



Mexico
Zero Carbon and Climate Resilience Readiness Framework - Enablig Actions Matrix

ID	READINESS GOALS (per Pillar)	DATE	STAKEHOLDERS	CORE COMPONENTS				ENABLING ACTIONS (What?)									INDICATORS
				Energy Efficiency	Operational	Embodied	Resilience	MILESTONE & SUBGOAL 1	MILESTONE & SUBGOAL 2	MILESTONE & SUBGOAL 3	MILESTONE & SUBGOAL 4	MILESTONE & SUBGOAL 5	MILESTONE & SUBGOAL 6	MILESTONE & SUBGOAL 7	MILESTONE & SUBGOAL 8	MILESTONE & SUBGOAL 9	
G Government Leadership																	
	When?	Who?															
G2	Existence of a National Energy Efficiency Policy or Strategy for the construction and operation of buildings	Mid term	SEMARNAT, SENER, SEDATU, CONAVI, CONUEE, INECC, academia and the private sector	✓				Create a working group to develop a National Energy Efficiency Strategy. Define governance, develop an agenda for public policy, decree, or regulation, in line with the NDCs.	Develop an energy baseline for the building sector: Measure energy consumption by building type, climate zone, and life cycle stage. Establish a system for monitoring and evaluating actual energy performance.	Update and harmonize standards and regulations: Update the NOM and NMX (Mechanical Standards) on energy efficiency and renewable energy. Incorporate energy efficiency into local building regulations, including for renovations.	Link to financing and tax benefits: Establish incentives for projects that meet energy efficiency criteria throughout their entire life cycle. Promote green programs in INFONAVIT, SHF, and private banks.	Train key stakeholders and foster innovation: Training for local governments, construction companies, developers, and end-users. Encourage local governments to adopt the IECC Mexico within their building regulations. Promote technological innovation and the use of energy simulation tools.	Approval and publication				% Progress = (milestone completed / total milestones) x 100
G5	Existence of a National Climate Resilience Policy or Strategy for the construction sector and its value chain	Mid term	State governments, Universities (academic institutions), Civil society, Private sector, INECC, CONUEE, CENAPRED (National Center for Disaster Prevention)				✓	Before forming a national roundtable, create state roundtables that consider the effects of climate change.	Establishment of a National Working Group on Climate Resilience in the Built Environment (Public Policy Committee)		Definition of governance, agenda for the development of public policy, decree or regulation, in line with the NDCs	Development of the legal instrument (policy, decree, regulation) of mandatory compliance	Approval and publication				% Progress = (milestone completed / total milestones) x 100
G7	Incorporation of more ambitious mitigation and adaptation commitments for the sector in the NDCs	Short term (Key date: new NDC cycle in 2025)	SEMARNAT, CFE, SENER, SEDATU, CONAGUA, INEGI, Industries, Chambers, Health Sector	✓	✓	✓	✓	Establishment of a National Working Group on the decarbonization of the built environment (Public Policy Committee) responsible for: Selecting a NDC assessment tool (e.g., WorldGBC's NDC Balanced Score Card). Updating the national GHG inventory (consolidated and disaggregated by sector). Estimating mitigation pathways compatible with net-zero emissions by 2050, including the buildings sector. Integrating life-cycle analysis approaches, embodied emissions, and reference scenarios (BAU vs. net-zero). The timing of the NDC update (until March 2025) and COP30.	Establish a baseline and sectoral trajectories: Once the working group has been formed and the initial points established, the baseline is established.	Conduct cost-benefit analysis and co-benefit assessment: Model the costs, benefits, and returns of adopting more ambitious targets. Consider co-benefits: health, green jobs, energy savings, and reducing energy poverty. Use results to strengthen the political and financial case. Initiate broad multi-stakeholder consultation processes.	Formally update the NDC with net-zero goals. Draft and register with the United Nations Framework Convention on Climate Change (UNFCCC) a new version of the NDC with: A pathway to net-zero. Sectoral and cross-cutting targets. Explicitly incorporate the Buildings and Construction sector into the NDCs with a mitigation target aimed at net-zero carbon. Implementation and financing plans. Create or adapt regulations that align with the national goal of zero carbon in buildings.	Publication of the NDC and dissemination.				% Progress = (milestone completed / total milestones) x 100 Achieve integration of sectoral zero-carbon goals into the NDCs, including the building and construction sector.	
