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Environmental Considerations in Competition Enforcement – Note by Mexico (COFECE)

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More documents related to this discussion can be found at https://www.oecd.org/daf/competition/environmental-considerations-in-competition-enforcement.htm.

Please contact Mr Antonio Capobianco if you have questions about this document [Email: Antonio.CAPOBIANCO@oecd.org].

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Mexico (COFECE)

1. Introduction

1. The main objective of Mexico's competition legal framework is the protection and promotion of competition, as well as the efficient functioning of markets. However, the experience of the Federal Economic Competition Commission (COFECE or the Commission) demonstrates that competition advocacy actions sometimes imply addressing environmental sustainability issues as well.

2. This contribution presents COFECE's experience in the electricity industry, where competition advocacy initiatives have simultaneously resulted in pursuing other public policy objectives, specifically environmental sustainability. The next section of this document explains the regulatory changes of the electricity industry carried out in Mexico during 2013-2014. These changes sought, among other objectives, to implement a transition towards clean generation through competition, which would motivate the installation of efficient electricity generation projects, which tend to be precisely those based on clean technologies. This legal framework incorporated the Clean Energy Certificates (CEL) and requested COFECE to assess the CEL market two years after the entry into force of this new market. The third part of this contribution describes the powers of COFECE to conduct such an assessment and provides a brief description of the Mexican CEL market. Finally, the last section of this contribution describes the competition problems identified in the CEL market, as well as some of the recommendations made by COFECE to address them. It also briefly explains the negative impact of these problems in fulfilling the clean generation goals envisaged in the Mexican regulations and the international environmental commitments undertaken by the country. In addition, it explains that this situation will be further aggravated if the Presidential bill for the constitutional reform of the electricity industry presented last September 2021 to Congress is passed and enacted.

2. Electricity regulatory framework: promotion of competition and clean energy sources

3. In 2013, the energy sector regulation in Mexico suffered a dramatic reform. In the electricity industry, the country went from having one state-operated enterprise (a monopoly in the entire chain), the Federal Electricity Commission (CFE for its acronym in Spanish), to a model which allowed private participation in the generation and sale of electricity. The reform also aimed at reducing the generation of electricity through conventional sources and increasing generation from clean sources.[1] This implied fostering an industry which would increasingly generate electricity from clean sources to comply with international commitments, reaching 35% of all generation by 2024, and 50% by 2050. This regulation was designed to attain the aforementioned environmental objectives

[1] Explanatory Statement of the Electric Industry Law (LIE), pag. 6, available at: https://legislacion.scjn.gob.mx/Buscador/Paginas/AbrirDocProcLeg.aspx?q=u+uol4XmeVVQSBV20oBZUzfoffjRaRREeXcrYq9ZdIt3r73u5/ZcAiJ87EltGSXDkLXBu+Qv24vehbDZSivnqdaisBmATdukIc7EOX+OO08mU1kY24JrOnenubF9MIJ4wAUyutpZnK9lXOZaaWlWRF1I/Dg2mIlOHWvfR4UJEQ8=

through market efficiency and competition. Four factors of the regulatory framework specially contribute to foster energy from clean sources:[2]

- open and non-discriminatory access to the National Transmission Network (RNT for its acronym in Spanish) and the General Distribution Networks (RGD for its acronym in Spanish), which are considered natural monopolies and are a necessary input for generators and suppliers to compete with equal opportunities;[3]
- economic dispatch,[4] which consists on dispatching first the most efficient plants, for example wind and solar plants, to encourage competition by reducing the costs of generating electricity;
- horizontal separation in the generation of electricity (to foster competition amongst several independent CFE generators, and of these with private generators, motivating lower costs in generation – through efficiency and productivity – , and to prevent collusive behaviour among CFE plants),[5] and vertical separation between the generation, transmission, distribution and commercialization (supply) activities of CFE (which is essential for avoiding that an integrated CFE takes advantage of its market power, especially in the links in which it remains a legal monopoly – transmission and distribution – to discriminate against its competitors in the generation or supply links by displacing them or preventing them from accessing the market, also for avoiding cross-subsidies between the activities of CFE in the different links); and
- the creation of a CEL market, which constitutes a mechanism aimed at assigning a monetary value to the social benefits of generating electricity from clean sources, thereby, motivating the installation of clean energy generation capacity to comply with Mexico's committed clean energy goals.

4. COFECE has accompanied the liberalization process of the electricity industry, mostly in two ways: (1) by advocating (through different tools such as opinions and

[2] COFECE 2021, *Transición hacia mercados competidos de energía: Los Certificados de Energías Limpias en la industria eléctrica Mexicana*, pag. 6, available at: https://www.cofece.mx/wp-content/uploads/2021/05/CEL_doc_vb2.pdf

[3] These networks are considered natural monopolies because: (i) developing the necessary infrastructure to provide the service implies high initial fixed sunk costs, which makes the entry of new competitors inefficient; (ii) they entail economies of scale, given that once the investment is made, the average costs of providing the service decrease over a wide range of demand, as more end users are connected, making the presence of more service providers inefficient; and (iii) there are no alternatives or substitutes for transporting the energy from the generation location to the consumption site.

