CLIMATE AMBITION
BEYOND EMISSION NUMBERS
Taking stock of progress by looking inside
countries and sectors

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CLIMATE AMBITION BEYOND EMISSION NUMBERS

Taking stock of progress by looking inside countries and sectors

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The results presented in this report are outputs of the academic research conducted under the DDP BIICS project as per the contractual agreement. The academic work does not in any way represent our considered opinion for climate negotiations and also does not reflect the official policy or position of the Government of Mexico.
How is this document relevant to the Global Stocktake?

This document is part of a collective report that assesses the evolution of climate ambition in 26 countries and 3 hard-to-abate sectors through a granular and context-specific analysis of trends and progress of national and sectoral transformations. This approach allows identifying what hinders and spurs action in countries and sectors, and understanding the conditions that can support enhanced ambition, which could be political, social, economic, governance.

These insights are directly relevant to four overarching functions of the Global Stocktake in support of its desired outcome, i.e. “to inform Parties in updating and enhancing, in a nationally determined manner, their actions and support in accordance with the provisions of the Paris Agreement, as well as enhancing international cooperation for climate action” (Article 14.3 of the Paris Agreement):

• Create the conditions for an open and constructive conversation on global cooperation (on e.g., technology, trade, finance, etc.), based on an in-depth understanding of the international enablers of enhanced country ambition.
• Organize a process for knowledge sharing and collective learning, based on concrete examples of actions already in place or being discussed, including best practices.
• Create space for open dialogues across different stakeholders to support better coordination of actions, based on a detailed understanding of the levers to be activated to enhance ambition in national and sectoral transitions
• Facilitate ownership by decision-makers of the climate challenge and the risks and opportunities of the low-emission and resilient transition, based on context-specific and granular analysis of barriers and enablers.

More specifically, the collective report in general – and this document in particular – can contribute to address some of the key guiding questions for the Global Stocktake, notably:

• What actions have been taken to increase the ability to adapt to the adverse impacts of climate change and foster the climate resilience of people, livelihoods, and ecosystem? To what extent have national adaptation plans and related efforts contributed to these actions (Decision 19/CMA.1, paragraph 36(c))? How adequate and effective are current adaptation efforts and support provided for adaptation (Article 7.14 (c) Paris Agreement)?

1 The full report “Climate ambition beyond emission numbers - Taking stock of progress by looking inside countries and sectors” can be found at: https://www.iddri.org/en/publications-and-events/report/climate-ambition-beyond-emission-numbers-taking-stock-progress
What are the barriers and challenges, including finance, technology development and transfer and capacity-building gaps, faced by developing countries?

What is the collective progress made towards achieving the long-term vision on the importance of fully realizing technology development and transfer in order to improve resilience to climate change and to reduce greenhouse gas emissions referred in Article 10.1 of the Paris Agreement? What is the state of cooperative action on technology development and transfer?

What progress been made on enhancing the capacity of developing country Parties to implement the Paris Agreement (Article 11.3 Paris Agreement)?

To achieve the purpose and long-term goals of the Paris Agreement (mitigation, adaptation, and finance flows and means of implementation, as well as loss and damage, response measures), in the light of equity and the best available science, taking into account the contextual matters in the preambular paragraphs of the Paris Agreement:

- What are the good practices, barriers and challenges for enhanced action?
- What is needed to make finance flows consistent with a pathway towards low GHG emissions and climate-resilient development?
- What are the needs of developing countries related to the ambitious implementation of the Paris Agreement?
- What is needed to enhance national level action and support, as well as to enhance international cooperation for climate action, including in the short term?
- What is the collective progress made by non-Party stakeholders, including indigenous peoples and local communities, to achieve the purpose and long-term goals of the Paris Agreement, and what are the impacts, good practices, potential opportunities, barriers and challenges (Decision 19/CMA.1, paras 36(g) and 37(i))?
Country commitments as reflected in enhanced Nationally Determined Contributions submitted to the UNFCCC are insufficient to put the world on track to achieve the collective objective of the Paris Agreement to hold temperature increase below 2 °C or 1.5 °C above pre-industrial levels. Furthermore, concrete policies and actions adopted by countries on the ground are often not sufficient to achieve these NDC targets. These conclusions highlight the need to increase ambition and to provide convincing evidence to accelerate action in the immediate and short term to give effect to this ambition. Yet these assessments are not sufficient to effectively guide the progressive increase of ambition, as organized by the cyclical process of the Paris Agreement.

