus aplicaciones en América Latina. Available at: https://repositorio.cepal.org/bitstream/handle/11362/4784/S0102117_es.pdf?sequence

Cepal, N. U. (2016). Autonomía de las mujeres e igualdad en la agenda de desarrollo sostenible. CEPAL.

CNDH (2016). Los principios de universalidad, interdependencia, indivisibilidad y progresividad de los derechos humanos. Available at: https://www.cndh.org.mx/sites/all/doc/cartillas/2015-2016/34-Principios-universalidad.pdf

Comisión Nacional Bancaria y de Valores (2022). Encuesta Nacional de Inclusión Financiera (ENIF) 2021: Reporte de resultados. Available at: https://www.cnbv.gob.mx/Inclusi%C3%B3n/Anexos%20Inclusin%20Financiera/Reporte_Resultados_ENIF_2021.pdf

Comisión Nacional de los Derechos Humanos, (2019) ABC de la Perspectiva de Género. Available at: https://mexicosocial.org/wp-content/uploads/2019/03/perspectiva-g%C3%A9nero-CNDH.pdf

De la Torre Valdez, Y. (2018). Gaceta Parlamentaria Miércoles 13 de junio de 2018 / LXIII/3SPR-11-2269/81633. Gaceta Parlamentaria. Available at: https://www.senado.gob.mx/65/gaceta_del_senado/documento/81633

EIGE (2019). Glosary of Terms. Available at: https://eige.europa.eu/gender-mainstreaming/toolkits/gender-sensitive-parliaments/glossary-terms

EPIC (2018). Igualdad de Remuneración por un trabajo de igual valor. Disponible en: https://www.equalpayinternationalcoalition.org/es/equal-pay/

FAO (s.f.) Consentimiento Previo, Libre e Informado Available at: https://www.fao.org/indigenous-peoples/our-pillars/fpic/es/

Feres, J. C., & Mancero, X. (s.f.). El método de las necesidades básicas insatisfechas (NBI) y sus aplicaciones en América Latina. Cepal.org. Available at: https://repositorio.cepal.org/bitstream/handle/11362/4784/S0102117_es.pdf?sequence

INEGI (s.f.). Encuesta Nacional sobre Uso del Tiempo (ENUT) 2019. Org.mx. Available at: https://www.inegi.org.mx/programas/enut/2019/

Inmujeres (s.f.). Acciones Afirmativas. Disponible en: https://campusgenero.inmujeres.gob.mx/glosario/terminos/acciones-afirmativas

Inmujeres (s.f.). Brechas de Desigualdad de Género. Available at: https://campusgenero.inmujeres.gob.mx/glosario/terminos/brechas-de-desigualdad-de-genero

Inmujeres (s.f.). Estereotipos de Género. Available at: https://campusgenero.inmujeres.gob.mx/glosario/terminos/estereotipos-de-genero

Inmujeres (s.f.). Institucionalización de la Perspectiva de Género. (s/f). Available at: https://campusgenero.inmujeres.gob.mx/glosario/terminos/institucionalizacion-de-la-perspectiva-de-genero

Inmujeres (s.f.).Violencia contra las Mujeres. Available at: https://campusgenero.inmujeres.gob.mx/glosario/terminos/violencia-contra-las-mujeres

Instituto de Administración Pública de Puebla (s.f.). Proceso formativo inicial en género para funcionarios y funcionarias de la administración pública. Available at: http://cedoc.inmujeres.gob.mx/ftpg/Puebla/pue03.pdf

Instituto Sueco de Estándares; Centro de Comercio Internacional (s.f.). Nota técnica: Definiciones de empresas de mujeres. Available at: http://learning.intracen.org

Molina, C. (s.f.). La inclusión social, un compromiso a largo plazo. Blogs del Banco Mundial. Available at: https://blogs.worldbank.org/es/latinamerica/la-inclusion-social-un-compromiso-largo-plazo

Norma Mexicana (2015). En Igualdad Laboral y no Discriminación. Available at: http://www.conapred.org.mx/userfiles/files/NMX-R-025-SCFI-2015_2015_DGN.pdf

OHCHR (1981, septiembre). Convención sobre la eliminación de todas las formas de discriminación contra la mujer. Available at: https://www.ohchr.org/es/instruments-mechanisms/instruments/convention-elimination-all-forms-discrimination-against-women

OHCHR (s.f.). Consultas y consentimiento libre, previo e informado (FPIC).Available at: https://www.ohchr.org/es/indigenous-peoples/consultation-and-free-prior-and-informed-consent-fpic

OIT (2021). Transición justa y empleo verde en el marco de la protección de la biodiversidad en América Latina y el Caribe. Available at: https://www.ilo.org/americas/publicaciones/WCMS_831480/lang--es/index.htm

OIT (2022). Trabajo decente. Available at: https://www.ilo.org/global/topics/decent-work/lang--es/index.htm

OIT (s.f.). Empleos verdes y nuevas calificaciones. Available at: https://www.oitcinterfor.org/general/empleos-verdes-nuevas-calificacione

ONU Mujeres (2017). Ciudades seguras y espacios públicos seguros. Informe de resultados globales. Available at: https://www.unwomen.org/es/digital-library/publications/2017/10/safe-cities-and-safe-public-spaces-global-results-report

ONU Mujeres (2022). Herramienta Empresarial de Género WEP. Available at: https://weps-gapanalysis.org/

ONU Mujeres (2022). Marco Metodológico para Construcción del Índice de Género. Documento de discusión.

Scott, J. (1990). El género: una categoría útil para el análisis histórico. En Historia y Género: Las mujeres en la Europa Moderna y Contemporánea. J. Amelang y M. Nash (eds.). Edición Alfons el Magnanim, Institució Valencina d Estudis i Investigació, 1990. La traducción es de Eugenio y Marta Portela. Originalmente, este artículo fue publicado en inglés como "Gender: A Useful Category of Historical Analysis" en American Historical review, 91,1986, pp. 1053-1075

Secretaría de Economía (2015). Norma Mexicana NMX-R-025-SCFI-2015 en Igualdad Laboral y no Discriminación. Available at: https://www.gob.mx/cms/uploads/attachment/file/25111/NMX-R-025-SCFI-2015_2015_DGN.pdf

Senado de la República (2021). Iniciativa con Proyecto de Decreto por el que se expide la Ley General del Sistema Nacional de Cuidados, Presentada por Senadoras y Senadores de Diversos Grupos Parlamentarios. Available at: https://infosen.senado.gob.mx/sgsp/gaceta/65/1/2021-11-30-1/assets/documentos/Iniciativa_Morena_Sen_Micher_LGSNC.pdf

UNESCO (1989). Declaración de Yamusukro sobre la Paz en la Mente de los Hombres. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000083903_spa

UNESCO (s.f.). ¿Qué es la cultura de paz?. Available at: http://unescopaz.uprrp.edu/documentos/culturapaz.pdf

UNICEF (2015). Acciones para la resiliencia de la niñez y la juventud. Guía para gobiernos. Available at: https://www.unicef.org/lac/media/2271/file/PDF%20Acciones%20para%20la%20resiliencia%20de%20la%20ni%C3%B1ez%20y%20la%20juventud.pdf

Wilson C., Grizzle A., Tuazon R., Akyempon K., Cheung C. (2011). Alfabetización mediática e informacional: curriculum para profesores. UNESCO. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000216099

Annex 1. Scores of Pillars, Axes, Criteria and Guiding Questions

Pillar 1. Decent work Maximum score: 66 Minimum threshold: 24		Weights					
		No (Score = 0)	Yes, partial scope within the organization (Score = 1)	Yes, comprehensive scope in the organization (Score = 2)	Yes, with a scope that extends outside the organization (public) (Score = 3)	Top Score	Minimum Threshold
1.1 Equal Pay						8	3
1.1.1 Equal Pay						8	3
Level 1: Policies	Is there a policy and/ or tabulator for all personnel that establishes equal remuneration for equivalent work, in accordance with the Federal Labor Law, and where the salary ranges for the different levels within the workplace can be consulted?	X	X	X	X	3	2
Level 2: Actions	Does the organization carry out a systematic and periodic analysis of the gender gaps in salaries, benefits and compensation of its staff?	X	X	X	X	3	1
Level 3: Measurement and correction mechanisms	Does the organization have a mechanism to correct cases where remuneration inequality is identified with?	X	X	X		2	0
1.2 Equality in Employment Access and Career Development						42	14
1.2.1 Possibilities of Access, Hiring, Participation, Permanence and Promotion						12	4
Level 1: Policies	Does the organization have a policy or mechanism that guarantees non-discrimination and equal opportunities in access, permanence, and career development?	X	X	X	X	3	2
Level 2: Actions	Are there job profiles, vacancy announcements or job offers, documentation for structured entrance interview and/or exams or evaluations free of gender bias or discrimination?	X	X	X	X	3	1
Level 2: Actions	Are there transparent and accessible processes for horizontal and vertical mobility free of sexist or discriminatory bias?	X	X	X	X	3	1

