INSTITUTO MEXICANO PARA LA COMPETITIVIDAD, A.C.

The Energy Reform bill, North American competitiveness and USMCA

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Executive Summary

To fully take advantage of USMCA, an open and competitive energy market is essential

Mexico's competitiveness depends, in part, on its ability to integrate into a North American market that takes full advantage of the United States-Mexico-Canada Agreement (USMCA). However, an essential element in the USMCA is a competitive energy market.

In the context of the discussion around the Energy Reform bill that seeks to re-concentrate the activities of the sector in an old model centered on the State, the Mexican Institute for Competitiveness (IMCO) analyzes the effects of an approval of said initiative and its possible consequences within the framework of USMCA. The study concludes that the initiative would generate obstacles for the use of benefits derived from the Agreement, since it generates conflicts with its provisions, affects the regional energy market as well as Mexican exporters and, at the end of the day, makes the country less attractive as an investment alternative compared to China.

The Energy Reform bill currently under discussion in Mexico's Lower House, has harmful implications in terms of rule of law and sustainable management of the economy and the environment, as well as the operations of businesses and productive activities.

Barriers to fully taking advantage of the USMCA:

- **Violation of the provisions of the USMCA** including its provisions on energy, investment, State-owned enterprises, environment, as well as economic competition and cross-border trade in services, among others. Chapters regarding Investment, State-Owned Enterprises and Designated Monopolies, Environment or Dispute Settlement would clash with Mexico's energy policy if the bill is approved in Congress. Mexico risks having to defend its energy policy in international panels. **The United States and Canada, as well as private actors in the energy sector, will be able to resort to the protections offered by both NAFTA and the USMCA to challenge the bill that limits their participation in the Mexican energy market.**
- **Impact on input-producing industries, or strategic industries for economic growth**. Although the potential adverse effects of the energy reform bill would reach all the country's industries, there are specific activities that would be disproportionately affected given their high electricity consumption. An eventual deterioration of their performance would impact the rest of Mexico's economy.
- **Losing the opportunity for Mexico to consolidate itself as a reliable investment alternative to China.** In the context of trade tensions between the United States and China, the country loses the opportunity to position itself as a North American ally and thus consolidate itself as a prime high-value added investment destination vis-a-vis Asian competition.
- **Reduce North American regional competitiveness** by limiting the possibilities of taking advantage of the complementarity among the energy markets of the three countries through, for example, the expansion of pipeline networks and transmission lines that allow more competitive transportation of gas and electricity between the countries. Mexico would be the main beneficiary of an integrated energy market that allows it to develop the infrastructure to take advantage of competitive prices on the other side of the border and strengthen its energy security through more network interconnections (transmission and pipelines) with the United States.

Mexico needs a competitive energy market that strengthens the Mexican economy and an open commitment to the rule of law to trigger higher levels of investment.

In the context of the parliamentary hearings to discuss the bill in Congress, IMCO Proposes:

- Adhere Mexico in the US-Canada side letter on energy cooperation, which includes a series of commitments on energy cooperation, especially regarding regulatory measures and regulatory transparency, as well as disciplines related to non-discriminatory access to power transmission infrastructure and pipelines.
- Invest in cross-border energy infrastructure and in energy and logistics infrastructure in Central American countries.
- Facilitate the development of new clean energy installed capacity.