G1	Existence of mandatory regulations and/or performance requirements related to a national goal of zero carbon in buildings	Short term	Various federal, state, and municipal secretariats. State energy agencies. NDCs, the private sector, academia, and the financial sector (applicable to all milestones).	✓	✓	✓		Establishment of a National Working Group on Decarbonization of the Built Environment (Public Policy Committee)	Communication and dissemination (it is recommended to add communication and dissemination as a milestone, after each milestone)	Establish a baseline for emissions in the building sector. Define the scope and target year of the goal. Develop a sector roadmap. Reform the policy and regulatory framework. Formally adopt the goal. Monitor, report, and adjust. Establish a national Zero Carbon goal (kWh/m²/year), emissions (kgCO₂e/m²/year), or renovation rates.	Defining sector and subsector targets. Translating the net-zero goal into specific goals: Social housing, public buildings, retail, hospitals, schools. New construction vs. existing buildings. Establishing targets for energy intensity (kWh/m²/year), emissions (kgCO₂e/m²/year), or renovation rates.	Transformation Roadmap Design: Develop a national roadmap for decarbonizing the built environment, similar to those promoted by GlobalABC. Include key measures: codes, financing, value chain, data, capacities, and governance. Define implementation and monitoring mechanisms.	Regulatory and institutional alignment: Update the NOM and NMX with progressive emission reduction targets. Establish sustainable public procurement criteria for public buildings.	Inclusion of the commitment in international frameworks. Integrate the net-zero goal for the built environment into: Revised NDCs. Long-term strategies (LT-LEDS). Reporting to the UNFCCC. Participate in international initiatives such as: GlobalABC, Buildings Breakthrough, SBTI for Construction, Race to Zero.			% Progress = (milestone completed / total milestones) x 100
G6	Availability and access to a local carbon market (Measurement, Reporting and Verification)	Short term	SEMARNAT		✓	✓		Conduct a diagnosis of the GHG mitigation potential in buildings (operational and embodied carbon). Update the General Law on Climate Change on the linking mechanisms between the Emissions Trading System (ETS) and the Voluntary Carbon Market (VCM).	Develop or adapt specific MRV methodologies for energy efficiency, renewable energy, and sustainable construction projects.	Implement pilot projects for buildings that reduce emissions and generate verifiable credits under international (such as the Gold Standard, VERRA) or national standards.	Include the building sector as a valid option within the voluntary and/or regulated market. This can be done through the expansion of the national ETS or through specific regulations.	Create a national platform for the registration and traceability of carbon credits, with a specific line for buildings.	Establish incentives for buyers (companies, governments) to acquire credits from sustainable buildings (e.g., integration into ESG reports).	Train developers, architects, verifiers, financial institutions, and local governments on project design and credit eligibility.	Combine carbon credits with instruments such as green bonds, trusts, or guarantees to increase their financial viability.		% Progress = (milestone completed / total milestones) x 100 Number of carbon credits issued for green building projects. Clear regulations for the implementation of carbon credits.
G3	Existence of a National Decarbonization Policy or Strategy for the construction sector and its value chain	Mid term	SEMARNAT, SENER, SEDATU, CONAVI, CONUEE, INECC, academia and the private sector		✓	✓		Establishment of a National Working Group on Decarbonization of the Built Environment (Public Policy Committee)	National baseline assessment. Prepare an emissions inventory for the building sector, considering: -Operational emissions (energy use). -Embodied emissions (materials, construction). -Characterize the current building stock by type, use, age, energy consumption, and climatic conditions. -Define governance and develop an agenda for public policy, decree, or regulation, in line with the NDCs.	Design a multisector roadmap. Formulate a national roadmap, following methodologies such as GlobalABC's: - Key areas: governance, codes and regulations, financing, supply chain, data and carbon culture, and capabilities. - Have a clear and agreed-upon definition of zero carbon and resilient buildings and a net-zero built environment. - Define decadal goals: 2030, 2040, 2050. - Include indicators and baselines. - Develop a binding legal instrument (policy, decree, regulation).	Institutional coordination. Create an inter-institutional governance mechanism (e.g., a national working group with SEMARNAT, SENER, SEDATU, CONAVI, CONUEE, INECC, academia, and the private sector). Establish roles and responsibilities. Approval and publication	Link with existing public policies. Integrate the strategy with: -Social and urban housing programs (SEDATU, CONAVI). -Building standards (CONUEE, SENER). -State and municipal urban development and climate change plans. -National energy strategy (transition and electrification).	Implementation tools. Update or generate new NOMs and NMXs with progressive goals toward zero carbon. - Create financial and tax incentives. - Establish minimum requirements for construction permits. - Promote national or international certifications (EDGE, CEELA, CASA, LEED, etc.).	Monitoring, Dissemination, and Periodic Review. - Establish a sector-wide emissions and efficiency monitoring system. - Publish annual or biennial reports. - Link the strategy to the national climate progress report (BURS, NDCs, LT-LEDS).		% Progress = (milestone completed / total milestones) x 100 Publication of the national strategy for decarbonizing the built environment.	