Level 3: Measurement and correction mechanisms	Does the organization carry out extensive training for candidate personnel, or for the company itself as a correction mechanism (other than the training plan) on gender biases for job interviews, performance evaluations, or for recruitment, mobility, and promotion processes?	X	X	X	X	3	0
1.2.2 Vertical and Horizontal Segregation						7	3
Level 1: Policies	Does the organization have institutional goals on gender diversity in the different work teams?	X	X	X	X	3	2
Level 2: Actions	Does the organization have an action plan to close the work participation gap between men and women, between hierarchical levels, in the hiring process and in promotion opportunities?	X	X	X		2	1
Level 3: Measurement and correction mechanisms	Is the deployment of the correction mechanisms to close the participation gap carried out according to the continuous evaluation or measurement of the gender gaps?	X	X	X		2	0
1.2.3 Equal Representation of Women and Men in Corporate Governance Bodies						8	2
Level 1: Policies	Is there a parity policy between women and men (regulations, standards, documents, or protocols) in the corporate governance body (governing board) or in decision-making positions?[41]	X	X	X	X	3	1
Level 2: Actions	Are there mechanisms or actions to promote rotation towards managerial or decision-making positions with a gender perspective, or, if applicable, does the appointment process not have gender biases?	X	X	X		2	1

[41] Considering that micro or some small companies or organizations with few personnel may have restrictions to have a governing board, this question is weighted with a lower score for the index threshold.

Level 3: Measurement and correction mechanisms	Does the organization submit to an internal or external analysis of institutional gender parity in its senior management or corporate governance positions, in accordance with the transparency policy that governs it?	X	X	X	X	3	0
1.2.4 Violence-Free Work Environment and Workplaces						6	2
Level 1: Policies	Does the organization have policies or specialized areas in diversity and inclusion that promote equal relationships accompanied by the implementation of prevention practices against gender violence (harassment, bullying or other)?	X	X	X		2	2
Level 2: Actions	Does the organization have a group, commission, or committee in charge of monitoring the development and implementation of practices against violence and gender discrimination in the workplace?[42]	X	X	X		2	0
Level 3: Measurement and correction mechanisms	Does the organization have mechanisms to address detected acts of violence or to redress damages, whose results safeguard the integrity of the victims and prevent re-victimization?	X	X	X		2	0
1.2.5 Labor Equality Training						9	3
Level 1: Policies	Does the organization have a training, awareness and dissemination plan as part of its gender agenda objectives?	X	X	X	X	3	2
Level 2: Actions	Does the organization offer continuous training for the development of skills required for labor mobility, such as mentoring or sponsorship; including capacity building for new green jobs that promote fair transition?	X	X	X	X	3	1

[42] This question will not be taken into account for the index threshold, since it considers the difficulty that it can represent for those family businesses by ownership or management.

Level 3: Measurement and correction mechanisms	Does the organization have mechanisms for evaluating or improving its training, consulting or mentoring implementation plan, which are extensive to other actors that interact with the organization, or to the external community (beyond the organization's staff)?	X	X	X	X	3	0
1.3 Care and co-responsibility						16	7
1.3.1 Flexible Work Schemes and Conciliation Policies						7	4
Level 1: Policies	Are there work flexibility measures, such as flexible or staggered hours, compressed work weeks, teleworking or paid and unpaid leaves?	X	X	X		2	2
Level 2: Actions	Is there a defined duration of the working day accompanied by a disconnection policy, regardless of whether the scheme is face-to-face, hybrid, or teleworking?[43]	X	X	X		2	2
Level 3: Measurement and correction mechanisms	Does the organization deploy and disseminate internal and external correction mechanisms based on the statistical information analyzed and disaggregated by sex, on compliance with work schedules in accordance with the workers' rights to disconnect?	X	X	X	X	3	0
1.3.2 Complementary offer of Care Services (playroom, day houses, additional children's rooms, among others)						9	3
Level 1: Policies	Does the organization have policies that allow the development of complementary offer of care services (own nurseries, lactation rooms, playrooms, etc.), affordable for all the organization's staff, including maternity and paternity leaves, longer than the required by law?	X	X	X	X	3	2

[43] Considering the establishment of a working day defined in the Federal Labor Law, the contribution of this question to the minimum score of the index is essential (that it adds the 2 points), since, in addition to compliance with the Law, it finding evidence of policies of disconnection is necessary.

Level 2: Actions	Are care services provided in addition to social security services (provided by IMSS, ISSSTE or others), or are leaves, with or without pay, offered to attend to care responsibilities?	X	X	X	X	3	1
Level 3: Measurement and correction mechanisms	Does the organization carry out and disseminate assessments of the care needs of its staff and their dependents, internally and externally?	X	X	X	X	3	0
Pillar 2 Wellbeing Maximum score: 54 Minimum threshold: 24		**Weights**					
		No (Score = 0)	Yes, partial scope within the organization (Score = 1)	Yes, comprehensive scope in the organization (Score = 2)	Yes, with a scope that extends outside the organization (public) (Score = 3)	Top Score	Minimum Threshold
2.1 Promotion of equal access to goods and services						18	8
2.1.1 Development and Provision of Infrastructure, Goods and Services with Positive Social Impact and Gender Perspective						18	8
Level 1: Policies	Does the organization have a policy of carrying out diagnoses with a gender perspective for the design and operation of the project, activity, infrastructure development, or the provision of goods and services?	X	X	X	X	6	4
Level 2: Actions	Does the infrastructure project, activity, good or service considers reasonable adjustments to meet the needs of women or contribute to the reduction or elimination of a situation of exclusion, inequality, or gender violence, and privileges their access to affordable prices based on gender?	X	X	X	X	6	4
Level 3: Measurement and correction mechanisms	Is there a plan of activities for equality between women and men, which includes budget and compliance indicators on the impact on women's lives, and where appropriate, on the environment in the use of infrastructure, products or services to be developed?	X	X	X	X	6	0

2.2 Health with a Gender Perspective						18	8
2.2.1 Promotion and non-affection of Women's Health						18	8
Level 1: Policies	Does the organization have, as a procedure, the preparation of diagnoses with a gender perspective on the potential impacts on health in the infrastructure project, activity, good or service, to support women's health or to ensure that it is not affected?	X	X	X	X	6	4
Level 2: Actions	Does the project, activity, good or service consider reasonable adjustments to meet the differentiated health needs of men and women and favor access from a gender perspective at affordable prices?	X	X	X	X	6	4
Level 3: Measurement and correction mechanisms	Are studies on the effects on health of the activity performed, products or services carried out, disaggregated by sex; and is there an activity plan for correction or improvement that includes budget and compliance indicators?	X	X	X	X	6	0
2.3 Economic and Social Empowerment						18	8
2.3.1 Promotion of Women's Autonomy and Flexible Financing with a Gender Perspective						18	8
Level 1: Policies	Does the organization have a policy to make visible the differentiated needs between women and men in the marketing strategies of the products or services offered?	X	X	X	X	6	4
Level 2: Actions	Does the organization guarantee the accessibility to products or services for women, offering differentiated financing options?	X	X	X	X	6	4
Level 3: Measurement and correction mechanisms	Is there an evaluation of the differentiated effects of offered products and services, disaggregated by gender, making it visible that they are used by women and/or benefit women more than proportionally?	X	X	X	X	6	0

Pillar 3. Social Inclusion Maximum score: 54 Minimum threshold: 24		Weights					
		No (Score = 0)	Yes, partial scope within the organization (Score = 1)	Yes, comprehensive scope in the organization (Score = 2)	Yes, with a scope that extends outside the organization (public) (Score = 3	Top Score	Minimum Threshold
3.1 Enabling peace contexts						18	8
3.1.1 Promotion of culture of peace and non-violence						18	8
Level 1: Policies	Does the organization or project consider within its objectives the reduction or eradication of violence against women or the development of spaces of peace and non-violence, or does it have a protocol or procedure for resolving conflicts with the community, which consider a gender and human rights perspective?[44]	X	X	X	X	6	4
Level 2: Actions	Have actions been developed for the prevention, care, punishment and eradication of violence against girls, boys, adolescents and women in the community or public spaces?[45]	X		X	X	6	4
Level 3: Measurement and correction mechanisms	Does the organization or project have evidence of its contribution to the reduction of violence against girls, boys, adolescents and women, or it has documented and disseminated success stories on conflicts resolution with the community, or on the development of spaces for peace and non-violence in a participatory manner?[46]	X	X	X	X	6	0

[44]The score obtained in the question will depend on the level of publicity given to the objective, protocol or procedure in question. A score of 0 will be assigned if there is no objective, protocol or procedure, or it is simply not communicated; 2, if the communication of the objective, protocol or procedure is partial within the organization; 4, if it is known to the entire organization; and 6 if the information is public.