Introduction

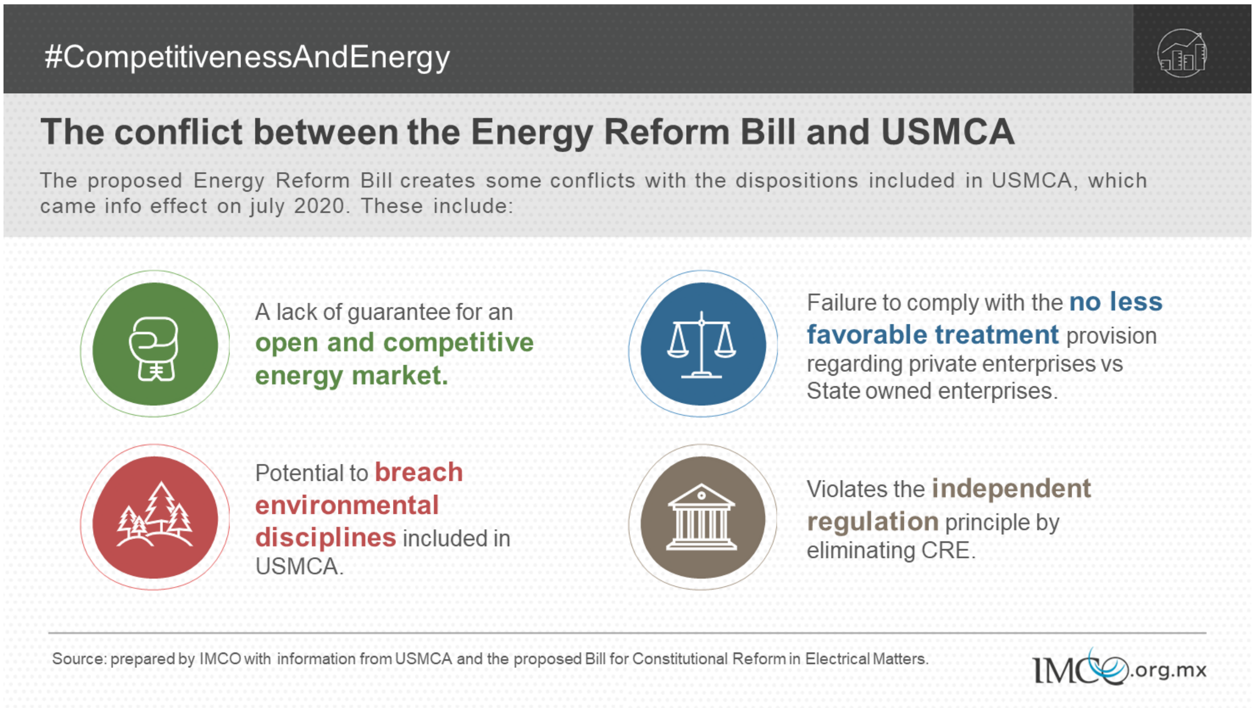
Mexico's competitiveness depends, in part, on its ability to integrate into a North American market that takes advantage of the complementarity of the three member countries of the United States-Mexico-Canada Agreement (USCMA). The implementation of a modernized trade agreement between the North American countries has opened the door for an even closer and more cooperative relationship between its members. A fundamental element for this is the existence of a competitive energy market, an indispensable precursor for the development of value chains in the region.

How can Mexico take advantage of this potential? What measures are being taken to do so? The Energy Reform bill sent to Mexico’s Lower House impacts the country's competitiveness from various angles. Perhaps the most relevant in the medium- and long-term is that, if passed, it would cancel the possibility of fully harnessing the opportunities of the USMCA and deepening the economic integration of North America, not only in terms of trade, but also of joint production between the three partners. Thus, the opportunity cost of its approval is high. This integration is critical for Mexico's economic performance and has the potential to help the country's worse-off states integrate into regional value chains and become North American in the economic sense.

There are three aspects through which the bill would generate unnecessary obstacles for the full implementation of the USMCA. First, some of its provisions clash directly with the spirit and provisions of the trade agreement. These conflicts raise the probability of a breach, and open the door for a number of disputes that would affect trade relations in the region. This, in turn, inhibits the possibilities to promote a joint energy market, which would not only facilitate collaboration in industrial processes and the development of skills among the three countries, but would also increase the availability of energy at competitive prices in the region. Lastly, a less competitive electricity market negatively affects the performance and growth possibilities of export manufacturing producers, the sector that would benefit the most from taking advantage of the trade agreement.

The bill will probably not bring about the end of USMCA, but it will not be harmless for the Mexico-United States relationship and the North American partnership, nor for Mexico’s export production capacities. By resulting in a less competitive energy market and a weaker rule of law, it directly affects Mexico's potential to attract investment and trigger economic growth, while also impacting the productive capacities of the manufacturing sector. **With this, the opportunity to position itself as an ally of the region is lost, as is the opportunity to consolidate itself as a main high added value investment destination, and to position itself as an investment alternative to China in the context of the commercial tensions that have surfaced in recent years.**

Conflicts with USMCA



The Energy Reform bill is inconsistent with the USCMA in many ways, including its disciplines in energy matters, investor rights, behavior of State-owned enterprises, environment, economic competition and cross-border trade in services, among others. Chapters such as Investment (14), State-Owned Enterprises and Designated Monopolies (22), Environment (24) or Dispute Settlement (31) would conflict with Mexico's energy policy if the bill is approved in Congress.

