

Mexico and the Environment, Thirty Years after Its Accession to the OECD

México y el medio ambiente a treinta años de su ingreso a la OCDE

Blanca Ileana Villalón Lozano

Permanent Delegation of Mexico to the OECD

bvillalon@sre.gob.mx



Abstract

This article analyses how Mexico's membership in the OECD since 1994 has driven important environmental reforms, improving areas such as air quality and water management, although challenges remain. It also highlights the role of the OECD in promoting a sustainable and integrated approach in the country's environmental policies.



Resumen

En este artículo se analiza cómo la membresía de México en la OCDE desde 1994 ha impulsado importantes reformas ambientales, mejorando áreas como la calidad del aire y la gestión del agua, aunque persisten desafíos. También se destaca el papel de la OCDE en promover un enfoque sostenible e integrado en las políticas ambientales del país.



Keywords

OECD, environment, sustainable growth, biodiversity



Palabras clave

OCDE, medio ambiente, crecimiento sostenible, biodiversidad

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*Blanca Villalón Lozano*¹

Introduction

In 1994, Mexico became the first Latin American country to join the Organisation for Economic Co-operation and Development (OECD), marking a milestone in its foreign policy and economic development. This event not only represented a commitment to economic reforms and trade openness, but also involved the adoption of new environmental policies aligned with international standards.

Thirty years later, it is a timely moment to reflect on the impact of this membership on Mexico's environmental policy, evaluating both the achievements and the challenges that remain. This article examines the evolution of Mexico's environmental policies since its entry into the OECD, focusing on structural changes, reforms implemented, impacts achieved, and future prospects.

¹ I thank the environmentalists who led the SEMARNAT office at the OECD: Germán González, Véronique Deli, Alfonso Zegbe and José Manuel Medina, whose commitment was key to advancing Mexico's environmental policy and strengthening its international presence. Their leadership was essential to the achievements set out in this study. I would also like to thank Jeannette Hennequin, Juan Carlos Serio and Eleonora Rafaelli for their invaluable support and professionalism, which were essential to the development of this work, as well as those who shared their thoughts for this article.

The 1990s were a period of transformation for Mexico, characterized by a transition towards a more open and globalized economy. The signing of the North American Free Trade Agreement (NAFTA) in 1993, which liberalized trade between Mexico, the United States and Canada, marked the beginning of a new economic era. This agreement not only promoted regional economic integration, but also laid the foundation for a framework for cooperation on environmental issues.

Mexico's entry into the OECD in 1994, as the first Latin American country to become a member of this organization, reaffirmed its commitment to structural reforms beyond the economic sphere, such as the adoption of international standards in environmental protection. The OECD, renowned for its focus on economic development, has also played a crucial role in promoting sustainable environmental policies among its members. For Mexico, membership of the OECD meant aligning itself with a group of developed nations that were making progress in protecting the environment and promoting sustainable development.

Prior to joining the OECD, environmental policy in Mexico was in its infancy. During the 1970s and 1980s, attention to the environment in Mexico was limited and mainly focused on the protection of specific natural resources and responding to environmental accidents. Environmental issues were handled at the federal level within the Ministry of Social Development (SEDESOL), which relegated the issue to a secondary position on the public agenda.

Growing international pressure and critical environmental events, such as high levels of pollution in Mexico City, began to change perceptions about the importance of environmental protection. In 1988, Mexico had enacted the General Law on Ecological Balance and Environmental Protection,² the first comprehensive legislation to address environmental issues. However, this law and related policies suffered from a lack of effective implementation and limited resources.

² General Law on Ecological Balance and Environmental Protection (last reform made on April 1, 2024), in *Diario Oficial de la Federación*, January 28, 1988, at <https://www.diputados.gob.mx/LeyesBiblio/pdf/LGEEPA.pdf> (date of access: November 6, 2024).

Changes in environmental policy

Mexico's accession to the OECD in 1994 was a catalyst for environmental reform in the country. As part of the accession process, Mexico had to demonstrate its commitment to improving its environmental policies and adopting international standards. The OECD carries out periodic evaluations through environmental performance reviews (EPR), which provide a comprehensive analysis of each member country's environmental management and provide recommendations for improvement.