[45]The score for this question takes values of 0, 4, or 6, depending on the level of implementation of the said actions. 0 if no actions have been developed; 4, if the actions address only one or more of the listed aspects (prevention, care, punishment and eradication of violence); and 6 if the actions consider the prevention, care, punishment and eradication of violence.

[46]The score obtained in the question will depend on the level of publicity given to the evidence and/or the dissemination of success stories. 0, if there is for no evidence or not communicated; 2 if the communication of the evidence is partial within the organization; 4 if it is known to the entire organization; and 6 if the information is public.

3.2 Inclusion in the Value Chain						18	8
3.2.1 Linkage with Local Businesses Owned or with women participation						18	8
Level 1: Policies	Are there policies, processes or mechanisms for the acquisition of products and services that encourage the hiring of local companies owned or with a high participation of women?[47]	X	X	X	X	6	4
Level 2: Actions	Is there evidence of business alliances and recurring or multi-year contracts with local companies with significant ownership or women participation?[48]	X		X	X	6	4

[47]The score obtained in the question will depend on the level of publicity given to the procurement policies, processes or mechanisms. 0, if there are no policies, processes or mechanisms, or they are not communicated; 2, if the communication is partial within the organization; 4, if it is known to the entire organization; and 6, if the information is public.

[48]The score for this question takes values of 0, 4 or 6, depending on the level of implementation of the actions mentioned. 0, if no efforts have been made to generate commercial alliances or contracts; 4, if there is evidence of efforts or communications to establish business alliances but that have not yet been formalized, or if there are contracts or documentation that formalize the business relationship only sporadically; 6, if full evidence of a recurring business relationship is presented. The participation or sponsorship of trade fairs and events focused on the development of companies led or with a high participation of women; communication mechanisms to disseminate and inform about contracting opportunities of said companies; invitations or guides aimed at this segment on bidding or other procurement procedures; market research on potential suppliers that include said companies; training offered or sponsored and feedback mechanisms to strengthen these companies as potential suppliers, and memberships in organizations that seek to connect local female-led companies with potential buyers. On the other hand, in the evidence of a commercial relationship, contracts, databases of supplier companies led or with a high participation of women, the progress in the fulfillment of goals related to the acquisition of products and services of said companies, reports to the personnel will be considered. Management or governance bodies on acquisitions from these companies, certifications that assess gender diversity in suppliers, dissemination of information on the results of gender-sensitive acquisition procedures.

Level 3: Measurement and correction mechanisms	Is there evidence that it contributes to strengthening the leadership of local companies headed by women or to the development of the sustainable strategy of local companies (for example, in access to financing, in the adoption of sustainable technology, etc.) owned or with women participation, beyond the purchase of goods and services?[49]	X	X	X	X	6	0
3.3 Social Participation of Women						18	8
3.3.1 Involvement of organizations and community networks that represent the interests of women						18	8
Level 1: Policies	Is there a policy to encourage community participation, under the framework of free, prior and informed consent, for carrying out the project or economic activity, or in its planning and participatory management, which contributes to the preservation of the territory, to the well-being of them and their community, and/or to care for the environment, or to a just transition? [50]	X	X	X	X	6	4

[49] The score obtained in this question will depend on the level of publicity given to the evidence. 0, if there is no evidence or it is not communicated; 2, if the communication is partial within the organization; 4, if it is known to the entire organization; and 6, if the information is public.

[50] The score obtained in this question will depend on the level of publicity given to the policy. 0, if there is no policy; 2, if the communication of this is partial within the organization; 4, if it is known to the entire organization; and 6, if the information is public.

Level 2: Actions	Did the involvement and consultation actions consider a gender perspective in their implementation to ensure equal participation of women (adequate hours, dynamics to promote participation, childcare facilities, a place with easy access for them), and do they have a monitoring mechanism that follows up on the incorporation of women's opinions?[51]	X		X	X	6	4
Level 3: Measurement and correction mechanisms	Is there evidence that the economic activity or project contributes to the formation or strengthening of alliances between women and organizations that work for their rights, gender equality, land or environmental conservation, and a just transition?[52]	X	X	X	X	6	0

[51]The score for this question takes values of 0, 4, and 6, depending on the level of implementation of the actions mentioned. 0, if no actions have been developed; 4, if the actions partially address the aspects required by the question (for example, there is a gender perspective, but no monitoring mechanism); and 6, if the actions consider a gender perspective and include a monitoring mechanism.

[52]The score obtained in the question will depend on the level of publicity given to the evidence. 0, if there is no evidence or it is not communicated; 2, if the communication of the evidence is partial within the organization; 4, if it is known to the entire organization; and 6, if the information is public.

Annex 2. Glossary

CONCEPT	DEFINITION
Equal Access	The result of those decisions, actions and pertinent measures that provide women and girls with the same opportunity that boys and men have to access education, health, decent work and employment, leadership positions, participation in political life, goods, services, financing, resources and technology; in respect to their dignity, human rights and freedoms, with the purpose of developing their potential as persons and to guarantee equality between men and women in the enjoyment of all economic, social, cultural, civil and political rights. ONU (1979). Available at: https://www.ohchr.org/es/instruments-mechanisms/instruments/convention-elimination-all-forms-discrimination-against-women
Community Action	Strategy of intervention or broad participation developed by a diversity of actors, whose purpose is to respond to specific needs, for shared spaces and scenarios within rural or urban environments.
Affirmative Actions	The set of temporary corrective, compensatory and/or promotional measures, aimed at accelerating substantive equality between women and men. EPIC (s.f.). Available at: https://www.equalpayinternationalcoalition.org/es/equal-pay/ Affirmative actions are public policies whose objective is to compensate the conditions that discriminate against certain social groups from the exercise of their rights. These types of actions are recommended for disadvantaged social groups, in the case of women, they are mandatory since their gender condition is a factor that limits their access to economic, cultural and political resources that are important for their development. Its application in favor of women does not constitute discrimination for men since for them gender does not represent a limitation for the exercise of their rights. It is necessary to consider that the temporary nature of affirmative actions is subject to the result that is expected to be achieved and not to a priori determinations; therefore, they will be discontinued only if the problem has been resolved and the results are sustainable. Some examples of these measures are the implementation of special actions to facilitate access to credit, positions of political representation, and special scholarships for women and girls. INMUJERES (s.f.). Available at: https://campusgenero.inmujeres.gob.mx/glosario/terminos/acciones-afirmativas
Sexual Harassment	A form of violence in which, although there is no subordination, there is an abusive exercise of power that leads to a state of defenselessness and risk for the victim, regardless of whether it is carried out in one or several events. Gobierno de México (2012, junio). Available at: https://www.senado.gob.mx/comisiones/desarrollo_social/docs/marco/Ley_GAMVLV.pdf

Reasonable Adjustments	Necessary and appropriate modifications and adaptations to a project, activity, good or service will be understood, which do not impose a disproportionate or undue burden, when required in a particular case, to guarantee girls and women the enjoyment or exercise, in equality of conditions with boys and men, of all human rights and fundamental freedoms.
Digital Literacy	The ability to use digital technology, communication tools, or networks to locate, evaluate, use, and create information. It also refers to the ability to understand and use information in multiple formats from a wide range of resources that are presented through the computer, or a person's ability to perform tasks efficiently in a digital environment. Digital literacy includes the ability to read and interpret media, reproduce data and images through digital manipulation, and evaluate and apply new knowledge gained in digital environments. UNESCO Wilson C., Grizzle A., Tuazon R., Akyempon K., Cheung C. (2011). Available at: https://unesdoc.unesco.org/ark:/48223/pf0000216099
Economic Autonomy	Economic autonomy is a fundamental pillar of women's autonomy and, by definition, requires that they receive income that allows them to overcome poverty and freely dispose of their time for training, access to the labor market, professional and personal development, participation in active way of social and political life, and dedicate themselves to their loved ones without this becoming a barrier to the achievement of their own aspirations. CEPAL Naciones Unidas-CEPAL (2016, diciembre). Available at: https://repositorio.cepal.org/bitstream/handle/11362/40633/S1601248_es.pdf?sequence=4&isAllowed=y
Gender Gap	Gender inequality gaps are a statistical measure that accounts for the distance between women and men with respect to the same indicator. The quantification of the gaps has stimulated the development of statistics and the formulation of indicators to understand the dimensions of inequality and monitor the effects of policies on its eradication, as well as progress in the elimination of inequality comparatively over time. Some examples of these gaps are: wages, labor participation, time use, among others. INMUJERES (s.f.). Available at: https://campusgenero.inmujeres.gob.mx/glosario/terminos/brechas-de-desigualdad-de-genero