In addition, **the opening of the Mexican energy sector is embedded into USMCA**, meaning that the guarantee of an open energy market is an essential condition for harmony in the commercial relationship of the three countries. Although the Agreement's chapter 8 recognizes, like the Mexican Constitution, the "direct, inalienable and imprescriptible ownership" of the United Mexican States over hydrocarbons and the freedom of the country to modify its Constitution in the matter, this does not represent a blank check for Mexico in such matters. In addition, the Agreement does not include under its definition of "inalienable and imprescriptible property" industrial production processes such as electricity generation. The same chapter clarifies that this recognition is given without prejudice to the rights and remedies available to the United States and Canada (8.1.2)[1]. In other words, Mexico is free to modify its national legislation, but not to violate the rights of the other parties within the USMCA, nor to return to an energy market with reduced competition and lower private sector participation.

The full consolidation of the open energy market in the USMCA is found in article 32.11 through cross-references to the energy disciplines of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). CPTPP disciplines include the liberalization of the energy

[1] The chapters, articles and, where appropriate, paragraphs in question are in parentheses.

sector in Mexico in the chapters regarding market access to goods and services, State-owned enterprises, cross-border trade in services, as well as dispute settlement.

The open energy market was also present in the original North American Free Trade Agreement (NAFTA). In the 1990s, NAFTA was revolutionary in its symmetry and universality, becoming the first trade agreement in which special and differential treatment was not granted to the least developed party. The three countries, despite their economic differences, were treated in the same way, and Mexico committed to the same level of disciplines as the United States and Canada. In addition, its concept of universality was based on the principle of negative lists, under which any issue that was not explicitly excluded from NAFTA was therefore an integral part of it. Thus, as soon as a party liberalized a previously excluded sector, this opening would become part of the Agreement (ratchet clause), under articles 11. 08 (1)(c) and 12.06 (1)(c). Due to this clause, once a country unilaterally opens a previously excluded sector, it cannot be closed again, which meant that the 2013-14 reforms consolidated the energy sector in NAFTA, regarding investment and cross-border trade in services. Once the renegotiation resulted in the USMCA, the principles of symmetry and universality were preserved (14.12 (c)) and, hence, the opening in the energy sector.

USMCA diluted the investor-State dispute settlement mechanism, so that it now only covers disputes between Mexico and the United States, and is limited to dealing with violations of national treatment, most favored nation and direct expropriation between both countries. However, Annex 14-E of the investment chapter preserves the same level of NAFTA protections for five sectors with government contracts:

- Electricity
- Hydrocarbons
- Telecommunications
- Infrastructure
- Transport

Protections for investors in these sectors include violations of any provision of the investment chapter, including indirect expropriation - **which refers to legal or regulatory changes that make the operation of assets installed in a country unviable**.

The transition from NAFTA to USMCA contemplates a three-year period during which investors will be able to resort to the protections offered by both agreements. In other words, until June 2023, investors will be able to resort to the protections of NAFTA’s investment chapter (11). Within these protections -both those of the new Agreement and those included in the original NAFTA-, **investors and private actors in the energy sector can challenge the reduction of their permitted participation in the sector, which is contemplated in and is an integral part of the initiative.**

On the other hand, the USMCA’s State-Owned Enterprises and Designated Monopolies (22) chapter requires said companies to operate under commercial considerations and requires a no less favorable treatment for private companies in the purchase and sale of goods and services. The designated monopolies (for example, electricity transmission and distribution in Mexico) must in turn operate under commercial considerations and avoid anti-competitive practices that may affect trade and investment in a non-monopoly market (22.4). An example of this is the access to the CFE's network businesses, that is, to the electricity transmission and distribution grids, which should not discriminate between private and public generators. Chapter 22 also addresses the regulatory issue, by establishing that each party must guarantee impartial regulation for all market participants, including State-owned enterprises, as well as private companies. Mexico has not complied with this provision in recent years, based on the resolutions of the country's Energy Regulatory Commission (CRE) that seek to benefit CFE over other market participants in electricity generation, as well as Pemex (the State-owned oil company) over other market participants in the hydrocarbons sector. **Eliminating the independent regulator, as proposed by the Energy Reform bill, implies violating the principle of regulatory independence established in the USMCA at a constitutional level.**

In environmental matters, the USMCA includes provisions that were not included in NAFTA and that are an integral part of the Agreement (Chapter 24), so its violation may imply a commercial retaliation. A country can be taken to an international panel and sanctioned if a sustained and recurring violation of domestic environmental legislation is proven to affect trade and investment (24.4). Unlike the reform of the Electric Industry Law of March 2021, it could be argued that by amending the Constitution, the bill's content would not violate domestic legislation. However, this depends on whether, in the event of an eventual approval of the Energy Reform initiative, the country's environmental laws are modified along with the energy legislation, specifically in terms of greenhouse gas (GHG) emissions and clean electricity generation (including but not limited to the General Law on Climate Change and the Energy Transition Law). In other words, the only way for the initiative to be consistent with the environmental disciplines of the USMCA means that, in addition to the Constitutional amendment, the Climate Change and Energy Transition laws must also be modified; otherwise, it would come into conflict with the environmental chapter.