**APPROACH**

With this imperative in mind, this report adopts a different, complementary, perspective on climate ambition. It seeks to open the box of emission pathways, by considering multiple dimensions of the conditions that will make these pathways possible. These are technical, economic, political, social and governance considerations in need of attention to enable the required far-reaching and systemic transformation towards the long-term goal. On the one hand, the revision of emission targets needs to be directed by an assessment of how drivers of emissions should change to trigger transformation. On the other hand, converting emissions’ targets into pertinent concrete implementation requires well-designed policy packages and investment plans that are also informed by a clear and detailed understanding of the starting point, priorities and interplays between the available levers of transformation.

This bottom-up assessment aims at contributing to the process of collective learning in support of the progressive increase of collective ambition, as inserted at the core of the Paris Agreement paradigm. Approaching climate ambition through the lens of underlying transformations calls for reflecting the heterogeneous nature and the multi-faceted aspects of transitions in different sectors and countries. This forces a move away from a purely global perspective and adopts a more granular approach based on country and individual sector perspectives. Thus, the report explores trends and progress on these transformations, as locally observed over the past years, notably since the Paris Agreement. This ‘backwards looking’ approach can help identify where developments are going in the right direction, where they should be accelerated and where major tensions remain that should be addressed as a priority to avoid undermining the transition. The picture of the state of the ambition discussion, firmly embedded in the country and sectoral realities, can provide means for reflection and action within the international climate community, particularly to inform focus areas for advancing the collective ambition agenda.

**STRUCTURE OF THE REPORT**

This country report describes the recent evolutions of domestic discourses on climate ambition, national climate policy, national governance and concrete policies and actions with a significant effect on GHG emissions. The chapter highlights a selection of striking and structurally important elements to advance the transformation towards carbon neutrality from an in-country perspective.

This report is part of a full series of 26 country chapters and three sectoral chapters. The full report includes a “summary for decision-makers” to present 10 cross-cutting messages emerging from the country and sector analysis, as a guide to the selection of priorities for collective action in the post-COP26 period.

Climate ambition beyond emission numbers: taking stock of progress by looking inside countries and sectors

MEXICO

**CLIMATE AMBITION SINCE THE PARIS AGREEMENT**

**CLIMATE CHANGE DISCOURSE**

*From Cancún to the Paris COP, Mexico’s active climate diplomacy allowed Mexico to raise the profile of climate change within national policy while presenting itself as a global climate leader.*

In the years prior to COP 21, Mexico was praised for both its national and international engagement with climate change. Following on from its successful hosting of COP16 in 2010, it adopted the 2012 General Law on Climate Change Law (LGCC as Spanish acronym) which framed the country’s long-term climate ambition.

The Paris Agreement provided further stimulus for Mexico to advance its climate credentials by presenting its NDC earlier than most countries (March 2015) and promptly delivering (November 2016) its Mid-Century Strategy in response to paragraph 19 of Article 4.

*While public concern with the climate change increased, this did not translate into ambitious climate action. The perceived importance of climate has receded as international visibility has declined.*

More recently, the AMLO administration has abandoned the goal of being perceived as a leader. By re-iterating the 2015 GHG reduction targets within...
its 2020 NDC update, Mexico failed to address the credibility challenges stemming from recent energy policy measures, while showing disregard for the widespread shift in international discourse towards 1.5°C and “net-zero” targets.

Research by the Pew Research Centre found public opinion concern on climate change increased from 52 to 80 per cent between 2013 and 2018 (significantly above US and Canada in North America). A recent public opinion study from Mexico’s Senate research institute shows climate change ranked seventh from a set of nine environment concerns, with air quality and deforestation at the top.3 Thus, climate action is often seen as a co-benefit to other forms of environmental policy.

Important segments of the business community have equally not embraced a vision of structural transformation, including supporting the expansion of the fossil fuel industry as a development strategy.2 Mexican companies have shown little interest in joining climate initiatives along global peers. For example, only nine publicly listed companies have pledged to use TCFD Disclosures recommendations, and only three companies have targets under the Science-Based Targets initiative, despite the country’s position as major global exporter and OECD economy. 3

INSTITUTIONAL FRAMEWORK AND LEGACY POLICIES

Despite the transformational potential of the LGCC, the energy liberalization reforms of 2013–2015 reaffirmed the domestic commitment to a fossil fuel economy

The unanimous adoption of the LGCC by the Mexican Congress during the final months of the Calderón administration (2012) remains the most significant achievement of national climate policy to date. The law set targets broadly in line with limiting global warming to 2°C, reflecting the ambition Mexico derived from COP16 in Cancún. The LGCC drove significant policy work during the 2013-2015 period to roll out its stipulated institutions and planning instruments, including the establishment of the National Institute for Ecology and Climate Change, the creation of the National Council for Climate Change, and the National System for Climate Change. At the national level, the National Strategy for Climate Change and Special Plan for Climate change laid out a national vision for mitigation and adaptation over 10, 20 and 40 years and concrete action plan for the ministries over the 2012-18 timeframe, respectively, while numerous State and Municipal level plans and laws were also adopted.