Gender Equality Training	A tool, strategy or mechanism that aims to generate transformative effects at the individual and collective level on gender equality through awareness, sensitization, empowerment of learning, knowledge construction, and skills development. It is part of a gender mainstreaming strategy. EIGE (2019). Available at: https://eige.europa.eu/gender-mainstreaming/toolkits/gender-sensitive-
Work Environment	A set of characteristics, conditions, qualities, attributes, or properties of a specific work environment that are perceived, felt or experienced by the people who make up the workplace, which influence the conduct and/or effectiveness and efficiency of the workers and employees. Secretaría de Economía (2015). Available at: https://www.gob.mx/cms/uploads/attachment/file/25111/NMX-R-025-SCFI-2015_2015_DGN.pdf
Free, Prior and Informed Consent (FPIC)	It is a specific Indigenous Peoples right, through which they can give or deny their consent to a project that affects them or their territories. Once they have given their consent, they can withdraw it at any stage of the process. On the other hand, the FPIC allows them to negotiate the conditions under which projects are designed, implemented, supervised and evaluated. This principle is enshrined in the universal right to self-determination. FAO (s.f.). Available at: https://www.fao.org/indigenous-peoples/our-pillars/fpic/es/#:~:text=El%20Consentimiento%20Libre%2C%20Previo%20e,por%20sus%20siglas%20en%20ingl%C3%A9s). 'Free' means that there has been no coercion, intimidation or manipulation. 'Previous' means that the consent has been obtained sufficiently in advance and before any authorization or start of activities and that the terms of the indigenous consultation/consensus processes are respected. 'Informed' means that information was provided covering a range of issues, including, but not limited to, the nature, size, implementation pace, reversibility, and scope of any proposed project or activity; the objective of the project and its duration; the area and zones affected; a preliminary assessment of its likely economic, social, cultural and environmental impacts, covering potential risks; the personnel likely to be involved in the implementation of the project, and the procedures that may be involved. Naciones Unidas (s.f.). Available at: https://www.ohchr.org/es/indigenous-peoples/consultation-and-free-prior-and-informed-consent-fpic

Shared Responsibility / Co-Responsibility	It is the balanced distribution of domestic tasks and family responsibilities, such as organization, care, education and affection of dependent people within the home, in order to fairly distribute the lives of women and men. Senado de la República (s.f.). Available at: https://www.senado.gob.mx/64/gaceta_del_senado/documento/81633
Care (Services)	All those daily activities that are carried out inside and outside the homes to provide well-being to people who lack autonomy, and who manage to live well and develop their capacities; It also refers to the reproduction activities of daily life, that is, those that are carried out repeatedly to sustain daily life. Gobierno de México (s.f.). Available at: https://infosen.senado.gob.mx/sgsp/gaceta/65/1/2021-11-30-1/assets/documentos/Iniciativa_Morena_Sen_Micher_LGSNC.pdf
Culture of Peace	It consists of a series of values, attitudes and behaviors that reject violence and prevent conflicts by trying to attack their causes to solve problems through dialogue and negotiation between people, groups and nations. UNESCO (1999). Available at: http://unescopaz.uprrp.edu/documentos/culturapaz.pdf
Discrimination	Discrimination shall be understood as any distinction, exclusion, restriction or preference that, by action or omission, with or without intention, is not objective, rational or proportional and has the purpose or result of hindering, restricting, impeding, impairing or nullifying recognition, enjoyment or exercise of human rights and freedoms, when based on one or more of the following reasons: ethnic or national origin, skin color, culture, sex, gender, age, disabilities, social, economic, health or legal status, religion, physical appearance, genetic characteristics, immigration status, pregnancy, language, opinions, sexual preferences, political identity or affiliation, marital status, family situation, family responsibilities, language, criminal record or any other reason- Gobierno de México (2023, enero). Available at: https://www.diputados.gob.mx/LeyesBiblio/pdf/LFPED.pdf

Discrimination Against Women	Any sex-based distinction, exclusion, or restriction that has the purpose or effect of impairing or nullifying the recognition, enjoyment, or exercise by women, regardless of their marital status, on the basis of the equality of men and women, of the human rights and fundamental freedoms in the political, economic, social, cultural and civil spheres or in any other sphere. Gobierno de México (2022). Available at: https://www.diputados.gob.mx/LeyesBiblio/pdf/LGIMH.pdf
Positive Discrimination / Affirmative Actions:	Affirmative actions are public policies whose objective is to compensate the conditions that discriminate against certain social groups from the exercise of their rights. They are also known as “positive actions”, “positive measures”, “reverse discrimination” and “positive discrimination”. These types of actions are recommended for disadvantaged social groups, they are mandatory in the case of women, since their gender condition is a factor that limits their access to economic, cultural and political resources important for their development; its application in favor of women does not constitute discrimination for men since for them gender does not represent a limitation for the exercise of their rights. It is necessary to consider that the temporary nature of affirmative actions is subject to the result that is expected to be achieved and not to a priori determinations; therefore, they will be discontinued only if the problem has been resolved and the results are sustainable. Some examples of these measures are the implementation of special actions to facilitate access to credit, positions of political representation, and special scholarships for women and girls. INMUJERES (s.f.). Available at: https://campusgenero.inmujeres.gob.mx/glosario/terminos/acciones-afirmativas
Green Jobs	It refers to the transformation of economies, companies, work environments and labor markets towards a sustainable economy that provides decent work with low carbon consumption. OIT, CINTERFOR (s.f.). Available at: https://www.oitcinterfor.org/general/empleos-verdes-nuevas-calificaciones IAP (s.f.). Available at: http://cedoc.inmujeres.gob.mx/ftpg/Puebla/pue03.pdf

Economic and Social Empowerment	It is a process through which women move from any situation of oppression, inequality, discrimination, exploitation or exclusion to a stage of consciousness, self-determination and autonomy, which is manifested in the exercise of democratic power that emanates from the full enjoyment of their rights and freedoms. Gobierno de México (2012, junio). Available at: https://www.senado.gob.mx/comisiones/desarrollo_social/docs/marco/Ley_GAMVLV.pdf
Women's Businesses	The Inter-American Development Bank (IDB) defines a women's company based on two criteria: ownership of the company and the presence of women in leadership positions. According to the International Finance Corporation (IFC), "it is one in which at least 51% of the capital is in the hands of women; or one in which one or several women own at least 20% of the capital, has at least one woman in the positions of CEO, COO, President or Vice President of the company, and at least 30% of the Board of Directors is made up of women."
Gender Stereotypes	The ideas, qualities and expectations that society attributes to women and men; they are symbolic representations of what women and men should be and feel; they are mutually exclusive ideas that, by assigning one or the other, reaffirm a model of femininity and another of masculinity. Stereotypes are often used to justify gender discrimination and can be reinforced by traditional or modern theories, even, through laws or institutional practices. INMUJERES (s.f.). Available at: https://campusgenero.inmujeres.gob.mx/glosario/terminos/estereotipos-de-genero
Gender Impact Assessment	An *ex-ante* evaluation, analysis or assessment of a regulation, policy or program that makes it possible to identify, from a preventive perspective, the probability that a certain decision will have negative consequences for the state of equality between men and women. EIGE (2019). Available at: https://eige.europa.eu/gender-mainstreaming/toolkits/gender-sensitive-parliaments/glossary-terms

Gender	It alludes to the meanings that society assigns to women and men through the differentiation of roles, attitudes, behaviors and responsibilities defined as "proper" to each other. This category focuses on the social relations between men and women (gender relations), for this reason it is necessary to emphasize that gender is not synonymous with women (Scott, 1990). Gobierno Federal (s.f.). Available at: http://archivos.diputados.gob.mx/Centros_Estudio/ceameg/participacion_politica/sipp3_2/datos/glos.htm Scott, J. (1990). El género: una categoría útil para el análisis histórico. En Historia y Género: Las mujeres en la Europa Moderna y Contemporánea. J. Amelang y M. Nash (eds.)
Gender Equality	The situation in which women and men have access with the same possibilities and opportunities to the use, control and benefit of goods, services and resources of society, as well as to decision-making in all spheres of social, economic, political, culture and family. Gobierno de México (2022). Available at: https://www.diputados.gob.mx/LeyesBiblio/pdf/LGIMH.pdf
Equal Opportunities	The Equal Opportunity approach seeks to equalize opportunities so that gender, race or ethnicity, place of birth, family background and other characteristics that are beyond the control of the individual do not influence a person's results. Success in life should depend on individuals' decisions, effort and talent, not on their circumstances at birth. Banco Mundial (s.f.). Available at: https://www.bancomundial.org/es/topic/poverty/lac-equity-lab1/equality-of-opportunities
Equal Pay	The principle of equal pay for equal work seeks to ensure that women and men doing identical or similar jobs receive equal pay. EPIC (s.f.). Available at: https://www.equalpayinternationalcoalition.org/es/equal-pay/ The wage gap is the difference between the average salary of men and women within an organization, sector or country. The salary gap, being the difference between the average salary, what really lets us see is the distribution of men and women within the workplace. In general, the gap is explained by the fact that men occupy a greater proportion of high-level positions –and therefore better paid– than women, who mostly hold low-level positions within organizations. Methodology Measure the Gender Wage Gap in Mexico. British Embassy/ Intrare