G4	Availability of regulations aligned with zero carbon certification systems	Mid term	SEMARNAT, SENER, SEDATU, CONAVI, CONUEE, INECC, academia and the private sector	✓	✓	✓		Establishment of a National Working Group on Decarbonization of the Built Environment (Public Policy Committee)	Create a national assessment of regulatory gaps in zero-carbon construction. Include embodied and operational carbon.	Update key NOMs (NOM-008, NOM-020, NOM-031) and integrate net-zero carbon targets. Include more ambitious thresholds. Ensure that updated standards are integrated into the federal legal system in the Quality Infrastructure standard with local implementation mechanisms.	Update the IECC-Mexico code with a net-zero approach and make it mandatory in key urban areas through its adoption in building regulations.	Train municipal and state governments in the implementation and supervision of regulations.	Develop systems for verification, certification, and monitoring of regulatory compliance (e.g., reporting platforms).	Integrate these regulatory goals into the process of updating the Nationally Determined Contributions (NDC).			% Progress = (milestone completed / total milestones) x 100 Number of standards updated Number of standards created
T Technical Solutions																	
	When?	Who?															
T6	Training in selection criteria of technical solutions for decarbonization and climate resilience	Short term	Public sector (SEMARNAT, SEDATU, CONAVI, INDAABIN, SHF) Expert evaluators. Public and private universities in architecture, civil engineering, and urban planning programs. Federal government (INECC, SECIHTI) University research centers (CCA-UNAM) Modeling experts	✓	✓	✓	✓	Create a national training strategy on decarbonization and climate resilience for the built environment.	Establishment of a National Working Group on decarbonization and climate resilience of the built environment	Establish minimum standards of technical knowledge for municipal officials and designers	Conducting workshops and reaching consensus on technologies already available locally, which ones to apply, and when	Reform curricula to incorporate life cycle analysis, bioclimatic design, renewable energy, and risk adaptation. Include these topics in universities and technical schools. Include capacity building as a priority action within building regulations and other public policy instruments related to the built environment.	Develop technical materials by climate region. Guides to technical solutions (passive and active) adapted to the local context, with selection and comparative analysis tools.	Fund regional climate innovation and training centers for construction. These spaces act as living laboratories to train builders, technicians, students, and local governments.			% Progress = (milestone completed / total milestones) x 100 Number of people trained
T7	Incorporation of climate resilience strategies from project planning and design	Mid term	Public sector (SEMARNAT, SEDATU, CONAVI, INDAABIN, SHF) Expert evaluators. Public and private universities in architecture, civil engineering, and urban planning programs. Federal government (INECC, SECIHTI) University research centers (CCA-UNAM) Modeling experts				✓	Establishment of a National Working Group on Climate Resilience in the Built Environment (Technical Committee).	Integrate long-term climate change scenarios into building regulations. Incorporate minimum adaptation requirements into local regulations, starting with vulnerable regions (e.g., coasts, highlands, heatwave areas). Develop national guidelines for resilient architectural design. Link the methodology to national resilience policies, regulations, and/or plans (RIDE Real Estate Assessment Model). Incorporate climate resilience as an impact factor in real estate appraisals.	Technical and Curricular Training: -Include projection-based climate resilience in architecture, urban planning, and civil engineering programs. -Conduct workshops and reach consensus on applicable strategies, which ones to apply, and when.	Tools and technical guides. Create platforms that integrate official climate projections (INECC, CCA-UNAM) with architectural modeling software (e.g., DesignBuilder, Rhino-Grasshopper, Revit). Technical guides based on regional climate, as part of a NOM, focused on passive design, building form, materials, and location.	Tax Incentives: -Bonuses, credits, or priority access to programs such as Infonavit, CONAVI, or SHF for projects with long-term climate design. -Tax incentives for real estate developers and for social and private housing. Financial Incentives: -Create or integrate, as a requirement within financial instruments for sustainable construction, the calculation of future risks in scenarios of 70 to 100 years, most frequently caused by climate change.	Replicable pilot projects.			% Progress = (milestone completed / total milestones) x 100	
T4	Availability of renewable energies for integration into the decarbonization pathway of buildings	Short term	Public sector (SEMARNAT, SEDATU, CONAVI, INDAABIN, SHF) Expert evaluators. Public and private universities in architecture, civil engineering, and urban planning programs. Federal government (INECC, SECIHTI) University research centers (CCA-UNAM) Modeling experts		✓		✓	Establishment of a National Working Group on Climate Resilience of the Built Environment (Technical Committee).	Integrate long-term climate change scenarios into building regulations. Incorporate minimum adaptation requirements into local regulations, starting with vulnerable regions (e.g., coasts, highlands, areas with heat waves). Develop national guidelines for resilient architectural design. Link the methodology to national resilience policies, regulations, and/or plans (RIDE Real Estate Assessment Model). Incorporate climate resilience as an impact factor in real estate appraisals.	