One tool that the United States and Canada have to promote international panels against Mexico's energy policy is the USMCA's State-State dispute settlement chapter (31). The main problem with the State-State dispute settlement chapter in the original NAFTA was the possibility that one of the parties would not accept the panelists proposed by the other, hence blocking the establishment of the panel. The USMCA corrects this dysfunction in its dispute settlement chapter by having lists of panelists previously agreed upon by the three parties, which prevents the rejection of panelists, making it easier for the panel to go forward. As it stands, Mexico risks having to defend its energy policy in the international arena.

The economic competition provisions of the USCMA establish the principle of independent regulation and procedural fairness for all market participants (21.1 and 21.2). Despite the fact that the chapter on competition policy (21) does not contemplate the possibility of resorting to dispute resolution panels, failure to comply with the provisions on economic competition sends a message contrary to the spirit of the treaty and the economic integration of North America. **If the initiative is approved, the principle of independent regulation would be violated by eliminating the**

Energy Regulatory Commission. At the same time, the electricity market would be canceled to transition to a system controlled by the Federal Electricity Commission, with a -restricted- possibility of private participation. In short, it would eliminate competition and competitiveness in the electricity generation market.

The future of the regional energy market

The emergence of shale oil and gas -abundant in the region- extracted using unconventional technologies, which have made the United States a net exporter of energy, as well as the pipeline networks for its transportation between countries, and the reduction in the costs of solar photovoltaic and wind energy, have made North America one of the most competitive regions in the world in terms of energy.

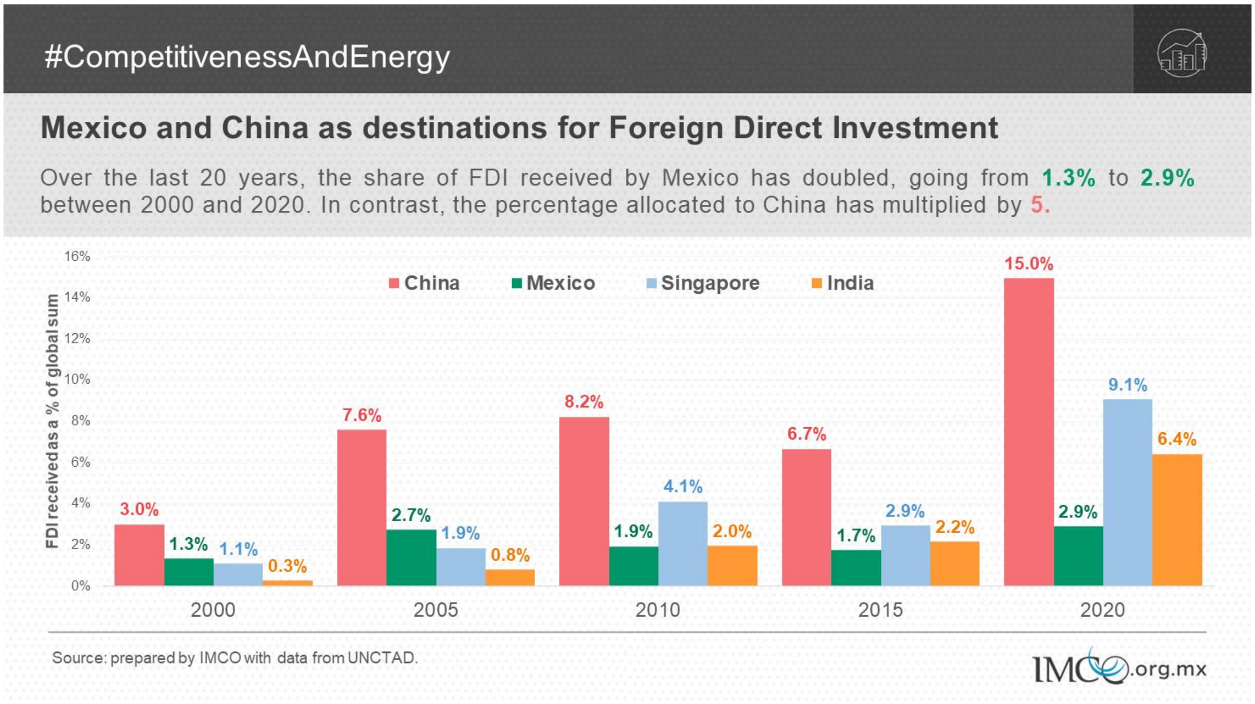
Closing the Mexican energy market also impacts the region's competitiveness by limiting the possibilities of taking advantage of the complementarity of the three countries in this sector, for example, through the expansion of pipeline networks and transmission lines that allow the transportation of gas and electricity between them. Mexico would be the main beneficiary to the extent that it develops the necessary infrastructure that, on the one hand, allows the country to take advantage of competitive prices on the other side of the border and, on the other, strengthens its energy security through more network interconnections (transmission and pipelines) with the United States.

