IRENA coalition FOR ACTION

Scaling up renewables investment in Mexico in the wake of COVID-19

Actions to scale up renewable energy investment in Mexico:

1. Factor socio-economic impacts into national energy planning and policy
2. Prioritise cost-competitiveness and resilience in the energy system
3. Ensure long-term policy certainty and stability for the renewable energy sector
4. Adopt a power market design that supports a high level of integration of renewable energy
5. Upgrade the capacity of transmission and distribution systems
6. Consider increased regional and sub-national co-operation to improve knowledge sharing
7. Strengthen dialogue between investors and the government

With one of the most promising renewable energy potentials in the world, Mexico has been a leading player in the energy transition during the last decade. Following the 2013 Energy Reform and the adoption of a legal and regulatory framework in support of renewables, the sector today stands as a substantial source of investment and an important generator of socio-economic benefits, including local job creation.

In 2015, the Energy Transition Law set an ambitious target for 35% of Mexico's electricity consumption to be supplied by clean energy by 2024. As of 2017, 9.5% of electricity consumption was from renewable energy sources. The power sector in Mexico remains heavily weighted towards fossil fuels, accounting for over 70% of total installed capacity in 2019 and relying, among other sources, on natural gas imports.

With favourable market conditions, the country could continue to attract substantial investment for renewable energy projects, as previously demonstrated through the outcome of three clean-energy auctions that took place between 2015 and 2017, among other accomplishments. These auctions attracted over USD 8 billion (US dollars) in investments and contracted over 7.4 gigawatts of mostly solar and wind projects. In addition, the country has finalised many corporate sourcing deals. Recent policy changes and the uncertainty they have generated, however, are set to change the course of the country's energy future.

In late 2018, the national government cancelled the fourth long-term clean energy auction, along with tenders for two transmission lines. In 2019, auctions for medium-term, capacity and transmission rights were also cancelled, and the clean energy certificates to support new renewable energy capacity were opened for reconsideration. Moreover, Mexico's energy regulator, Comisión Reguladora de Energía, announced a review of existing power purchase agreements (PPAs) awarded in the first three auctions. In April and May 2020, Mexico further issued new rules related to grid management, resulting in a halt of all pre-operative testing for variable electricity generation projects, and instead granted preferential grid access to conventional electricity generation. Further, an increase in tariffs that would multiply the amount clean energy generation facilities pay in wheeling and distribution charges has been announced, which also affects projects already in operation. Even though some of these policy changes have been revisited/put on hold following lawsuits and strong reactions from both industry and civil society, they have generated major uncertainties for existing as well as planned renewable energy projects in the country, leading to a decrease in investments in the renewables sector, including from foreign investors. The corporate PPA market has also dried up due to policy uncertainty.

With its track record of developing a renewable energy sector from the ground up, Mexico has the potential to unlock significant socio-economic benefits and achieve a higher degree of energy independence if policy certainty is re-established in the country.

The International Renewable Energy Agency (IRENA) estimates that a transition to a renewables-based economy in Mexico would generate net-positive impacts in terms of gross domestic product (GDP) growth, job creation and welfare gains – both in the short and longer term.

The IRENA Coalition for Action Business and Investors Group, which brings together leading renewable energy players, continues to see great potential for investments in Mexico. The group represents a sizable portfolio of renewable energy assets worldwide and is planning to further contribute substantial additional investments needed for a green economic recovery post-COVID-19 and as a way to reach global climate objectives. From an industry point of view and based on its engagement in Mexico, the Business and Investors Group has put together the following key recommendations that the government may wish to consider to reach higher shares of renewable energy:

1. Factor socio-economic impacts into national energy planning and policy

In the wake of COVID-19, it is more important than ever to determine the socio-economic impacts of any planned policy and investment. Through a continued transition to a renewables-based energy system, Mexico can foster a speedy, resilient and fair economic recovery. While the positive effects on the economy would become apparent in the first years of investment, they would significantly increase over time. Under the IRENA Transforming Energy Scenario, Mexico's GDP could grow by an average of 1.1 % per year from now until 2030 and by an average of 6.3% per year from 2030 until 2050, compared to the Planned Energy Scenario. More importantly, a large number of energy transition-related jobs would be created, outnumbering jobs lost in the fossil fuels sector. According to IRENA, jobs in renewables would reach up to 0.34 million in 2030 and 0.47 million in 2050. Adding also energy efficiency and system flexibility jobs, the numbers would amount to 1.78 million in 2030 and 1.85 million in 2050.

2. Prioritise cost-competitiveness and resilience in the energy system

The cost of renewable energy technologies has dropped dramatically over the last ten years. Renewable energy is now more cost-competitive than any other source of energy in an increasing number of countries. During the COVID-19 crisis, the resilience of renewables compared to conventional energy has become more evident than ever. In 2017, Mexico achieved the world's lowest average price for wind power in one of its auctions, proving that the country has the potential to build an energy system based on clean, cost-competitive and resilient sources of energy. However, recent changes proposed by the government may increase the cost of renewable electricity by up to 20% for commercial and industrial users (through fees), which would lower demand from an important group of off-takers.