Technical and curricular training: -Include projection-based climate resilience within architecture, urban planning, and civil engineering programs. -Conduct workshops and reach consensus on applicable strategies, which ones to apply, and when.	Technical tools and guides. Create platforms that integrate projections. Official climate models (INECC, CCA-UNAM) using architectural modeling software (e.g., DesignBuilder, Rhino-Grasshopper, Revit). Technical guides based on regional climates, as part of a NOM, focused on passive design, building form, materials, and location.	Tax incentives: Bonuses, credits, or priority access to programs such as Infonavit, CONAVI, or SHF for projects with long-term climate design. -Tax incentives for real estate developers, as well as for social and private housing. Financial Incentives: -Create or integrate, as a requirement within financial instruments for sustainable construction, the calculation of future risks in 70- to 100-year scenarios most frequently caused by climate change.	Replicable pilot projects.			% Progress = (milestone completed / total milestones) x 100 Number of guides and manuals published Directory of technology and service providers	
T3	Availability of technologies for the implementation of energy efficiency strategies and improvement of energy performance from the design stage	Short term	Public sector (SEMARNAT, SEDATU, CONAVI, INDAABIN, SHF) Expert evaluators. Public and private universities in architecture, civil engineering, and urban planning programs. Federal government (INECC, SECIHTI) University research centers (CCA-UNAM) Modeling experts	✓				Establishment of a National Working Group on Climate Resilience of the Built Environment (Technical Committee).	Integrate long-term climate change scenarios into building regulations. Incorporate minimum adaptation requirements into local regulations, starting with vulnerable regions (e.g., coasts, highlands, areas with heat waves). Develop national guidelines for resilient architectural design. Link the methodology to national resilience policies, regulations, and/or plans (RIDE Real Estate Assessment Model). Incorporate climate resilience as an impact factor in real estate appraisals.	Technical and curricular training: -Include projection-based climate resilience within architecture, urban planning, and civil engineering programs. -Conduct workshops and reach consensus on applicable strategies, which ones to apply, and when.	Technical tools and guides. Create platforms that integrate projections. Official climate models (INECC, CCA-UNAM) using architectural modeling software (e.g., DesignBuilder, Rhino-Grasshopper, Revit). Technical guides based on regional climates, as part of a NOM, focused on passive design, building form, materials, and location.	Tax incentives: Bonuses, credits, or priority access to programs such as Infonavit, CONAVI, or SHF for projects with long-term climate design. -Tax incentives for real estate developers, as well as for social and private housing. Financial Incentives: -Create or integrate, as a requirement within financial instruments for sustainable construction, the calculation of future risks in 70- to 100-year scenarios most frequently caused by climate change.	Replicable pilot projects.			% Progress = (milestone completed / total milestones) x 100 Number of guides and manuals published Directory of technology and service providers	



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T5	Knowledge of affordable methodologies for the calculation and management of embodied carbon and consulting services	Mid term	Public sector (INECC, CONUEE, SENER, SEDATU, CONAVI) University research laboratories (UNAM, IPN, etc.) ONNCE INEGI, SCT, SEDATU, Ministry of Economy Public and private universities			✓		Develop or adapt simplified national methodologies: -Adapt international tools (One Click LCA, eTool, Athena, EC3, etc.) to the Mexican context, considering: -Database of local construction materials and processes. -Regional emission factors from INECC or CFE. -Generate abbreviated and visual methodological manuals to calculate embodied carbon in different types of buildings (housing, offices, equipment).	Create a national database of construction materials with emission factors. Establish a public and open database on construction materials with information such as: -Carbon footprint per unit. -Life cycle of typical materials (cement, steel, concrete, blocks, wood, etc.). Align with global initiatives such as EPDs (Environmental Product Declarations) and the EU Level(s) scheme.	Build technical capacity at the national and subnational levels: Design and implement technical training programs for the use of tools aimed at: -Architects, engineers, and developers. -Government officials in public works and urban regulations.	Promote pilot projects and national case studies, primarily in vulnerable communities and public buildings. Fund and promote projects that: - Assess the embodied carbon footprint. - Compare scenarios for conventional and alternative materials. - Present environmental and life-cycle returns. Publish open and replicable results.	Integrate the calculation of IQ into national standards and certifications: National sustainable building certification (e.g. NMX-AA-164). -Public bidding criteria (educational infrastructure, healthcare, housing). -Incorporate IQ requirements into the NIDM/NMX. Amend regulations to allow the use of a percentage of residual and low-carbon materials such as fillers and limestone.	Create a digital platform where you can download or be directed to freely available tools.					% Progress = (milestone completed / total milestones) x 100 Number of people trained