The first evaluation made of Mexico in 1998³ highlighted several areas of concern, including air quality, water management, biodiversity conservation, and hazardous waste management. The assessment recommended improving the regulatory framework, strengthening environmental institutions, and promoting intersectoral cooperation. Based on these recommendations, Mexico implemented several key reforms:

- *Importance of intersectoral coordination.* One of the main actions has been to integrate environmental policies with economic and social decisions. The OECD has stressed that greater intersectoral coordination is essential to promote sustainable development. Mexico has worked on an integrated approach to more effectively address environmental challenges, thereby improving natural resource management and the development of public policies.
- *Improvements in environmental regulation.* In response to OECD assessments, Mexico revised its environmental legislation to align it with international standards. The General Law on Ecological Balance and Environmental Protection was updated to include stricter provisions on air and water pollution, as well as on hazardous waste management. In addition, policies were implemented to improve air quality in major cities and to reduce water pollution.
- *Promoting transparency and accountability.* In line with OECD principles, Mexico strengthened its environmental indicators and data-

³ OECD, *OECD Environmental Performance Reviews: Mexico 1998*, Paris, OECD Publishing, 1998, at <https://doi.org/10.1787/9789264162594-en> (date of access: December 2, 2024).

bases to monitor environmental performance, with a particular focus on greenhouse gas emissions and chemical pollution. This improvement in transparency has allowed for greater accountability and better decision-making in environmental policy.⁴

- *Strengthening institutional capacity.* Another important action has been the strengthening of the capacities of environmental institutions to ensure effective management of natural resources. In response, Mexico has worked to improve institutional infrastructure and train its staff on issues related to environmental management and compliance with stricter regulations.

Achievements of environmental policy

Since joining the OECD, Mexico has made significant progress in various areas of environmental policy. Some of the most important achievements are listed below.

Improvements in air quality

Mexico has implemented several initiatives to improve air quality, especially in large urban areas such as Mexico City, which faced critical levels of pollution during the 1990s. The creation of the Metropolitan Air Quality Index (IMECA)⁵ allowed pollution levels to be monitored and reported publicly, facilitating the implementation of more effective public policies. In addition, local emission reduction programs were implemented, such as the Hoy No Circula program, which limits vehicle circulation to reduce pollutant emissions.

⁴ OECD, *OECD Environmental Performance Reviews: Mexico 1998*, Paris, OECD Publishing, 1998, at <https://doi.org/10.1787/9789264162594-en> (date of access: December 2, 2024).

⁵ Comisión Ambiental de la Megalópolis (CAME), “IMECA: Índice Metropolitano de la Calidad del Aire”, in CAME, September 21, 2018, at <https://www.gob.mx/comisionambiental/articulos/imeca-indice-metropolitano-de-la-calidad-del-aire> (date of access: December 2, 2024).

Water and water resources management

Water management has been a central focus of Mexico's environmental policies since joining the Organisation. The country has made significant progress in water resources management, through the creation of river basin councils and the promotion of integrated water management. Irrigation management reforms and the promotion of more sustainable agricultural practices are important steps that have been made toward reducing excessive water use and mitigating pollution of water bodies.

Conservation of biodiversity

Mexico is one of the most biodiverse countries in the world and has taken significant steps to protect its ecosystems. The expansion of the National System of Protected Natural Areas represents an important effort to conserve biodiversity and protect critical habitats. In addition, payment programs for environmental services have been implemented to encourage local communities to conserve natural resources and protect biodiversity. However, deforestation and ecosystem degradation remain significant problems in Mexico. Agricultural expansion, illegal logging and uncontrolled urban development have led to the loss of important forest ecosystems and soil degradation.

Waste and chemical management

The regulation of hazardous waste and chemical substances has improved considerably since Mexico joined the OECD. The country has adopted stricter international standards and encouraged self-regulation in the private sector. These efforts have included improving hazardous waste treatment capacity and introducing control systems for the generation, treatment, and disposal of this waste. Despite these advances, urban solid waste management remains a challenge. Landfill capacity is limited, and recycling infrastructure is not sufficiently developed. In addition, plastic waste and electronic waste are increasing, posing new challenges for waste management in the country.

Challenges for environmental policy

Despite the achievements made over the past three decades, Mexico faces significant challenges in meeting its environmental goals. This section mentions some of the most significant ones.

Climate change

Climate change represents one of the most important challenges for Mexico in terms of environmental policy. Despite having approved the General Law on Climate Change in 2012, which establishes a framework for reducing greenhouse gas emissions, Mexico remains highly dependent on fossil fuels. The implementation of renewable energy has been slow, and greater efforts are required to improve energy efficiency and reduce emissions. Mexico also faces significant challenges in terms of adapting to climate change. The country is vulnerable to the impacts of climate change, in areas including rising temperatures, variability in rainfall, and the frequency and intensity of extreme events such as hurricanes and droughts. It is essential that Mexico strengthens its capacity for adaptation and resilience to face these challenges.