Women's Financial Inclusion	It is defined as access to the use of formal financial products and services under an appropriate regulation that guarantees protection schemes for users and promotes financial education to improve the financial capacity of all segments of the population. National Banking and Securities Commission (CNBV). Access to and use of financial products and services make daily life easier and help women plan, from long-term goals to unexpected emergencies. Starting with the use of an account, women are likely to use other financial services, such as credit or insurance, to start or expand businesses, invest in education or health, manage risk and overcome financial crises, which can improve the quality of their lives.
Social Inclusion	The process of enhancing the ability, opportunity, and dignity of people who are disadvantaged because of their identity, so that they can participate in society. Banco Mundial (2021, febrero). Available at: https://blogs.worldbank.org/es/latinamerica/la-inclusion-social-un-compromiso-largo-plazo
Intersectionality	Category of analysis to refer to the components that come together in the same case, policy or mechanism multiplying the disadvantages and discriminations. This approach allows contemplating the problems from a comprehensive perspective, avoiding simplifying the conclusions and, therefore, the approach to said reality. INMUJERES (s.f.). Available at: https://campusgenero.inmujeres.gob.mx/glosario/terminos/interseccionalidad
Institutionalization of the Gender Perspective	Systematic process of integrating a new value into the routines of an organization's work, through which women's demands for substantive equality are inserted into regular processes and procedures and institutional norms. As a result, practices, rules and sanctions are generated, maintained by the general will of the organization, to promote equality, combat violence against women and counteract the social disadvantages associated with the gender condition. It involves the development of various actions: 1. Formulating Policies, regulations and specific intervention actions to achieve equal relations. 2. Developing technical and methodological instruments capable of incorporating the gender perspective in the planning, monitoring and evaluation of programs. 3. Sensitizing and training staff on gender perspective issues, so that they can identify cultural, social, and economic asymmetries between women and men and act accordingly. 4. Having sufficient economic resources for the planning, execution, follow-up and evaluation of the institutional Policies for equality between women and men. INMUJERES (s.f.). Available at: https://campusgenero.inmujeres.gob.mx/glosario/terminos/institucionalizacion-de-la-perspectiva-de-genero

Horizontal and Vertical Mobility	Mobility can occur within the same socioeconomic stratum, such as when a person changes jobs, but their income or their new position remain practically at the same level as the previous one. We call this horizontal mobility. Now, when a person moves to a position in which their income or the role they play in these new circumstances correspond to a different stratum than the original, they are experiencing vertical mobility. In this case, mobility can be upward or downward. CEEY (s.f.). Available at: https://ceey.org.mx/que-tipos-de-movilidad-social-en-mexico-medimos/
Basic Needs	They are those whose satisfaction is essential for human existence, regardless of the social environment in which the person develops. The needs considered are usually limited to the following four categories: i) Access to housing that ensures a minimum standard of habitability for the home. ii) Access to basic services that ensure an adequate level of health. iii) Access to basic education. iv) Economic capacity to achieve minimum levels of consumption CEPAL (2001, febrero). Available at: https://repositorio.cepal.org/bitstream/handle/11362/4784/S01021117_es.pdf?sequence
Organization	In the context of this taxonomy, it refers to the end user who implements the IIG questionnaire and that could be any public sector entity, private sector company, financial institution (e.g., commercial bank and development bank), government body, representatives of the federal, state (s) or municipal (s) government, among other users.
Differentiated Financing Options	In a generic way, they are those sources of financing independent of banks and traditional markets (for instance, Fintech companies' services), and those offered by banks and traditional markets adjusted to the specific needs of their beneficiaries, offering flexible terms, preferential rates, among other elements.
Gender Parity	Gender parity refers to a balanced participation and representation of women and men in positions of power and decision-making in all spheres of life (political, economic and social). INMUJERES (2020, septiembre). Available at: https://www.gob.mx/inmujeres/articulos/la-paridad-de-genero-un-asunto-de-igualdad-y-de-justicia#:~:text=La%20paridad%20de%20g%C3%A9nero%20se,pol%C3%ADtica%2C%20econ%C3%B3mica%20y%20social)

Gender Equality Plan	A set of actions that seek to: carry out impact assessments/audits of conduct, procedures and practices dedicated to the identification of gender biases; identify and implement innovative strategies to correct any biases; and sets concrete goals with follow-up monitored by progress indicators. EIGE (2019). Available at: https://eige.europa.eu/gender-mainstreaming/toolkits/gender-sensitive-parliaments/glossary-terms
Conciliation Policies	The reconciliation of work, family and personal life is a line of work that is promoted as part of equality policies with the purpose of transforming the unequal distribution of domestic and care tasks socially assigned to women. Reconciliation is promoted through actions that, from the private sector, help people to eradicate tensions between work, personal and family life, though, for example: mixed, compact or flexible schedules, nurseries, lactaries, maternity and paternity leave or community care networks or in which the public and private sectors are jointly responsible, among others. INMUJERES (s.f.). Available at: https://campusgenero.inmujeres.gob.mx/glosario/terminos/conciliacion-de-la-vida-laboral-familiar-y-personal
Gender-Based Affordable Price	t refers to the amount of money to be paid for the acquisition or use of a good or service, which is achievable for both men and women, determined in accordance with an acceptable commercial practice, without discriminatory elements that constitute a barrier that prevents access to the acquisition or use of goods or services for reasons of gender.
Progressiveness	The principle of progressivity implies gradual progress to achieve the fulfillment of rights as expeditiously and efficiently as possible. The principle of progressivity has been particularly related to economic, social and cultural rights, but it also applies to civil and political rights, seeking their satisfaction at all times by all possible means. For the purposes of this Taxonomy, this principle is related to gradual and continuous progress to achieve the objectives of the index and, at the same time, to the prohibition of unjustified setbacks in the levels of compliance achieved. CNDH (2016)

Resilience	It is defined as the ability of an individual, community, society or system exposed to a threat to resist, absorb, adapt and recover from its effects in a timely and effective manner. Building resilience means placing greater emphasis on what individuals and communities can do for themselves and how their capacities can be strengthened, rather than concentrating on their vulnerability to disaster or their needs in an emergency. UNICEF, (2015). Available at: https://www.unicef.org/lac/media/2271/file/PDF%20Acciones%20para%20la%20resiliencia%20de%20la%20ni%C3%B1ez%20y%20la%20juventud.pdf
Health and gender	It refers to the link between the quality of life and the integral health of women from a broad, feasible and inclusive perspective. This link includes the relationship between women's sexual and reproductive health visibility and social services access, as determining factors in improving their quality of life, as well as the incorporation of the gender approach and the specific consideration of the needs of women in socio-health care and the understanding of vital environments, territory and community for the transformation of medical assistance programs.
Horizontal and Vertical Segregation	The World Labor Organization explains occupational segregation as proof of inequality, which includes social stratification in terms of power, qualifications and earnings; that is, it is the assignment of stereotyped work tasks. This differentiation prevents people from developing work or professionally in activities not attributable to their sex/gender. This form of inequality that mainly affects women can be horizontal; that is, when the jobs "for men" are occupied by them (mining, construction, financial services, among others) and the jobs "for women" are occupied by them (communal and social services, secretaries, educational services, health and social assistance, etc.). There is also vertical segregation, when men and women tend to occupy different categories within the same job (management positions, coordination of areas, senior managers and subordinates), where they generally occupy higher hierarchies and with better salaries. INMUJERES (s.f.). Available at: https://campusgenero.inmujeres.gob.mx/glosario/terminos/segregacion-ocupacional

Gender/Sex Bias	It refers to the omission that is made about how women, men and gender relations are conceptualized in a certain object of study or problem. Blindness or gender bias constitutes a serious defect when designing programs or public policies that omit or marginalize gender analysis in the different phases of said formulation and therefore exclude the needs and impacts of decisions and actions on the lives of women. INMUJERES (s.f.). Available at: https://campusgenero.inmujeres.gob.mx/glosario/terminos/sesgo-de-genero
Sex Gender System	It is the set of beliefs, values, customs, norms, practices, opportunities and different social behaviors that affect and regulate a person's life, depending on whether they are a woman or a man" (Colin, 2017). The anthropologist Gayle Rubin formulated the category of sex-gender system, which refers to "the set of arrangements by which a society transforms biological sexuality into products of human activity, and in which those transformed needs are satisfied" (Bravo, 2008). In this system, which is the predominant one throughout the world, women and men play different roles (gender roles) that are in turn full of “labels” (stereotypes). The words sex and gender are often used as synonyms, but they are not. While sex has to do with biological characteristics, the concept of gender refers to all those practices, values, customs and tasks that society, and not nature, has assigned differently to each of the sexes. UNWOMEN Training Centre (s.f.). Available at: https://portal.trainingcentre.unwomen.org/courses/yo-se-de-genero-1-2-3-conceptos-basicos-de-genero-marco-internacional-para-la-igualdad-de-genero-y-promocion-de-la-igualdad-de-genero-en-el-sistema-de-la-onu/