Crucially, none of these instruments nor institutions sought to link short or medium-term targets with the long-term national goals, nor was an overall roadmap for a low-carbon transition developed.4 As a concrete example, all policies from 2013 to 2021 simply restated the power sector climate goals first established in 2010 (goals for low emissions electricity to reach 35 per cent by 2024 and 50 per cent by 2050) without relating them to the demands the 2050 emissions target will make of the 2050 power sector. These goals had been originally established in 2010 and already by 2015 were known to misalign with the domestic climate legislation.5 This lack of agreed short-term milestones meant the LGCC’s long-term goals were not a significant input for the Energy Reform which happened immediately after its adoption.

Policies and actions since 2013 have increased investment in oil production and locked in a greater dependency on natural gas across electricity, industry, and other sectors, unhindered by LGCC, NDC or LTS commitments

In 2013, the newly instated Peña Nieto administration started an energy sector transformation

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2 For instance, the business think tank Mexican Institute for Competitiveness (IMCO) defined as a goal to increases oil production by 50 per cent and more tripling natural gas from shale gas production
3 TCFD Supporters and SBTi membership consulted on 22 June 2021.
with the primary objectives of directing foreign investment into oil production and reducing the cost of energy for the economy. Structural choices included constitutional changes to enable foreign investment in hydrocarbons and development of pipeline infrastructure to allow increased imports of low-cost shale gas from the USA for power generation and industry. The policy objective of increased competitiveness in the fossil fuels industry found domestic and international support. International institutions like the IMF applauded the reform for its capability to accelerate use of natural gas in the system. Many in Mexico embraced natural gas epithets as ‘bridge fuel’ and ‘clean fuel’ and looked to Mexico to join the ‘Golden Age of Gas’ so-called by the IEA.

This commitment to natural gas had direct repercussions on Mexico’s climate policy. For example, a carbon tax on fossil fuels was first rolled out in 2014 as part of LGCC implementation (directly charged at point of sale on fuels according to their CO₂ density), with a price of 3.50 USD per ton, with natural gas fully exempt from the tax. The small cost did little to impact the energy economy, while favoring natural gas over other fuels across all uses.

This context limited the scope for Mexico’s NDC, which followed a sectoral approach of emissions reduction with respect to a baseline to establish a whole-economy mitigation commitment for 2030 of reducing GHG emissions by 22% with respect to business-as-usual. The NDC contained no mention of structural change, nor any reference to how targets related to the 2050 emissions limit set by the LGCC. Mexico’s Mid-Century Strategy of 2016 did not address this gap, largely repeating previous policy statements.

Furthermore, since 2015 Mexico has included black carbon as a climate pollutant alongside its GHG accounting – both for the NDC commitments of 2015 and subsequent GHG inventory updates – despite this being inconsistent with relevant IPCC guidelines. This made the substitution of diesel, coal and fuel-oil with natural gas (which has lower emissions of particulate matter) present a far greater apparent climate mitigation than what would result from applying IPCC guidelines. Thus, by deciding to diverge from accepted GHG accounting practice, Mexico’s environmental authorities reinforced the belief – espoused by both private and public sector – that climate targets can be achieved by switching to “clean” fossil combustion, even though this message is inconsistent with national (LGCC) and international (Paris Agreement) goals.

The expectation of natural gas demand growth led the government to use state-owned companies to expand pipelines by 40% and increase of import capacity from the US of more than 220%, with additional import capacity additions under construction. By 2018, Mexico had transformed the electricity state-owned company in a top natural gas trader in North America and a committed advocate of the gasification of the economy, with contracts on US produced natural gas well into the 2040s.