3. Ensure long-term policy certainty and stability for the renewable energy sector

The recent focus by the federal electricity commission, Comisión Federal de Electricidad, on conventional energy generation has brought uncertainty to existing and planned renewable energy projects in the country and stands in stark contrast to national energy and climate targets. The cancellation of the fourth clean energy auction in December 2018 brought further instability to the renewable energy sector. Long-term policy certainty, both regulatory and legal, has been key to driving investment in renewable energy in the past. Re-establishing investor confidence in the country requires commitment at the highest level, a reconsideration of retrospective policy changes and the honouring of signed contracts and agreements in accordance with the rule of law. In a liberalised and unbundled market like Mexico's, a long-term PPA resulting from an auction can, for example, hedge the seller against spot-market variability and improve the bankability of projects. Auctions and other long-term policies as well as market design can further be tailored to promote the participation of small and new players, develop local industries, as well as maximise community and subnational benefits, including for minorities and marginalised groups.

4. Adopt a power market design that supports a high level of integration of renewable energy

Increased shares of variable renewable energy, combined with the rise in distributed generation, require a flexible infrastructure and a rethinking of the way power sector markets are designed and operated. Failure to adapt market design to future system needs may lead to additional long-term costs, systematic integration challenges and higher electricity prices. A market design that properly integrates variable

renewable energy can have a can have a positive effect on electricity prices in the medium to long term; this in turn will have beneficial effects for electricity consumers as well as the overall economy and industrial competitiveness of Mexico.

5. Upgrade the capacity of transmission and distribution systems

With the expected growth in electricity demand, Mexico urgently needs to expand and modernise its grid. The regions with the greatest renewable potential are scattered across the country, which has three electricity systems with constrained transmission capacity. The lack of reinforcements in grid infrastructure and deficiencies in co-ordination among technologies are both factors that deter companies from entering the market. Substantial investments will be needed to upgrade transmission and distribution systems to meet future demand and clean energy targets. Prioritising these investments now could bring business opportunities and jobs and create overall strong stimulus effects during a time when this is much needed. Furthermore, flexible infrastructure and dispatchable renewable energy sources, such as hydropower and geothermal, will be critical in helping to further integrate variable renewables into the grid.

6. Consider increased regional and sub-national co-operation to improve knowledge sharing

A substantial body of evidence across Latin America demonstrates the successful integration of renewable energy, with several countries operating flexible grids supported by modern renewable energy forecast methods, production scheduling and storage. Energy authorities can restore certainty, security and confidence in their decisions by co-operation with other regional regulators that can share their best practices on how to manage high levels of variable renewable energy safely, reliably and cost-competitively.

7. Strengthen dialogue between investors and the government

Limited dialogue between investors and the government as well as legislators and civil society make it difficult to accurately assess the investment risk in the country, including the impacts that investors face in response to the newly implemented institutional framework. Increasing transparency and strengthening dialogue on how to best de-risk investments would allow the renewable energy sector to plan better for and respond faster to policy demands and the needs of the country. The Coalition for Action Business and Investors Group stands ready to support and facilitate such dialogue.

About the IRENA Coalition for Action

The IRENA Coalition for Action brings together leading renewable energy players from around the world. The Coalition facilitates global dialogues between public and private sectors to develop actions to increase the share of renewables in the global energy mix and accelerate the global energy transition. Within the Coalition, the Business and Investors Working Group is chaired by the Global Wind Energy Council and SolarPower Europe. The Group puts forward analysis and recommendations based on on-the-ground experiences of some of the leading private sector players in the renewable energy field. IRENA acts as the Secretariat of the Coalition. ***https://coalition.irena.org***

Coalition for Action Business and Investors Group Members: ABB, Abengoa Solar, ACCIONA, Alectris, Alliance for Rural Electrification (ARE), AMEA Power, Boston Consulting Group, Clean Energy Business Council MENA, Confederation of Indian Industry (CII), Dii Desert Energy, Enel Green Power, Energy Watch Group, European Geothermal Energy Council (EGEC), Falck Renewables, Finergreen, First Solar, FTI Consulting, Global Solar Council (GSC), Global Wind Energy Council (GWEC), Graded, Iberdrola SA, International Council for Local Environmental Initiatives (ICLEI), International Geothermal Association (IGA), International Hydropower Association (IHA), International Network for Sustainable Energy (INFORSE), International Renewable Energy Agency (IRENA), kiloWattsol, Lekela Power, Lusophone Renewable Energy Association (ALER), Mainstream Renewable Power, MAKE/Wood Mackenzie, Masdar, Middle East Solar Industry Association (MESIA), National Solar Energy Federation of India (NSEFI), New Energy Nexus, Novozymes, Ocean Energy Europe, Ørsted, Phanes Group, QWAY energy, Rahimafrooz Renewable Energy, Renewable Energies Association of Colombia (SER Colombia), Renewable Energy and Energy Efficiency Partnership (REEEP), Res4Africa Foundation, Ryse Energy, Siemens Gamesa Renewable Energy, SkyPower, SolarCoin Foundation, SolarPower Europe, Syndicat des énergies renouvelables (SER), TERI School of Advanced Studies, The Climate Group/RE100, The Nature Conservancy, Trina Solar, Vestas Wind Systems, World Bioenergy Association (WBA), World Resources Institute (WRI), World Wind Energy Association (WWEA), World Wide Fund for Nature (WWF) Yellow Door Energy.