Telework	A form of subordinate labor organization that consists of the performance of paid activities, in places other than the establishment or establishments of the employer, for which the physical presence of the worker in the workplace is not required under the teleworking modality, primarily using information and communication technologies, for contact and command between the worker under the teleworking modality and the employer. The worker under the teleworking modality will be the one who provides their personal, paid and subordinate services in a place other than the company's facilities or employer's source of work and uses information and communication technologies. For the purposes of the teleworking modality, information and communication technologies will be understood as the set of services, infrastructure, networks, software, computer applications, and devices whose purpose is to facilitate tasks and functions in the workplace, as well as such as those needed for the information management and transformation, particularly the technological components that allow the creation, modification, storage, protection, and recovery of that information. Gobierno de México (2021, enero). Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5609683&fecha=11/01/2021#gsc.tab=0
Decent Work	Dignified or decent work is understood to be that in which the human dignity of the worker is fully respected; there is no discrimination based on ethnic or national origin, gender, age, disability, social status, health conditions, religion, migratory status, opinions, sexual preferences or marital status; have access to social security and receive a remunerative salary; continuous training is received to increase productivity with shared benefits, and there are optimal safety and hygiene conditions to prevent work risks. Decent work also includes unrestricted respect for the collective rights of workers, such as freedom of association, autonomy, the right to strike and collective bargaining. Gobierno de México (2022, diciembre). Available at: https://www.diputados.gob.mx/LeyesBiblio/pdf/LFT.pdf
Flexible Work	A work practice that allows employed personnel a certain degree of freedom in deciding how work will be performed and how employee schedules will be coordinated. Flexible work arrangements include any type of time and/or space arrangement to perform work, such as flextime, part-time, remote work/telecommuting schemes. EIGE (2019). Available at: https://eige.europa.eu/gender-mainstreaming/toolkits/gender-sensitive-parliaments/glossary-terms

Just Transition	The just transition concept is a privileged tool to address the intersection between the world of work and the environment: without more responsible production from an ecological point of view, there can be no better future for workers and their communities, and without decent jobs, there can be no sustainable society and production. The ILO Policy Guidelines for a Just Transition provide a set of guidelines on the policies necessary to protect employment and create new job opportunities under decent working conditions, while preserving the environment. OIT (2021). Available at: https://www.ilo.org/americas/publicaciones/WCMS_831480/lang--es/index.htm
Transversality	It is the process that makes it possible to guarantee the incorporation of the gender perspective with the objective of assessing the implications that any programmed action has on women and men, in the case of legislation, public policies, administrative, economic, and cultural activities in the public and private institutions. Gobierno de México (2022). Available at: https://www.diputados.gob.mx/LeyesBiblio/pdf/LGIMH.pdf
Use of Time	The use we give to time or the way we distribute it in our daily lives. In general, it depends on several social differentiation factors, such as gender, social class, ethnicity, region of residence, and they affect the type of activities we carry out, such as: paid work, domestic work, recreational activities, leisure, care, etc. INEGI (2019). Available at: https://www.inegi.org.mx/programas/enut/2019/

Violence Against Women	Any action or omission based on their gender, that causes them psychological, physical, property, economic, or sexual harm or suffering, or death, both in the private and public spheres. Gobierno de México (2012, junio). Available at: https://www.senado.gob.mx/comisiones/desarrollo_social/docs/marco/Ley_GAMVLV.pdf Violence against women has its origin in unequal power relations, resulting from the cultural and historical structures of patriarchy; it is vital to recognize and eradicate it since it is one of the extreme expressions of violation of women's human rights. Violence against women does not distinguish ethnicity, class, religion or age, and it manifests itself in various actions such as humiliation, persecution, prohibitions, isolation, control or any other action that prevents women from enjoying their rights and freedoms. INMUJERES (s.f.). Available at: https://campusgenero.inmujeres.gob.mx/glosario/terminos/violencia-contra-las-mujeres

Annex. Participants in the construction of the Sustainable Taxonomy

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Abdías Moreno	North American Development Bank
Salvador López Córdova	North American Development Bank
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Kitzia Irina Oribe Aguilar	Secretaría de Medio Ambiente y Recursos Naturales

Technical, Sectoral and Thematic Groups: Manufacturing Industries

Irais Vázquez Cisneros	Climate Bonds Initiative (CBI)
Excalibur Acosta Miranda	Asociación de Normalización Y Certificación
Carlos Rafael Mendizabal Pérez	Cámara Nacional de la Industria de Transformación
Enrique Villegas Valladares	Cámara Nacional de la Industria de Transformación
Francisco Segura Mujica	Cámara Nacional de la Industria de Transformación
Gustavo Córdova Araiza	Cámara Nacional de la Industria de Transformación
Juan Carlos Neri Guzmán	Cámara Nacional de la Industria de Transformación
María de Jesús Alonso Ruiz	Cámara Nacional de la Industria de Transformación
Rosa Jimena Gómez Jimeno	Cámara Nacional de la Industria de Transformación
Rosalba Medina Rivera	Cámara Nacional de la Industria de Transformación
Julio César Martínez	Cámara Nacional de la Industria del Aluminio
Mónica Barrera Vara	Cámara Nacional de la Industria del Hierro y del Acero
Griselda Medina Laguna	Comisión Nacional del Agua
Jorge Fernando Ojeda Santos	Comisión Nacional del Agua
Gloria Olivia Espinosa Sánchez	Comisión Nacional para el Conocimiento y Uso de la Biodiversidad
Tania Roswitha Urquiza Haas	Comisión Nacional para el Conocimiento y Uso de la Biodiversidad
Carlos Medina Ayala	CEMEX
Ayax Segura Peralta	CEMEX
Graciela Hernández Cano	Centro Mario Molina
Valeria Dagnino Contreras	Climate Bonds Initiative (CBI)
Fabiana Contreras Moreno	Climate Bonds Initiative (CBI)

Irais Vázquez Cisneros	Climate Bonds Initiative (CBI)
José Ramón Ardavín Ituarte	Comisión de Estudios del Sector Privado para el Desarrollo Sustentable
José Javier Gómez García	Comisión Económica para América Latina y el Caribe
Israel Jáuregui Nares	Comisión Nacional para el Uso Eficiente de la Energía
Alba Aguilar Priego	Consejo Mexicano de Finanzas Sostenibles
Vishwas Vidyaranya	Corporación Financiera Internacional (IFC)
Rogelio González González	Elementia Materiales
Ibette Sosa Ortega	Holcim
Carlos Matías Figueroa	Instituto Global para el Crecimiento Verde (GGGI)
Claudia Octaviano Villasana	Instituto Nacional de Ecología y Cambio Climático
Juana Itzchel Nieto Ruiz	Instituto Nacional de Ecología y Cambio Climático
Maria del Pilar Salazar Vargas	Instituto Nacional de Ecología y Cambio Climático
Aram Rodríguez de los Santos	Instituto Nacional de Ecología y Cambio Climático
José Francisco Rodríguez Montoya	Instituto Nacional de Estadística y Geografía
Roberto Revilla Ostos	Nacional Financiera
Amed Gutierrez Carmona	Nacional Financiera
Agustín Ávila Romero	Secretaría de Medio Ambiente y Recursos Naturales
Adolfo Cimadevilla Cervera	Secretaría de Medio Ambiente y Recursos Naturales
Leonardo Pérez Sosa	Secretaría de Medio Ambiente y Recursos Naturales
Victor Hugo Páramo Figueroa	Secretaría de Medio Ambiente y Recursos Naturales
Diana Karin Guzmán Torres	Secretaría de Medio Ambiente y Recursos Naturales
Alejandro Villegas López	Secretaría de Medio Ambiente y Recursos Naturales
Eduardo Garza Pasalagua	Secretaría de Medio Ambiente y Recursos Naturales
Lizbeth Cruz Carbajal	Secretaría de Medio Ambiente y Recursos Naturales
Kitzia Irina Oribe Aguilar	Secretaría de Medio Ambiente y Recursos Naturales
Victor Hugo Páramo Figueroa	Secretaría de Medio Ambiente y Recursos Naturales

