

ENABLER **2**
**CLEAN
ENERGIES**



Technological progress has enabled the active extraction of energy from **low-emission** or **net-zero sources** like wind, solar, gas, geothermal, nuclear, bioenergy, and hydrogen. Industries around the world are actively transitioning to cleaner energy sources to power their operations.

KEY POINTS

- **Mexico's greatest potential** lies in the solar and wind sources due to the country's geographic location and the scalability of infrastructure projects. In addition, LNG, geothermal, bioenergy, and hydrogen have emerged as **promising** opportunities.
- Clean energy adoption can help companies arriving in Mexico **meet goals and ESG commitments** while aiming for more efficiency and competitiveness.

MEXICO'S ADVANTAGES 

Interconnectedness with the United States

- Mexico's Northern Interconnected System is connected to the Western Electricity Coordinating Council (WECC) grid in the United States between **Eagle Pass, Texas**, and **Piedras Negras, Coahuila**. This allows Mexico to import and export electricity with the United States, depending on needs and prices.



National & International Commitments

- Mexico has a long history of promoting global environmental agreements. The country played an active role in the processes of the **Kyoto Protocol** (1992), the **Millennium Summit** (2000), and the **Paris Summit** (2015), among many others.
- In 2015, Mexico passed the **Energy Transition Law**, which committed the country to sourcing 35% of its energy from clean sources by 2024. As of 2022, Mexico only reached 26.1%.
- The Development Program of the National Electrical System (PRODESEN) 2023-2037 guarantees **universal access to electricity** while prioritizing the country's social and economic development.



Renewable Resources and Geographical Diversity

- Diverse geography allows for various clean energy technologies. Geothermal energy can be harnessed in regions with volcanic activity, while coastal areas provide offshore wind energy project opportunities.



**ENABLERS'
POTENTIAL**
(ACCORDING TO THE EXPERTS)

Mexico is positioned to become a **clean energy powerhouse** given its world-class renewable energy resource potential.
(U.S. National Renewable Energy Laboratory)

The renewable energy sub-sectors with the most potential for U.S. exporters in Mexico are **small-scale wind and hydro**.
(U.S. International Trade Administration)

Mexico's energy resource base could support significant growth in clean generation capacity, **enough to meet the country's electricity needs a hundred times over**.
(U.S. International Trade Administration)

ENABLERS' HIGHLIGHTS

According to the U.S. Energy Information Administration, as of 2023:

- Mexico had 7.1 trillion cubic feet (Tcf) of proven natural gas reserves, mainly in the southeast and the Veracruz basin.
 - Private production accounted for 5% of total natural gas production, (in 2017, it was less than 1%)
 - Additionally, according to TC Energy, states with natural gas infrastructure have a GDP up to 50% higher than those without it.
- Mexico sources most of its energy imports from the United States:
 - U.S. natural gas exports via pipeline totaled 2.1 Tcf in 2022.
 - U.S. natural gas pipeline exports to Mexico have increased more than 400% since 2011.

According to the Mexican Institute for Competitiveness (IMCO):

- The hydroelectric industry (state-owned) is the main source of clean energy in the country, accounting for 10.7% of all energy production. The wind sector (privately owned) is in second place, with 6.1% while solar is in third, reaching to 4.9% of total energy generation in the Mexico.

MAIN STAKEHOLDERS TO WATCH IN 2024

- **AES:** Next-generation energy company that creates greener, smarter, and innovative energy solutions. It owns and operates power plants, which it uses to generate and sell electricity to end users and intermediaries like utilities and industrial facilities.
- **EATON:** Power management company doing business in more than 175 countries with energy-efficient products and services to effectively manage electrical, hydraulic, and mechanical power more reliably, efficiently, safely, and sustainably.
- **ÉNESTAS:** Provides the development of an efficient electrical and thermal consumption of medium and small companies through the operation, maintenance, and financing of cogeneration and trigeneration projects.
- **Jaguar:** Exploration and production company that seeks to promote sustainable development and bring lasting improvements to the quality of life of the communities where they live and work.
- **TC Energy:** Leader in the responsible development and operation of North America's energy infrastructure, including pipelines for gas and oil, electricity generation, and gas storage facilities.
- **Sempra Infraestructura:** Facilitates energy transition by leading the responsible development of LNG and net-zero solutions, clean power, and modernized energy networks.

RECOMMENDATIONS FOR MAXIMIZING THE ENABLER

Despite the challenges, Mexico has the potential to tap into clean energy sources, an opportunity that should be seized with policies and actions such as:



Strengthening communication with decision-makers, regulators, and potential investors.



Prioritizing clean energy supply in states where nearshoring is increasing demand.



Establishing clear and favorable regulations that promote the use of clean energy.



Reinforcing the private sector's interest in North American security.

This series is created by the USMF with ideas from its Ally-shoring Taskforce which meets periodically to discuss ways to expand the knowledge and adoption of an ally-shoring strategy for the relocation of the supply chains.



Taskforce members