Energy competitiveness in Mexico in relation to China

A competitive energy market is necessary for the creation of value chains in the region, which is why the Energy Reform initiative and its possible repercussions on it put the country's competitiveness and its capacity for sustainable management of the economy and environment at risk. According to the International Competitiveness Index 2021-elaborated by IMCO-, which compares 43 countries in different key areas, Mexico already faces challenges in environmental matters: it obtained the 36th position, surpassing only 7 of the considered countries. Its poor performance in this indicator reflects challenges in variables such as air pollution, CO_2 emissions and less polluting energy sources. In that sense, the initiative does not stimulate improvement.

In addition to its impact on the environmental approach to competitiveness, the initiative also represents an affront to the rule of law of the country, by benefiting state companies with advantages that other companies in the energy sector do not have access to. **A weaker rule of law directly affects Mexico's ability to attract investment and trigger economic growth, which becomes an obstacle to positioning the country as the main destination for national and international investment. In addition to this, the country wastes the opportunity to position itself as an investment alternative against China.**

Although Mexico and China were both considered emerging economies towards the end of the last century, their economic performance over the last 20 years has been very different. In particular, their reception of Foreign Direct Investment (FDI) has grown at drastically different rates. The proportion of global FDI directed to China has multiplied by five, as the country went from receiving 3% of FDI in 2000 to 15% in 2020. Mexico shows a smaller increase, going from 1.3% of Global FDI in 2000 to 3% in 2020. The results indicate that China has become an increasingly attractive destination for investment, while Mexico has not been able to take advantage of its resources and generate a more competitive environment to become an important competitor, particularly in a period during which the United States have lost prevalence in regards to FDI reception (in 2000, 23% of global FDI went to the US, a number that fell to 15% in 2020).



Within the FDI received by Mexico, most of it goes to the manufacturing, mining or trade sectors. Manufacturing is one of the most energy-intensive sectors and during the last 20 years, the percentage of investment that Mexico has allocated to this sector has been significant: its highest point was in 2013 with 65% of total FDI and, in 2020, the sector received 38% of the investment that entered Mexico from abroad. However, despite the fact that in the last 20 years the growth rate of FDI in the manufacturing sector was higher than that observed in total FDI, in the five years prior to the pandemic the trend was reversed: between 2015 and 2019, manufacturing FDI grew at at annual average rate of (-)3.1%, while total FDI increased 2.8% in the same period. If affected by the changes contemplated in the initiative, the manufacturing sector in Mexico could attract even less FDI.