Technical, Sectoral and Thematic Groups: Transportation

Ernesto Infante Barbosa	Corporación Financiera Internacional (IFC)
Osvaldo Belmont Reyes	Asociación Mexicana de la Industria Automotriz
Virginia Olade López-Gavito	Asociación Nacional de Productores de Autobuses, Camiones y Tractocamiones
Alejandro Osorion Carranza	Asociación Nacional de Productores de Autobuses, Camiones y Tractocamiones
Miguel Elizalde Lizarraga	Asociación Nacional de Productores de Autobuses, Camiones y Tractocamiones
Miguel Ogazón Del Abrego	Asociación Nacional de Productores de Autobuses, Camiones y Tractocamiones
Bernardo Roth Rivero	Banco Nacional de Obras y Servicios Públicos
Irma Puente Escalante	Banco Nacional de Obras y Servicios Públicos
Virna Gutiérrez Gómez	Banco Nacional de Obras y Servicios Públicos
Fernando Tehuintle Basañez	Banco Nacional de Obras y Servicios Públicos
Juan Carlos Martínez Nava	Banco Nacional de Obras y Servicios Públicos
Lorena Vivar Jiménez	Banco Nacional de Obras y Servicios Públicos
Tamara Sapien Bravo	Banco Nacional de Obras y Servicios Públicos
Néstor Arauz Hernández	Banco Nacional de Obras y Servicios Públicos
Saira Vilchis Jimenez	Centro Mario Molina
Griselda Medina Laguna	Comisión Nacional del Agua
Jorge Fernando Ojeda Santos	Comisión Nacional del Agua
Gloria Olivia Espinosa Sánchez	Comisión Nacional para el Conocimiento y Uso de la Biodiversidad
Tania Roswitha Urquiza Haas	Comisión Nacional para el Conocimiento y Uso de la Biodiversidad
Alba Aguilar Priego	Consejo Mexicano de Finanzas Sostenibles
Carlos Torres White	Consejo Mexicano de Finanzas Sostenibles
Vishwas Vidyaranya	Corporación Financiera Internacional (IFC)
José Luis Amaya Loustaunau	Global Green Growth Institute
Marité Chavira Mendoza	Grupo Financiero CitiBanamex
Ricardo Garza Del Rio	Grupo Financiero CitiBanamex
Claudia Octaviano Villasana	Instituto Nacional de Ecología y Cambio Climático
José Francisco Pérez de la Torre	Instituto Nacional de Ecología y Cambio Climático
Ana María Martínez Ramos	Instituto Nacional de Ecología y Cambio Climático
Maria del Pilar Salazar Vargas	Instituto Nacional de Ecología y Cambio Climático
Eduardo Olivares Lechuga	Instituto Nacional de Ecología y Cambio Climático

Ernesto Infante Barbosa	Corporación Financiera Internacional (IFC)
Linda Riva Palacio Flores	Instituto Nacional de Ecología y Cambio Climático
Roberto Ulises Ruiz Salcedo	Instituto Nacional de Ecología y Cambio Climático
Eunice Alejandra Cortés Alfaro	Instituto Nacional de Ecología y Cambio Climático
Aram Rodríguez de los Santos	Instituto Nacional de Ecología y Cambio Climático
Ángel Fernando Pineda Solís	Instituto Nacional de Estadística y Geografía
Gerardo Alfonso Durand Alcántara	Instituto Nacional de Estadística y Geografía
José Francisco Rodríguez Montoya	Instituto Nacional de Estadística y Geografía
Martin Wilson Sánchez	Instituto Nacional de Estadística y Geografía
Iván Cornejo Villalva	Nacional Financiera
Daniel Vázquez Medina	Nacional Financiera
Marío Jesús Bocanegra Romero	Nacional Financiera
Siddharta Flores Villegas	Nacional Financiera
Rodolfo Valadez Coria	Navistar
Cuitláhuac Cruz	North American Development Bank
Daniel Gutiérrez	North American Development Bank
Sarahi Elena Malanche García	Planisphera Sustentabilidad A.C.
Javier Garduño Arredondo	Secretaría de Desarrollo Agrario, Territorial y Urbano
Michelle Montijo Arreguín	Secretaría de Medio Ambiente de la Ciudad de México
Agustín Ávila Romero	Secretaría de Medio Ambiente y Recursos Naturales
Adolfo Cimadevilla Cervera	Secretaría de Medio Ambiente y Recursos Naturales
Leonardo Pérez Sosa	Secretaría de Medio Ambiente y Recursos Naturales
Victor Hugo Páramo Figueroa	Secretaría de Medio Ambiente y Recursos Naturales
Diana Karin Guzmán Torres	Secretaría de Medio Ambiente y Recursos Naturales
Alejandro Villegas López	Secretaría de Medio Ambiente y Recursos Naturales
Eduardo Garza Pasalagua	Secretaría de Medio Ambiente y Recursos Naturales
Lizbeth Cruz Carbajal	Secretaría de Medio Ambiente y Recursos Naturales
Kitzia Irina Oribe Aguilar	Secretaría de Medio Ambiente y Recursos Naturales
Jorge Luis Zenil Alva	Societe Generale
Javier Orlando Avilés	Societe Generale
Daniel Wasserteil Fridman	Traxión
Alicia López Villamar	United Nations Development Programme
Luis Cervantes García Rulfo	United Nations Development Programme

Technical, Sectoral and Thematic Groups: Waste Management and Remediation Services.

Gloria Marina Godínez Ramírez	SustainLuum
Carolina Alcalá	Banco Interamericano de Desarrollo
Ricardo Martínez Lagunes	Banco Interamericano de Desarrollo
Rodrigo Riquelme Bentjerodt	Banco Interamericano de Desarrollo
Carlos Jesús González Martín	Banco Nacional de Obras y Servicios
Carlos Puente López	Banco Nacional de Obras y Servicios
Jorge Lira Quirarte	Banco Nacional de Obras y Servicios
Fernanda Montes de Oca	Banco Nacional de Obras y Servicios
Javier Calderón Domínguez	Cámara Nacional de la Industria de Transformación
Miguel Ángel Moreno Hernández	Cámara Nacional de la Industria de Transformación
Sofía Borges	Climate Bonds Initiative (CBI)
Valeria Dagnino Contreras	Climate Bonds Initiative (CBI)
José Ramón Ardavín Ituarte	Comisión de Estudios del Sector Privado para el Desarrollo Sustentable
José Javier Gómez García	Comisión Económica para América Latina y el Caribe
Griselda Medina Laguna	Comisión Nacional del Agua
Jorge Fernando Ojeda Santos	Comisión Nacional del Agua
Gloria Olivia Espinosa Sánchez	Comisión Nacional para el Conocimiento y Uso de la Biodiversidad
Tania Roswitha Urquiza Haas	Comisión Nacional para el Conocimiento y Uso de la Biodiversidad
Alba Aguilar Priego	Consejo Mexicano de Finanzas Sostenibles
Ana Silvia Arrocha	Consultor Independiente
Consuelo Juárez Mendoza	Consultora Independiente
Eduardo Parra	Consultora Independiente
Vishwas Vidyaranya	Corporación Financiera Internacional (IFC)
Pablo Kohan	Emisiones Neutras
Biuludani Altamirano Magaña	Estrategia Circular MX
Jorge Arturo Calderas Winder	Estrategia Circular MX
Oscar Alfredo Enriquez Gomez	GeoCycle
Cristian Omar Ortiz	Grupo Financiero AFIRME
Irma Acosta Pedregal	Grupo Financiero BBVA
Adriana Salazar Cajero	Grupo Financiero BBVA
Aidee Olmos Salgado	Grupo Financiero HSBC
Etzael Romero Mejía	Grupo Financiero Santander

Gloria Marina Godínez Ramírez	SustainLuum
Ibette Sosa	Holcim
Carlos Matías Figueroa	Instituto Global para el Crecimiento Verde (GGGI)
Gabriela Rodríguez Martinez	Instituto Global para el Crecimiento Verde (GGGI)
Maria del Pilar Salazar Vargas	Instituto Nacional de Ecología y Cambio Climático
Luz María González Osorio	Instituto Nacional de Ecología y Cambio Climático
Aram Rodríguez de los Santos	Instituto Nacional de Ecología y Cambio Climático
José Francisco Rodríguez Montoya	Instituto Nacional de Estadística y Geografía
Martín Wilson Sánchez	Instituto Nacional de Estadística y Geografía
José Guillermo Díaz	ProAmbiente
Claudia Hernández Fernández	Secretaría de Medio Ambiente de la Ciudad de México
Estefanía Arriaga Ramos	Secretaría del Medio Ambiente de la Ciudad de México
Agustín Ávila Romero	Secretaría de Medio Ambiente y Recursos Naturales
Adolfo Cimadevilla Cervera	Secretaría de Medio Ambiente y Recursos Naturales
Leonardo Pérez Sosa	Secretaría de Medio Ambiente y Recursos Naturales
Victor Hugo Páramo Figueroa	Secretaría de Medio Ambiente y Recursos Naturales
Diana Karin Guzmán Torres	Secretaría de Medio Ambiente y Recursos Naturales
Alejandro Villegas López	Secretaría de Medio Ambiente y Recursos Naturales
Eduardo Garza Pasalagua	Secretaría de Medio Ambiente y Recursos Naturales
Lizbeth Cruz Carbajal	Secretaría de Medio Ambiente y Recursos Naturales
Kitzia Irina Oribe Aguilar	Secretaría de Medio Ambiente y Recursos Naturales
Jorge Luis Zenil Alva	Secretaría de Medio Ambiente, Desarrollo Sustentable y Ordenamiento Territorial del Gobierno del Estado de Puebla
Javier Orlando Avilés	Sociedad Alemana de Cooperación Internacional (GIZ)
Danae Díaz Pesce	TUV Rheinland
David Herranz Aina	Veolia México
David Herranz Aina	Veolia México