T2	Establishment of public commitments by the private sector to decarbonize their assets and make them climate resilient	Mid term	Banks, chambers, regulatory bodies	✓	✓	✓		Require or incentivize companies to align with the parameters established in the Mexican Taxonomy. Companies must publicly commit to net-zero carbon goals. Report concrete actions on energy efficiency, renewable energy, resilience, and embodied carbon.	Align with the Mexican Sustainable Taxonomy published by the Ministry of Finance (SHCP) to Establish which investments and projects qualify as sustainable - Stimulate alignment of the financial and business sectors with zero-carbon goals. - Facilitate access to green loans or preferential financing.	Require in federal and state bidding processes: - Declaration of GHG emissions. - Decarbonization and resilience commitments or plans. - Environmental certifications or assessments (e.g., ISO 50001, EDGE, etc.).	Strengthen and promote ESG reporting frameworks and alignment with TCFD/ISSB Establish the use of TCFD (Task Force on Climate-related Financial Disclosures) or ISSB (International Sustainability Standards Board) as a minimum standard for: - Publicly listed companies. - Companies accessing public financing or tax incentives.	Sign voluntary sector-wide decarbonization and resilience agreements (construction, retail, finance, manufacturing, housing) that: - Define sector-wide roadmaps. - Establish gradual goals with indicators and timelines. - Include public-private technical and financial support.	Offer fiscal and non-fiscal incentives for public commitments: - Reduction in income tax for investments in energy efficiency or resilience. - Streamlining permits for sustainable development. - Access to green financing (Banobras, Nafri, multilateral banks).	Monitor and publicly report progress Publish an annual report: - Progress on emissions reduction and resilience measures. - Success stories and replicable best practices.			% Progress = (milestone completed / total milestones) x 100 m2 of net zero-carbon built area	
F	Finance	When?	Who?	Energy Efficiency	Operational	Embodied	Resilience	MILESTONE & SUBGOAL 1	MILESTONE & SUBGOAL 2	MILESTONE & SUBGOAL 3	MILESTONE & SUBGOAL 4	MILESTONE & SUBGOAL 5	MILESTONE & SUBGOAL 6	MILESTONE & SUBGOAL 7	MILESTONE & SUBGOAL 8	MILESTONE & SUBGOAL 9	INDICATORS	
F1	Establish a financial model, with fiscal and non-fiscal incentives for zero-carbon and resilient projects in the construction sector	Short term	Trade associations Consulting firms Government Construction companies Banks Regulators National and international financial institutions	✓	✓	✓	✓	Diagnostic and technical design (development of the financial model, business case, taxonomies, etc.). -Establishment of a Working Group on Sustainable Building and Construction Financing and convening of participants (Financial Committee). -Identify the additional costs of net-zero carbon and resilient construction (thermal envelope, renewable energy, water efficiency, low-carbon materials, etc.). -Quantify expected operational savings (energy, water, maintenance, health). -Analyze financing barriers: access to credit, financial costs, risk perception. -Estimate the financial gap that justifies the tax incentive.	Incentive scheme design: -Proposal for federal or local tax incentives, for example: -Deductions or exemptions from income tax or VAT for certified developers. -Exemption from property taxes or property acquisition taxes for net-zero housing. -Accelerated depreciation of green assets. -Densification bonuses in urban development regulations.	Coordination with green financing: -Link tax incentives to green financing sources (Green loans with preferential rates (INFONAVIT, SHF, Banobras, FIRA). -Green bonds (BMV / MexiCO2). -Multilateral programs (IDB, GCF, OEF, UNDP). -Create programs and financing sources to promote innovation in Mexico.	Pilot projects: -Launch pilot projects with public or private developers in different regions. -Monitor economic, environmental, and social impact (emissions reduction, ROI, green jobs). -Adjust parameters based on results.	Approval and launch of the model: -Integrate the model into the local taxonomy. -Climate Change Law, Housing Law, Income and Expenditure Law. -Urban development plans, building regulations. -Sectoral programs (PECC, PROSEGH, ENASES, etc.).					% Progress = (milestone completed / total milestones) x 100 Publication of the financial model	
F3	Linking energy efficiency, zero carbon and building resilience with ESG performance reporting frameworks and disclosure standards	Mid term	Trade associations Consulting firms Government Construction companies Banks Regulators National and international financial institutions	✓	✓	✓	✓	Establishment of a Working Group on Sustainable Financing for Buildings and Construction and call for participants (Technical-Economic Committee)	Compendium: Develop a guide/manual of financial/accounting best practices linking decarbonization, resilience, and ESG in the built environment, aligned with reporting frameworks under national (if applicable) or international regulations.	Promote the development of national regulations alongside local building regulations.	Establish measurement and disclosure systems: -Measure and monitor key energy and climate performance indicators: -Establish internal protocols for: -Third-party verification (e.g., certification bodies, ESCOs). -Integration into annual or sustainability reports. -Use the Mexican taxonomy. -Publicly report the ESG performance of the real estate portfolio.	Education and awareness-raising among financial institutions at the management level. Synergy between consultants to facilitate and speed up the measurement process. Creation of generally accessible tools to support decision-making.	