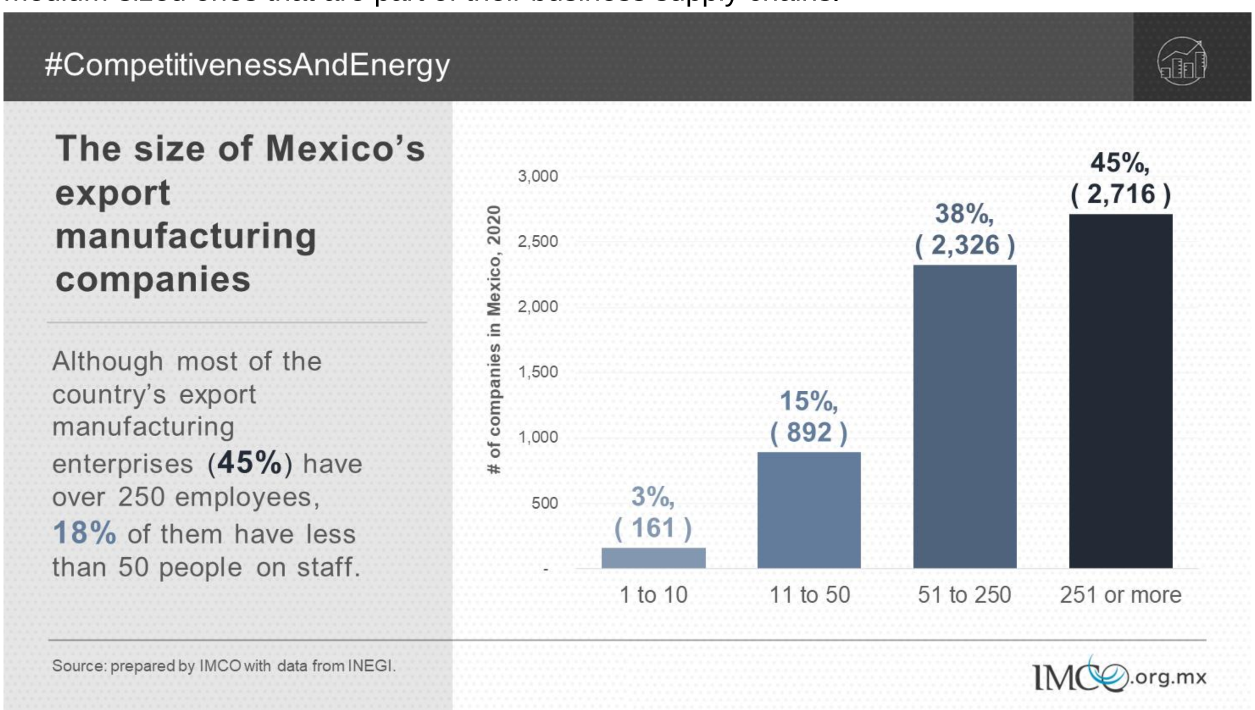
In this sense, there's a window of opportunity both for Mexico and for the North American markets which, if integrated, would possess a high level of competitiveness against China. A weak energy market, one in conflict with American and Canadian markets, would not only affect Mexico's economic sectors, but would also make regional energy integration in North America difficult, thus affecting our country's opportunity to consolidate itself as an alternative for high-value investment to the Asian powerhouse.

The impact on export manufacturing production

Given the restructuring of the energy market proposed in the bill, the business sector has expressed concerns about the implications for production costs in different sectors of Mexico's economy.

The cancellation of contracts with private electricity generators, intended to reduce their participation in the electricity market, would force producers to procure all their energy from CFE, which would limit access to clean energy for supply companies and send a message that the Mexican state is not committed to the rule of law. **If the State company faces higher generation costs than private generators of renewable energy and combined cycles, productive companies in different industries could incur in higher costs when acquiring this essential input, which entails a widespread loss of competition.**

Although the potential adverse effects of the Energy Reform bill would reach all industries in the country, there are certain activities that would be affected to a greater extent given their comparatively higher electricity consumption. The deterioration in their performance would impact the rest of the national economy, due to their position as input-producing industries and, as such, strategic industries for economic growth. One example is the export manufacturing sector, where the possible increase in the cost of inputs could create obstacles for Mexico's foreign trade, and would have implications not only for companies with large-sized plants, but also for the small and medium-sized ones that are part of their business supply chains.



Furthermore, possible negative effects on key sectors for the modernization of Mexico's economic activities -such as the automotive industry, the steel industry and more- would not only mean lower economic growth at present, but also a loss in the future growth potential of the Mexican economy. Some specific cases are detailed below.

Automotive industry

The total electrical energy consumption of the automotive sector in 2019 amounted to 19.3 petajoules. It is the eleventh industrial activity with the highest consumption of electricity within the list reported by the Ministry of Energy (SENER)[2]. This industry has an important participation in Mexico's export sector, one of the main economic engines: more than 30% of the exports from Mexico to the United States -the destination of more than 80% of its exports- consist of automotive goods.

Entrepreneurs in the automotive sector have expressed concerns about the Energy Reform bill, including the possibility of higher costs and an irregular supply of electricity, as well as the imposition of prioritizing the use of energy from CFE over that from other sources[3]. These effects would jeopardize the productive capacity of the industry and would cause an increase in the price of automotive goods, making them less competitive in the international market and, therefore, reducing their level of exports and their linkage with the productive chains of the region. A lessened performance in this industry would mean the generation of fewer resources and a lower capacity to create jobs, particularly in certain states of the country where the automotive clusters are located.

Cement and steel industry

In 2019, the cement industry had an electricity consumption of 157.6 petajoules -10% of the total energy consumption in the industrial sector-. It is the fifth activity with the highest consumption, as reported by SENER. This industry produces one of the most important inputs for the construction industry -which contributes around 7% of Mexico's GDP- and plays a crucial role in the post-pandemic economic recovery.