Renewable energy has remained an afterthought within electricity policy, itself secondary to the fossil fuel reform, despite some positive policy developments. The 2013-2015 reforms made important contributions to decarbonization in the electricity sector reform: the establishment of a renewable auction system which successfully de-risked private investment in solar and wind energy projects, coupled to a requirement that power producers surrender a certain number of Clean Energy Certificates (CEL)

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7 Mexico’s 3 Big Steps Towards Comprehensive Carbon Pricing Juan-Carlos Altamirano and Julia Martinez https://www.wri.org/insights/mexicos-3-big-steps-towards-comprehensive-carbon-pricing
9 Black carbon, commonly known as soot, is made up of small particles of solid carbon remaining from imperfect combustion which are dispersed into the atmosphere within the resulting smoke. A sample of emitted black carbon will therefore not be made up of a standard molecule, such as CO₂ or CH₄, but rather will contain a potentially enormous variation of particle sizes depending on fuel used and the technology and quality of combustion. Particle size and meteorological conditions present at the time of combustion or afterwards influence how long the black carbon remains in the atmosphere, with its warming impact further depending on the surrounding environmental conditions. In addition to climate impacts, black carbon has important negative health effects, usually included within particulate matter considerations when studying air quality.
10 Gobierno de México, Sexto Informe de Gobierno, 2018, p. 128-134
each year to ensure demand for their low-carbon power. By 2018 Mexico had proven a successful mechanism to de-risk investment in wind and solar energy. Still, the country missed its 25% target clean electricity by 2018.

While these achievements are welcome, the proportional investments made during the Peña Nieto administration, as shown in the government investment report from 2012-2018 period, show the country’s priorities: while more than 160,000 million USD were directed to oil and gas production, investment in gas pipelines was 12,000 million USD, and 8,600 million USD were presented as “observed or committed to clean energy”.

CURRENT POLICIES AND OPPORTUNITIES

The current AMLO administration’s developmentalist policy program has re-directed infrastructure investment, halting the expansion of private investment in some segments of the fossil economy while expanding SOE participation in others.

In December 2018 the AMLO administration took power under an electoral platform which seeks to recuperate the value creation opportunities of the state-owned energy companies rather than pursuing fossil fuels per se. For instance, it has rejected ventures in offshore oil and inland shale hydrocarbons, the expansion of airflight capacity in Mexico, and long-term contracts to import natural gas from the US. But it is committed to deliver on an expansion of refining capacity owned by the state-owned oil company, Pemex, as showcased by the development of a greenfield refinery at Dos Bocas and the purchase of the outstanding 50% of the Deer Park refinery in Texas.

In the electricity sector, the government has challenged legacy policies developed by regulators in the late 2000s and 2010s that directly reduce the market share of the state-owned utility CFE. Firstly, the bilateral contracts for large consumers that benefited with discounted transmission rates and other regulatory benefits. And secondly, the long-term renewable energy auctions that de-risked private investment, effectively blocking further rollout of renewable generation and putting previous investments at risk. This falls within the AMLO administration’s general revision of policies that historically favored private foreign investment.

While some authors blame these recent challenges for the bulk of Mexico’s lack of climate ambition, others (including us) consider many of the weaknesses of the climate regime as a structural feature present since the early implementation of the LGCC (2012).

Looking forward, decision-makers of different political persuasions should view a structural transition to a low-carbon economy as a source of growth to be incorporated within their development models, rather than as an ideology in its own right.

Mexico’s development towards achieving its climate ambition requires an acceleration and a redirection of investments. In electricity this includes renewable generation assets and electricity grid technologies to manage a solar and wind energy based system. Economy-wide, the change in direction includes the electrification of energy use across transportation, industry, and buildings. National demand for fossil fuels will decline along with international demand in a context where the world economy is moving to structural changes consistent with the objectives of the Paris Agreement. This represents a challenge to existing investment logic in the public and private sector, creating important stranded assets with labor and regional development implications. But it has the potential to generate concrete opportunities for growth for Mexico, given its extensive renewable resources, skilled workforce, industrialized economy, and access to global markets – regardless of the political or market model under which this activity is guided.