Technical, Sectoral and Thematic Groups: Gender Equality

Marta Clara Ferreyra Beltrán	Instituto Nacional de las Mujeres
Julieta Osornio Colin	Banco de México
Mónica Gómez Ruíz	Banco de México
Gina Andrade Baena	Banco Interamericano de Desarrollo
Eliana Carolina Rubiano	Banco Mundial
Irma Puente Escalante	Banco Nacional de Obras y Servicios Públicos
Daniela Cuellar Müller	Banco Nacional de Obras y Servicios Públicos
Virna Gutiérrez Gómez	Banco Nacional de Obras y Servicios Públicos
Delia Sánchez Castillo	Banco Nacional de Obras y Servicios Públicos
Bibiana Gómez Muñoz	Banco Nacional de Obras y Servicios Públicos
Francisco Cota González	Banco Nacional de Obras y Servicios Públicos
Saira Vilchis Jiménez	Centro Mario Molina
Daniela Nyssen Lozano	Consejo Mexicano de Finanzas Sostenibles
Edgar Ramírez Ramos	Consultor Independiente
Roberto Guirette Saldaña	Fideicomisos Instituidos en Relación con la Agricultura
Mariana Ixchel Cornelio Sánchez	Fideicomisos Instituidos en Relación con la Agricultura
Fayruz El-Assaad Zamora	Finanzas en Tacones
Lucía Quiroga Jímenez	Finanzas en Tacones
Beatriz Sánchez Covarrubias	Grupo Financiero Banorte
Ximena Olvera Ricart	Grupo Financiero Banorte
Irma Acosta Pedregal	Grupo Financiero BBVA
Tania Carolina Rosales	Grupo Financiero BBVA
Ana Gabriela González	Instituto Nacional de Estadística y Geografía
Ana Carolina Maldonado Pacheco	Instituto Nacional de las Mujeres
Carlos Andrés Pérez Narvéz	Instituto Nacional de las Mujeres
Karina Mayela Ruíz Aguilar	Instituto Tecnológico de Monterrey
Irene Donají Ramírez	Nacional Financiera
Viridiana Saldivar y García	Nacional Financiera
Isaura Guzmán Leal	North American Development Bank
Mitzy Jazmin Baqueiro	Organización de las Naciones Unidas
Mario Govea Soria	Organización de las Naciones Unidas

Marta Clara Ferreyra Beltrán	Instituto Nacional de las Mujeres
Ana Citlalic González Martínez	Planisphera Sustentabilidad A.C.
Zaira Fernández Haddad	Secretaría de Hacienda y Crédito Público
Diana Laura Jiménez Miranda	Secretaría de Hacienda y Crédito Público
Michelle Papadakis Barradas	Secretaría de Hacienda y Crédito Público
Camilo De la Garza Guevara	Sociedad Alemana de Cooperación Internacional (GIZ)
Luz María Rodríguez Guerrero	Sociedad Hipotecaria Federal
Elsa Amalia Castellanos López.	Telecomunicaciones de México
Miriam Alvarado Quintero	Telecomunicaciones de México
Itzá Castañeda Camey	World Resources Institute

Technical, Sectoral and Thematic Groups: Sustainable Cities

Juan Carlos Zentella Gómez	Local & Global Ideas SC
Liliana Campos Arriaga	Agencia Alemana de Cooperación Internacional
Armando Rosales García	Banco Mundial
Daniela Cuellar Müller	Banco Nacional de Obras y Servicios Públicos
Virna Gutiérrez Gómez	Banco Nacional de Obras y Servicios Públicos
Carlos Puente López	Banco Nacional de Obras y Servicios Públicos
Bibiana Gómez Muñoz	Banco Nacional de Obras y Servicios Públicos
Carla Estrada Vera	Banco Nacional de Obras y Servicios Públicos
Carlos Jesús González Martín	Banco Nacional de Obras y Servicios Públicos
Adriana Vicente Sánchez	Cámara Nacional de la Industria de Desarrollo y Promoción de Vivienda
Julieta Leo Lozano	Centro Mario Molina
Luisa Manzanares Papayanopoulos	Comisión de Estudios del Sector Privado para el Desarrollo Sustentable
Pablo Kohan	Consultor Independiente
Irma Acosta Pedregal	Grupo Financiero BBVA
Tania Carolina Rosales	Grupo Financiero BBVA
Juana Itzchel Nieto Ruiz	Instituto Nacional de Ecología y Cambio Climático
José Francisco Rodríguez Montoya	Instituto Nacional de Estadística y Geografía
Armando Esparza Juárez	Instituto Nacional de Estadística y Geografía
María Julia Martínez Acosta	Instituto Tecnológico de Monterrey

Juan Carlos Zentella Gómez	Local & Global Ideas SC
Fernando Ortíz Westendarp	North American Development Bank
Javier Garduño Arredondo	Secretaría de Desarrollo Agrario, Territorial y Urbano
Ana Karen Mendivil	Secretaría de Medio Ambiente de la Ciudad de México
Michelle Montijo Arreguín	Secretaría de Medio Ambiente de la Ciudad de México
Estefanía Arriaga Ramos	Secretaría del Medio Ambiente de la Ciudad de México
Alejandro Villegas López	Secretaría de Medio Ambiente y Recursos Naturales
Claudia Castillo Aguilar	Sociedad Alemana de Cooperación Internacional (GIZ)
Gerardo González Alfaro	Sociedad Alemana de Cooperación Internacional (GIZ)
José David Álvarez	Sociedad Hipotecaria Federal
Soledad Salcedo Hernández	Telecomm
Dario Bravo Campa	Veolia México
David Herranz Aina	Veolia México
Beatriz Cárdenas González	World Resources Institute
David Bronzwaig Kravzov	World Resources Institute

International Cooperation

Juliette Grundman	Agencia Francesa de Desarrollo (AFD)
Pauline Schaal	Agencia francesa de desarrollo (AFD) / Expertise France
Eva M. Gutierrez	Banco Mundial
Carlos Senon Benito	Banco Mundial
Olivia-Kelly Lonkeu	Banco Mundial
Marcela Ponce Pérez	Corporación Financiera Internacional (IFC)
Ernesto Infante Barbosa	Corporación Financiera Internacional (IFC)
Diego Ismael Tomé Gayosso	Corporación Financiera Internacional (IFC)
Alejandra Teresa Campos Torres	Corporación Financiera Internacional (IFC)
Miguel Ángel Fernández Contreras	Corporación Financiera Internacional (IFC)
Arturo Martínez Oest	Frankfurt School
Diego Delgado	Frankfurt School
María Baez	Frankfurt School
Sergio Camilo Ortega Pardo	Instituto Global para el Crecimiento Verde (GGGI)
Marianna Lara Otaola	Instituto Global para el Crecimiento Verde (GGGI)

Juliette Grundman	Agencia Francesa de Desarrollo (AFD)
Gabriela Rodríguez Martínez	Instituto Global para el Crecimiento Verde (GGGI)
Diana Alejandra Quezada Ávila	Instituto Global para el Crecimiento Verde (GGGI)
Valeria Arlette Garcia Lara	Instituto Global para el Crecimiento Verde (GGGI)
Luz Jimena Islas Díaz	Instituto Global para el Crecimiento Verde (GGGI)
José Luis Amaya Loustaunau	Instituto Global para el Crecimiento Verde (GGGI)
Carlos Matías Figueroa	Instituto Global para el Crecimiento Verde (GGGI)
Ana Citlalic González Martínez	Planisphera Sustentabilidad A.C.
Jonathan Ryan	Planisphera Sustentabilidad A.C.
Karen Castaño Tovar	Planisphera Sustentabilidad A.C.
Sarahi Elena Malanche García	Planisphera Sustentabilidad A.C.
Dolores Barrientos Alemán	Programa de las Naciones Unidas para el Medio Ambiente (PNUMA)
Enrique Lendo	Programa de las Naciones Unidas para el Medio Ambiente (PNUMA)
Maritta Brömmelmeier	Agencia Alemana de Cooperación Internacional (GIZ)
Gabriela Niño Herandy	Agencia Alemana de Cooperación Internacional (GIZ)

Taxonomía Sostenible De México

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SECRETARÍA DE HACIENDA Y CRÉDITO PÚBLICO