Using ESG performance as a competitive advantage Link it to: -Issuance of green or sustainable bonds. -Access to green or sustainable financing (prime rate, blended finance). -Improvement in the GRESB rating or other indices. Promote awareness of sustainable opportunities to the end customer.	Environmental: Energy consumption per m², operational and embedded emissions (CO₂e/m²), green certifications, water efficiency, low-carbon materials, renewable energy generated or contracted. Social: Accessibility, indoor air quality, thermal comfort, occupant health, social inclusion (affordable housing, gender), green jobs generated. Governance: Corporate policies on sustainable building, regulatory compliance, climate strategy, transparency, and environmental audits. Begin establishing joint goals and objectives. Action steps and well-defined horizons.	Dissemination of reports and identification of improvements in key areas (Mandatory for public companies and recommended initially for non-public companies)	% Progress = (milestone completed / total milestones) x 100		
F4	Guidelines for the verification and disclosure of climate risks to include in project economic models	Short term	Banks, insurance and consultants. WorldGBC, SUMe, WRI				✓	Establishment of a Working Group on Sustainable Financing of Buildings and Construction and call for participants (Technical-Economic Committee) to evaluate existing tools and validate which ones are approved for the financial system.	Climate risk assessment. Financial analysis of inaction.	Develop a climate risk management guide/manual (identification, assessment, verification, and reporting) to be included in the financial model/business case. Approved methodology for risk assessment, financial analysis of the cost of inaction, and climate risk of the asset due to inaction.	Develop financial analysis guidelines. Financial evaluation methodologies.	Integrate future climate change into the bioclimatic design of buildings to increase their resilience and take into account potential risks posed by the property's location. Create a climate risk classification for each asset, as well as adaptation and mitigation efforts to reduce risks, and integrate these criteria into financial models. Study of international labels and adapt them for easy use by banks.	Integrate adaptation actions and demonstrate their effectiveness. The price of resilience in assessing asset costs.	Approve and publish the document/guide for correcting the disclosure of the classification system and its implementation in the financial system.	Create resilience-building case studies.	Classify how much or how little resilience the building has.	% Progress = (milestone completed / total milestones) x 100	
F5	Capacity building in technical-financial analysis with a project life cycle approach and best practices considering climate mitigation and adaptation	Short term	Banks and consultants or verifiers specializing in sustainable finance. - Experts in sustainable construction/financing. - Banks - Developers - Consultants - Verifiers - Government - International institutions - Sustainable Construction Councils	✓	✓	✓	✓	Establishment of a Working Group on Sustainable Financing for Buildings and Construction and call for participants (Technical-Economic Committee)	Local training, through academia and/or national and international consultants	Train financial sector professionals on the benefits of considering the return on investment from implementing energy efficiency measures to reduce interest rates on financial instruments for sustainable construction.	Dissemination of sustainable products to the end user. Internal communication strategies that achieve this).	Dissemination of training methodology and results. Standardization of the language used to verify and evaluate results.	Monitoring and improvements. Feedback to regulators and the working group/Technical/Economic Committee				% Progress = (milestone completed / total milestones) x 100	
F2	Establishment of budget guidelines for zero-carbon and resilient construction projects	Mid term	SUMe, IFC, SHF, INFONAVIT, Developers	✓	✓	✓	✓	Establishment of a Working Group on Sustainable Financing for Buildings and Construction and call for participants (Technical-Economic Committee).	Development of guidelines and directives to consider when preparing, presenting, and evaluating budgets for sustainable construction projects, aligned with the financial model.	Incorporation of Sustainable Taxonomy criteria into financial products.	Approve and publish document/guide.						% Progress = (milestone completed / total milestones) x 100	
D	Data	When?	Who?	Energy Efficiency	Operational	Embodied	Resilience	MILESTONE & SUBGOAL 1	MILESTONE & SUBGOAL 2	MILESTONE & SUBGOAL 3	MILESTONE & SUBGOAL 4	MILESTONE & SUBGOAL 5					INDICATORS	
D3	Digital solutions for measurement, monitoring, control and automation of buildings such as BIM modeling, AI, SG, and big data	Mid term	Specialists and non-governmental organizations Building operators (with success stories) Organizations, universities, private sector Private and educational sectors	✓	✓			Diagnostic of the current state of the use of digital solutions in the construction sector in Mexico, including technological and regulatory barriers.	Benchmark analysis to measure the lag against the international context	Identify and systematize existing success stories in the country regarding the use of digital solutions in buildings to build local benchmarks. It is advisable to include their positioning in relation to other international contexts.	Integrate these technologies into academic training through agreements with universities and student discounts on modeling and simulation platforms adapted to the Mexican climate. Generate alliances and synergies from senior management.	Implementation of demonstration pilots in new or existing buildings that use digital solutions for energy efficiency, comfort, and resilience.	Impact assessment of the pilots (energy, water, comfort, data) and publication of results.	Development of a technical guide or manual for the adoption of digital technologies for scaling up at the municipal, state, or federal level.	Dissemination of technical guide		Number of buildings (by productive sector or economic activity) that have adopted a digital solution. Number of workshops, training sessions, or partnerships conducted for technological dissemination. Probability of implementation percentage	