**State-owned companies can be catalytic to rapid decarbonization due to their significant asset-based, large workforce and historical legitimacy if they are entrusted with the mandate to decarbonize and plan for the decline of fossil fuel economy**

Today, the federal executive and majority in Congress are committed to the rehabilitation of state-owned companies as a locally appropriate instruments of economic governance. Is decarbonization compatible with such an paradigm? What might it look like? Given one of the characteristics of democratic institutions is the potential for frequent changes in the political platform of governments, it is worth considering the challenge of aligning climate ambition across the ideological spectrum by ensuring that policies are robust within varied political programs, for example, by making state-owned companies greener rather than making them smaller. There are important reasons to consider in the context of Mexico:

Firstly, dominant state-owned companies like electricity CFE effectively pool business risks across its value chain and can shift well-remunerated workers across business lines. For example, in contrast to legal battles and politically protracted processes of negotiation to close coal power generation (seen in Europe), the state-owned company could develop a managed transition for the closure of the two active coal power stations without the need for major tax-payers’ compensation. Secondly, in the oil sector, the decision to suspend new lease bidding rounds is a window of opportunity to plan for declining oil and gas production at least at the pace of domestic fuels consumption reduction. Thirdly, the revision of the tax regime could fill loopholes on natural gas and increase the effective rate of carbon tax with the explicit objective of funding domestic infrastructure for climate actions that result in other economic, health and environment benefits. And, finally, the development of infrastructure by existing or new state-owned companies can lead to structural changes in demand, especially in transportation, with inter-urban train across Mexico’s regions and electrified mass urban transport. The ambition of these mass-transportation solutions should result in a noticeable reduction in fuel demand during this decade. These new ventures include forming joint-ventures between the CFE and state-governments on locally relevant renewable energy programs.14

Thus, in addition to work towards finding a place for successful experiments like renewable auction system, it is plausible to nurture a discussion on a state-manage low carbon infrastructure development, and to view Mexico’s concrete low-emissions development opportunities in this light. In some areas the presence of state enterprises will be beneficial.

**Lack of accountability internationally and domestically over past plants and action (or lack thereof) will remain a major challenge to work on the barriers and opportunities to move from the fossil fuel economy**

Our retrospective on Mexican climate ambition has found that that the diplomatic leadership of 10 years ago, followed by the 2012 Climate Change Law, have remained largely on the margins of national policy ever since. As different administrations have promoted contrasting development paradigms, each with its corresponding vision for the energy economy, the climate question has had little relevance on major policy choices. Concrete climate achievements, such as the Renewable Electricity Auctions, while welcome, have been minor in scale, and constrained to where they do not interfere with the stated direction of travel. Recent action has not been better, challenging the most distinctive achievements of the previous administration and emphasising an environmental view focused on the safety and wellbeing of communities as long as this does not collide with fossil fuel interests. Meanwhile, doubling down national investments on the hydrocarbon value chain, based on expectations of global and domestic oil market resilience over the coming decades, is a direct bet against global decarbonization.

There are at least two domestic and one international institutional condition that contribute to this unfortunate outcome. The first condition is a perennial misalignment between energy and environmental policy in general and climate change in particular, which

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has been widely documented by scholars in politics and administrative sciences. The second condition is the lack of formal rules or practices on accountability over government targets. Officials are not assessed publicly about the failure to meet stated goals and there are not even reviews of achievements of past targets. Mexico missed its renewable energy and GHG mitigation targets in 2012 and 2018, without institutional accountability. Finally, the integration to a North America economic community has meant the alignment to the socio-technical system of the United States which has promoted the expansion of fossil fuel production, including under the promise of “cleaner fossil fuels”.

Policymakers, business leaders, and civil society must understand the potential of resilient low-carbon development on its own merits as relates to economic and social growth through investment, jobs creation, and greater social equality, and find how it can be included within whichever development vision is chosen. Only in this way can sustainable development translate across the political spectrum. Until this occurs, our country will remain a climate laggard.


16 Only the Congress auditing office has pointed to failures to reach targets in their budget and expenditure auditing work, however, these have not resulted in any form of public accountability.
The DDP is an initiative of the Institute for Sustainable Development and International Relations (IDDRI). It aims to demonstrate how countries can transform their economies by 2050 to achieve global net zero emissions and national development priorities, consistently with the Paris Agreement. The DDP initiative is a collaboration of leading research teams currently covering 36 countries. It originated as the Deep Decarbonization Pathways Project (DDPP), which analysed the deep decarbonization of energy systems in 16 countries prior to COP21 (deepdecarbonization.org). Analyses are carried out at the national scale, by national research teams. These analyses adopt a long-term time horizon to 2050 to reveal the necessary short-term conditions and actions to reach carbon neutrality in national contexts. They help governments and non-state actors make choices and contribute to in-country expertise and international scientific knowledge. The aim is to help governments and non-state actors make choices that put economies and societies on track to reach a carbon neutral world by the second half of the century. Finally, national research teams openly share their methods, modelling tools, data and the results of their analyses to share knowledge between partners in a very collaborative manner and to facilitate engagement with sectoral experts and decision-makers.

www.ddpinitiative.org

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