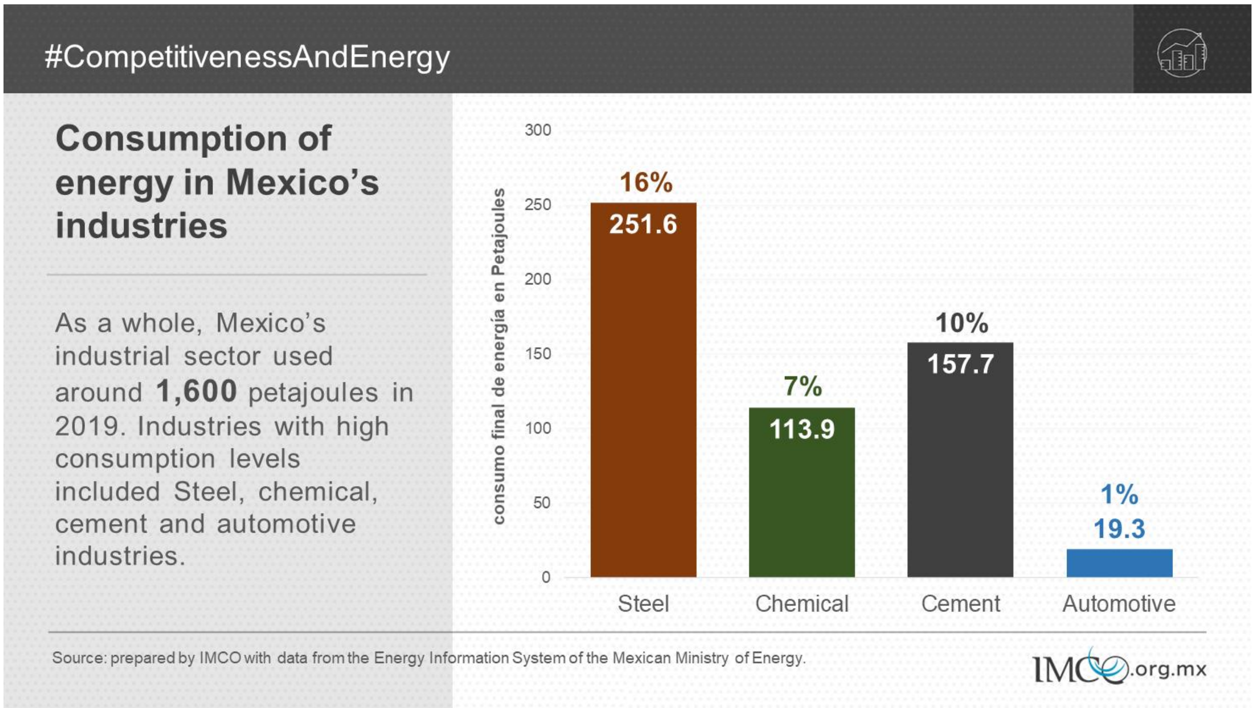
Some industry representatives have predicted that the Energy Reform bill would cause a significant reduction in investment in large infrastructure and clean energy projects for the cement industry[4]. The constitutional amendments to the conditions for the participation of private companies would generate uncertainty for investors involved in clean energy projects, most of which already supply several cement production plants due to their comparatively lower costs and lower emissions. Hence, the cement industry's plan to transition towards a higher use of clean energy for its operations would be hindered and their objectives of reducing its polluting emissions by 40% by 2030 and zero emissions by 2050 would be compromised[5].

[2] SENER. Energy Information System. Available at https://sie.energia.gob.mx/bdiController.do?action=temas

[3] Sandoval, M. (2022). Industria automotriz rechaza la reforma eléctrica de AMLO. Forbes. Available at https://www.forbes.com.mx/businesses-industry-automotive-rechaza-a-reforma-electrica-de-amlo/

[4] Navarrete, F. (2021). Terror para las constructoras: reforma eléctrica las va a 'fulminar'. El Financiero. Available at https://www.elfinanciero.com.mx/empresas/2021/10/14/terror-para-las-constructoras-reforma-electrica-las-va-a-fulmin

[5] (2021). Cemex y otros fabricantes de concreto enfrentan grandes desafíos en compromisos climáticos. El CEO. Available at https://elceo.com/businesses/cemex-and-other-concrete-manufacturers-face-great-challenges-in-com



Steel industry

The steel industry has the highest electricity consumption. Steel is an essential input for the production of a wide variety of goods for activities related to water management, food cultivation and storage, activities related to energy, construction, and transportation equipment, among others. Additionally, it's an essential industry for the future of manufacturing, since iron and steel are also fundamental in the manufacture of technologically advanced products. All in all, the manufacturing of iron and steel products represents about 3% of total production value of manufacturing industries.