D2	Provide measurement and benchmarking tools for efficient, zero-carbon buildings and resilient	Mid term	SUMe, Government, Public and private actors/developers	✓	✓	✓	✓	Map and select existing tools. Open more options focused on non-residential buildings.	Provide training in existing tools such as EDGE, ARC, and BETTER. For immediate use and basic energy diagnostics. Look for tools adapted to Mexico. Existing tools can assist or complement, but there must be a national one.	Develop a national assessment methodology. Aligned with the baseline and with efficiency, carbon, and resilience criteria.	Design the national tool that is accessible and user-friendly. Free, with minimal data requirements and a modular approach, including resilience parameters.	Test in various pilot projects: Validate functionality and comparability across different typologies and regions.	Approve and publicly launch the tool. Publish pilot results and open it for national use. Disseminate the tool.	Apply the tool in credit risk analysis			Number of public tools available for diagnosis and evaluation in the Mexican context. Number of buildings evaluated with these tools.	
D5	Capacity building in mechanisms and information technologies for measurement, registration, verification and reporting of emissions	Short term	Federal government, municipal governments, private companies (construction companies), banks, technology providers. Developers and operators		✓	✓		Identify relevant monitoring technologies: Map commercially available systems (BMS, IoT, sensors, dashboards, etc.). A national database is required.	Dissemination of existing information. Specific training objectives with guidelines.	Develop technical guidelines for installation and use: Create practical guides adapted to the Mexican context.	Identify and provide training to key stakeholders	Train key players in the construction sector. In the selection, operation, and data utilization of these technologies.	Implement demonstration pilots: Install monitoring systems in representative public and private buildings.	Connect systems to national reporting platforms. - Ensure that the data is useful for evaluating impact, performance, and compliance with goals defined by laws/regulations. - Provide tax/financial incentives. - Develop a standard based on the results.	Promote their incorporation into financing or certification programs: - Establish criteria that recognize the use of these technologies. - Consider technical issues for cybersecurity and interconnection with the systems involved.		Number of people trained in BMS or monitoring technologies. Number of buildings that integrate functional BMS. Training effectiveness	
D1	Provide tools or databases for defining energy efficiency, embodied and operational carbon, and resilience goals for the construction sector	Mid term	SUMe, Government, Public and private actors/developers	✓	✓	✓	✓	Form an inter-institutional technical group: academia, the private sector, and international organizations to coordinate the process.	Review climate commitments and international targets: Analyze existing benchmarks and targets in countries with comparable contexts.	Propose differentiated goals for energy efficiency, embodied carbon, operational carbon, and resilience.	Validate goals with key stakeholders and adjust based on evidence and technical feasibility.	Publish and make official the national goals	Define monitoring and updating mechanisms: Establish indicators, review frequency, and those responsible for follow-up.				Number of sectoral goals defined and published. Number of goals achieved	
D4	Data transparency to promote leadership, favor comparability, management and trust in the dissemination of results	Mid term	Energy agency, energy secretary, local governments, legislative branch	✓	✓		✓	Creation of an inter-institutional committee (government, private sector, academia, and civil society) to lead the definition of the data strategy and methodologies.	Search and analyze how they are done in other countries	Launch a strategic campaign to educate the industry on the benefits of data sharing: leadership, reputational enhancement, and early regulatory compliance.	Definition of measurement, verification and reporting (MRV) methodology. Establish what is measured, how it is measured, how often it is measured, and how it is verified.	Design of an incentive and penalty system: Establish concrete benefits for those who report (visibility, access to funds, certifications) and possible restrictions for those who do not.	Confidentiality agreements and anonymization mechanisms: Establish clear protocols to protect sensitive data and foster trust.	Development and launch of an open-access platform: Integrate the collected data into a visual, georeferenced, and updatable platform.	Training and technical assistance program: Supporting stakeholders (public and private) with tools, workshops, and standardized reporting formats, leveraging existing digital and knowledge tools.		Number of institutions that publish building performance data. Percentage of buildings reporting open data by type.	