To achieve this, Mexico could continue to accelerate the adoption of renewable energy, since, according to the Ministry of Energy, in 2023, 28% of the country's electricity came from clean sources, with the goal of reaching 35% by 2024. To make this possible, fiscal and financial incentives could be implemented to continue attracting investments, in addition to modernizing energy infrastructure to improve efficiency, given that improvements in this area could reduce emissions in the industrial sector by up to 30%.

In terms of adaptation, it would be beneficial to continue strengthening early warning systems and response plans for natural disasters, considering that Mexico has seen an increase in extreme weather events in recent decades. Restoring ecosystems such as mangroves, which protect coastal areas, could also be key to improving resilience to these challenges. With these actions, supported by international cooperation and access to global climate financing, Mexico could continue to make progress in its fight against climate change in a comprehensive and sustainable manner.

Air and water pollution

Air pollution remains a critical problem in many Mexican cities. Although air quality improvement programs have been implemented, regulation and control of mobile sources of pollution, such as vehicles, remain insufficient. Air pollution has serious consequences for public health and the environment, and policies need to be strengthened to reduce pollutant emissions and improve air quality. Likewise, water pollution persists due to a lack of adequate wastewater treatment infrastructure and poor water resource management. Water quality is a critical issue in many areas of Mexico, especially in regions where water availability is limited. More effective policies are needed to improve water management and reduce pollution.

In recent years, important steps have been taken to improve air quality, such as the implementation of the Hoy No Circula program, which has achieved a 15% reduction in CO₂ emissions in the Metropolitan Area of the Valley of Mexico. However, there is still room for improvement. One proposal would be to complement this program with a more rigorous vehicle verification system, focused not only on CO₂ emissions, but also on pollutants such as PM_{2.5} particles. Furthermore, modernizing the vehicle fleet with a shift towards electric or hybrid vehicles, supported by tax incentives and the creation of low-emission zones in urban areas, could serve to magnify the progress already achieved.

At the same time, the improvement of infrastructure for public transport and sustainable mobility alternatives, such as electric bicycles and scooters, would help to consolidate this progress. With these alterations, Mexico could continue to strengthen its environmental policies, building on current achievements to achieve better air quality and more efficient water management, benefiting both public health and the environment.

Deforestation and loss of biodiversity

Although efforts have been made to protect biodiversity, deforestation and habitat loss continue to be significant problems in Mexico. Agricultural expansion, illegal logging and uncontrolled urban development have

led to the loss of important forest ecosystems and soil degradation. To address these challenges, it is essential to strengthen conservation policies and promote sustainable use of natural resources.

Deforestation and biodiversity loss also have significant implications for climate change. The destruction of forests contributes to greenhouse gas emissions, while the loss of biodiversity reduces the capacity of ecosystems to adapt to climate change. It is essential that Mexico adopt more effective policies to protect its forests and conserve its biodiversity. In this regard, Mexico has shown a strong commitment through initiatives such as the *Sembrando Vida* (Sowing Life) program, which not only seeks to reforest large areas of the country, but also to improve the quality of life of rural communities by directly involving them in the conservation of their ecosystems. This approach is aligned with OECD recommendations, which suggest the implementation of economic incentives such as payment for environmental services to ensure the long-term preservation of forests. Mexico is also strengthening surveillance and control of illegal deforestation, and promoting sustainable agricultural practices that help reduce pressure on forests. Reforestation with native species and the creation of biological corridors are other concrete actions that Mexico is carrying out to protect biodiversity and improve the capacity of ecosystems to mitigate and adapt to climate change.

Waste management

Although Mexico has improved its management of hazardous waste, urban solid waste management remains a challenge. Landfill capacity is limited and recycling infrastructure is not sufficiently developed. In addition, plastic waste and electronic waste are increasing, posing new challenges for waste management in the country. Mexico needs to implement more effective policies to reduce waste generation and promote recycling. Following OECD recommendations, Mexico is in an ideal position to move towards a comprehensive “circular economy” policy that promotes the reduction, reuse, and recycling of waste. This could include creating incentives for companies to use recycled materials and design more durable and repairable products, as well as strengthening electronic waste collection and recycling programs.