Representatives of the iron and steel industry are concerned that clean, cheap and sufficient electricity will not be available in the coming years[6]. They have requested amendments to the Energy Reform bill in order to guarantee the availability of electricity and natural gas at competitive prices.[7] Without competitive energy, the likelihood of successfully substituting imports from Asia and developing high value-added products nationally in order to supply the North American market would be low.

Chemical industry

Chemical production is the second industrial activity with the highest electricity consumption, according to SENER; its level of consumption in 2019 amounted to 113.8 petajoules -7% of total industrial consumption-. The chemical industry integrates resins, fertilizers and paints, as well as pharmaceutical products -areas where Mexico has a great opportunity for growth modernization

[6] Joy, A. (2021). Preocupa reforma eléctrica a industria siderúrgica: Canacero. La Jornada. Available at https://www.jornada.com.mx/notas/2021/12/15/economia/pretrabajo-reforma-electrica-a-industria-siderurgica-canacer

[7] Gonzalez, A. (2021). Steelmakers ask to correct 4T electrical reform. Reforma.

of productive activities-, and it also contributes to about 2% of the country's GDP. Its relevance lies in the transformation of oil and gas to produce a wide variety of products that range from materials for general use, to materials with a high technological content and cutting edge technologies for other industries.

Entrepreneurs in this industry are concerned about rising electricity prices[8], since it would represent an additional challenge for an industry that is already facing a drop in sales of petrochemical products at a national level, the lack of inputs from Pemex and brand new restrictions on fuel imports. For this reason, they request that Congress reconsider the bill, and they've submitted specific proposals to the Federal Government containing necessary measures to increase the productive capacity of the sector so that it's able to satisfy a greater share of the national demand.

IMCO Proposals

Beyond representing a compliance risk for USMCA, the Energy Reform bill has harmful implications regarding rule of law, the sustainable management of the economy and the environment, as well as in the operation of businesses and productive activities. In addition, its potential to negatively impact the costs and availability of an essential input such as electricity also jeopardizes the possibilities and potential for growth and modernization of the Mexican economy, which in turn inhibits socioeconomic development.

In the context of the parliamentary hearings in Congress to discuss the bill, IMCO proposes a series of measures to strengthen the competitiveness of the energy market and the Mexican economy, which include the integration of a North American energy market, a commitment with the rule of law and a push for investment in necessary infrastructure:

a. **Include Mexico in the US-Canada side letter on energy cooperation**, which encompasses a series of commitments regarding energy cooperation, especially regulatory measures and regulatory transparency, as well as disciplines related to non-discriminatory access to transmission infrastructure and pipelines.
b. **Invest in cross-border energy infrastructure.** The creation of new institutions is not necessary, as it is possible to expand cross-border cooperation with minor changes to the existing framework. One possibility is to expand the capitalization of the North American Development Bank, which currently stands at $6 billion, as well as extend its mandate to allow it to develop transportation and energy infrastructure projects. It would also be possible to expand its geographic coverage to finance projects in Central America.
c. **Invest in energy and logistics infrastructure in Central America**. The North American partners face the challenge of getting the countries of the Central American northern triangle (Guatemala, Honduras and El Salvador) to transition from rentier economies based on remittances, agriculture, tourism and low value-added industry towards competitiveness. This requires that Mexico, the United

[8] Garcia, K. (2021). ANIQ pide al gobierno reconsiderar iniciativa de reforma eléctrica. El Economista. Available at https://www.eleconomista.com.mx/empresas/ANIQ-pide-frenar-iniciativa-de-reforma-electrica-del-gobierno-de-AMLO

States and Canada acknowledge that the development of these countries is in their national interest and bet on the competitiveness of a region that currently lacks the physical infrastructure for the transportation of goods, as well as access to competitive energy which allows the establishment of high value-added industries. A stepping stone would be to resume the Salina Cruz-Tapachula pipeline project and study the feasibility of a potential expansion to Guatemala.

d. **Facilitate the development of new installed capacity based on clean energy.** The long-term power auctions that took place between 2015 and 2017 were highly successful in supplying clean energy at competitive prices. They were also successful in attracting 26 billion dollars in investment to develop renewable generation capacity. Resuming this strategy would be a first step to reactivate investment in renewable capacity.
e. **Reinforce the commitment of the Mexican State to the Rule of Law.** A predictable investment environment is an essential condition for the country to be successful in attracting and retaining investment and talent. This requires full commitment to the spirit and contents of USMCA. Similarly, it is indispensable to guarantee regulatory independence from both government and private parties.

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