Mexico

Zero Carbon and Climate Resilience Readiness Framework - Enablig Actions Matrix

ID	READINESS GOALS (per Pillar)	DATE	STAKEHOLDERS	CORE COMPONENTS				ENABLING ACTIONS (What?)									INDICATORS	
				Energy Efficiency	Operational	Embodied	Resilience	MILESTONE & SUBGOAL 1	MILESTONE & SUBGOAL 2	MILESTONE & SUBGOAL 3	MILESTONE & SUBGOAL 4	MILESTONE & SUBGOAL 5	MILESTONE & SUBGOAL 6	MILESTONE & SUBGOAL 7	MILESTONE & SUBGOAL 8	MILESTONE & SUBGOAL 9		
M2	National working group on energy efficiency, zero carbon and resilience in buildings	Short term	Government, NGOs, companies, coalitions (ACs and collectives), international observers, experts in traditional processes	✓	✓	✓	✓	There is currently national work on energy efficiency, zero-carbon, and building resilience. The next step would be the creation of local working groups.	Definition of the Working Group's governance, objectives, goals, and activities. Recover a contemporary paradigm of local governance and then standardize, regulate, and update it with agreed-upon objectives.	Launch of the local Working Group, including sub-working groups with specific objectives	Monitoring and dissemination of the achievement of the Working Group's objectives and goals							Number of working groups created at the local level Development of local regulations
M4	Existence of a mechanism for capacity development in climate adaptation and resilience in buildings	Short term	Organizations, businesses and government, climate resilience experts, universities				✓	Establishment of a local technical committee to create capacity-building mechanisms and programs aligned with the National Working Group.	Create programs for architects, engineers, municipal authorities, and construction communities. Develop capacity to calculate the costs of not integrating resilience measures into building design to improve climate adaptation.	Local training through academia and/or international consultants. Develop official guidelines based on climate evidence and territorial risk. Guidelines for verifying and disclosing climate risks to be included in project economic models. Generate practical methodologies to assess and monitor building resilience. Strengthen relationships with institutions such as CONUEE to disseminate the efficient building code.	Design a tool for analyzing return on investment and operating costs. Establish tax incentives, climate risk funds, and insurance mechanisms linked to building resilience.	Design a free tool to analyze climate change and implement resilient projects.	Dissemination of training achievements and results at the local level.					Number of university programs with topics focused on climate adaptation and resilience. Number of local training programs. Number of workshops and webinars implemented.
M3	Existence of a mechanism for capacity development in energy efficiency and decarbonization in buildings	Short term	Government, NGOs, companies, groups, researchers and experts, universities, schools, academia, entrepreneurs, media, communication professionals	✓	✓	✓		Establishment of a local technical committee to create capacity-building mechanisms and programs aligned with the National Working Group.	Create training programs for professionals in the construction and building sector and stakeholders across the construction value chain. Train company staff and managers in best practices to reduce their environmental impact. Provide training to construction professionals on the implementation of NOM regulations and NMX standards for energy efficiency and renewable energy. Integrate decarbonization topics for the building sector into university curricula, such as: - Life Cycle Analysis of buildings - Bioclimatic Architecture Create programs aimed at training local public servants: - Train local governments to integrate NOM regulations and NMX standards for energy efficiency and renewable energy into their building regulations. - Train financial sector professionals to understand the benefits of net-zero buildings and projects and the opportunities for creating financial instruments. Create a training program to raise awareness about the need for communication.	Local training, through academia and/or local and international consultants, to: - Develop official, evidence-based guides and manuals. - Generate practical methodologies to assess and monitor the decarbonization process.	Create study programs at all levels (from basic education to postgraduate).	Dissemination of training achievements and results	Communication, feedback, and follow-up of initiatives (with construction workers linked to a green culture)					Number of university programs with topics focused on decarbonization. Number of training programs created locally. Number of workshops and webinars implemented. Monitoring and updating of these programs. Development of digital tools.
M1	Existence of a 'public declaration of commitments' as a requirement to ensure transparency, access to financial and regulatory incentives for the public sector	Mid term	Government and experts on climate commitments.	✓	✓	✓	✓	Establish a public sector agreement on the adoption of decarbonization and asset resilience commitments. Make the submission and publication of institutional climate commitments (NDC-type by entity) mandatory.	Establish climate commitments and develop mandatory training and information programs on implementation that include benefits and implications.	Create mandatory formats for each federal and state public entity to report emissions, goals, and annual progress (GHG Protocol or CDP style for government). Translate meeting these goals into incentives.	Establish that only entities with active and verified climate commitments can access infrastructure, green bond, and international funds.	Establish independent assessments of institutional climate progress and publish their results. Define or select a mechanism or methodologies for submitting commitments (e.g., the Zero Carbon Buildings Commitment).	Monitoring and tracking the disclosure of commitments established by targets, entities, and key stakeholders.					% Progress = (milestone completed / total milestones) x 100. Statement of resources for managing restoration actions that have resulted in emissions reductions.