The contribution of the OECD

The OECD's influence on Mexico's environmental policies has been significant for several reasons. First, its periodic evaluations have provided an external and objective perspective on Mexico's environmental performance, which has served to drive the implementation of more effective reforms and policies. The Organisation's recommendations have helped Mexico align its policies with international standards and improve transparency and accountability.

Secondly, the OECD has encouraged international cooperation and the exchange of best practices among member countries. Mexico has actively participated in the Organisation's environmental working groups and committees, which has allowed it to learn from the experiences of other countries and adapt successful policies to its domestic context. This cooperation has been particularly useful in areas such as water management, air quality, and biodiversity conservation.

Furthermore, the OECD has played a key role in promoting an integrated and sustainable approach to development. Mexico has adopted several of the OECD principles, such as the "polluter pays" principle and the "user pays" principle, to guide its environmental policies and promote more responsible management of natural resources.

The OECD's EPRS have been a fundamental tool for promoting the improvement of environmental policies in Mexico. Over the past three decades, a number of evaluations have been carried out that have provided comprehensive analysis of Mexico's environmental performance and offered key recommendations for improving policies and practices in various areas.

1998 evaluation: laying the foundation for environmental reform

The first evaluation of Mexico in 1998 highlighted the urgent need to strengthen environmental regulation and improve natural resource management. Recommendations included creating a stronger regulatory framework, strengthening institutions and promoting sustainable policies. In response, Mexico implemented a series of key reforms, including the cre-

ation of the Ministry of Environment and Natural Resources (SEMARNAT), and updating environmental legislation.

This evaluation also highlighted the importance of improving transparency and accountability in environmental policy. Mexico strengthened its environmental indicators and databases to monitor environmental performance, allowing for greater accountability and better decision-making in environmental policy.

2003 evaluation: promoting the integration of environmental and economic policies

The second evaluation in 2003 focused on the integration of environmental policies with economic and social decisions. The evaluation highlighted the need to improve intersectoral coordination and promote an integrated and sustainable approach to development. In response, Mexico adopted several policies to foster the integration of environmental considerations into economic and social policies.

Furthermore, the assessment highlighted the importance of strengthening institutional capacity to manage environmental challenges. Mexico implemented several reforms to improve water management, air quality, and biodiversity conservation, as well as to strengthen the capacities of environmental institutions.

2013 evaluation: addressing the persistent challenges of climate change and biodiversity

The 2013 evaluation highlighted the need for Mexico to address environmental challenges by improving its institutional capacity, strengthening its regulatory frameworks, and integrating environmental considerations into its broader economic policies. The recommendations ultimately sought to boost green and sustainable economic growth while addressing persistent problems of environmental degradation.

This evaluation also highlighted the need to strengthen climate action in Mexico. Despite efforts to reduce greenhouse gas emissions and promote

renewable energy, Mexico remains highly dependent on fossil fuels. The assessment recommended increased use of market mechanisms and better monitoring of greenhouse gas emissions.⁶

Future prospects for Mexico's environmental policy

Looking to the future, Mexico must continue to strengthen its institutional capacity to face environmental challenges. This includes improving the enforcement of environmental regulations, investing in sustainable infrastructure, and promoting greater integration of environmental considerations into economic and social policies.

International collaboration will remain crucial to addressing global environmental issues such as climate change and biodiversity loss. In this sense, membership of the OECD provides Mexico with a valuable platform to influence the global environmental agenda and to receive support in the implementation of more effective policies.

It is also important for Mexico to continue promoting public participation and transparency in environmental decision-making. Environmental education and public awareness of these issues are essential to foster a cultural shift towards sustainability and to ensure public support for the implementation of environmental policies through a greater effort in environmental education for future generations.

Thirty years after joining the OECD, Mexico has made significant progress in improving its environmental policies, but still faces significant challenges. Without a doubt, OECD membership has been a driving force for environmental reform in Mexico, providing a framework for evaluation, advice, and support in the implementation of more effective policies. As Mexico moves towards a more sustainable future, continued collaboration with the OECD and other international partners will be essential to overcome environmental challenges and promote balanced and sustainable development that benefits both the economy and the environment.

⁶ OECD, *OECD Environmental Performance Reviews: Mexico 2013*, Paris, OECD Publishing, 2014, at <http://dx.doi.org/10.1787/9789264180109-en> (date of access: December 2, 2024).