[4] Economic dispatch is a mechanism foreseen in the Short-Term Energy Market (MECP for its acronym in Spanish) – which is a component of the MEM – used to dispatch first the most efficient plants in terms of generation costs and prices. The National Centre for the Control of Energy (CENACE per its acronym in Spanish) is responsible of verifying that the prices offered by generators are actually based on costs. For more information about the MECP see Agreement by which the Short-Term Energy Market Manual is issued, of June 2016, available at: https://www.cenace.gob.mx/Docs/MercadoCortoPlazo/Manual%20de%20Mercado%20de%20Energ%C3%ADa%20de%20Corto%20Plazo%20(DOF%20SENER%2017-Jun-16).pdf

[5] In this sense, the power plants of CFE were divided among different companies of CFE *Generación* and as a result, thirteen new CFE companies were created. COFECE 2021, pag. 25.

controversies)[6] that Mexican consumers should have access to cheaper and cleaner energy, and pointing out the obstacles to effective competition in secondary regulation, both in norms which derived from the 2013-2014 reform and its implementation, as well as measures posited by the current government since 2020; and (2) by carrying out a study into competition conditions in the CEL market.

5. As mentioned, recent actions of the current government seek to counter-reform this industry with a clear impact on competition in the generation and supply of electricity, as well as on the CEL market, compromising Mexico's compliance with the committed percentages of future clean energy generation. The challenges posed by this situation are described in more detail in section four of this contribution.

3. CEL market study

6. The generation of electricity from clean sources creates social benefits.[7] To achieve these benefits, Mexico, like other countries, created a market mechanism to accelerate the installation of clean electricity generation projects. This mechanism is the CEL, which functions as an economic instrument to recognize the social benefit of electricity generation through clean sources, motivating projects that require the signing of long-term contracts with fixed prices (between generators and wholesalers or large-scale consumers) making it possible to consider the value of CEL as an additional element in the recovery of investments. This is relevant for the Mexican scenario, which had to transition from a model of a vertically integrated monopoly to one in which there is competition in the generation link, and where CFE (the incumbent) has already recovered the investment of its generation plants in operation, owns the transmission network and has a greater bargaining power to sign long-term contracts with consumers.

7. CEL are established in the Electricity Industry Law (LIE for its acronym in Spanish) and the Energy Transition Law (LTE per its acronym in Spanish). Moreover, the Twenty-Second Transitory Article of the LTE[8] established that COFECE would carry out an assessment from a competition perspective of the CEL market, two years after it began operating. This request is in line with COFECE's powers to conduct market studies as an advocacy tool.[9] Therefore, in March 2020, COFECE published a questionnaire to learn more about the diverse views from parties interested in this market[10] and received a total

[6] For more information about this actions refer to Press Releases:COFECE-012-2021, available at: https://www.cofece.mx/wp-content/uploads/2021/04/COFECE-012-2021_ENG.pdf; COFECE-006-2021, available at: https://www.cofece.mx/wp-content/uploads/2021/02/COFECE-006-2021_ENG.pdf; COFECE-037-2020, available at: https://www.cofece.mx/wp-content/uploads/2021/02/COFECE-006-2021_ENG.pdf; COFECE-023-2020, available at: https://www.cofece.mx/wp-content/uploads/2020/06/COFECE-023-2020-Eng.pdf; and COFECE-018-202, available at: https://www.cofece.mx/wp-content/uploads/2020/05/COFECE-018-2020-Opinion-to-the-Energy-Control-Center.pdf .

[7] Such as combating climate change, reducing Green House Gases emissions, reducing diseases related to air pollution, and reducing the use of fossil fuels.

[8] Enacted on 24th December 2015, whose object is to regulate obligations regarding clean energy and reduction of pollutant emissions of the Mexican electricity industry.

[9] Section XXIII of article 12 of the Federal Economic Competition Law (LFEC per its acronym in Spanish).

[10] COFECE Press Release. COFECE-010-2020, available at: https://www.cofece.mx/wp-content/uploads/2020/03/COFECE-010-2020-English.pdf

of 137 responses. These inputs, as well as COFECE's analysis of the market, its regulation (including recent changes) and market statistics, resulted in a preliminary version of the study and its recommendations. This preliminary version was subject to a public consultation in January 2021[11] and a final version was released in May 2021.[12]

8. The study covers a wide range of topics including (1) an overview of the electricity industry as of the energy reform of 2013, and a definition of the CEL emphasizing their importance to comply with Mexico's international clean energy goals, (2) an analysis of the demand and supply sides of the CEL markets – considering the aspects that favour or hinder their performance, providing recommendations from a competition perspective, (3) the aspects that impact the commercialization of CEL and also provides recommendations to address them, (4) a description of the mechanisms for monitoring and compliance of CEL obligations, and (5) a conclusion, with the aid of forecasting methods, on Mexico's ability to comply with its clean energy obligations. In the remaining sections of this contribution these topics will be further explained.

3.1. Definition of CEL

9. In the study, CEL are defined as a market mechanism that recognize the positive externalities for society from generation of electricity from clean sources, aimed at accelerating the installation of clean energy generation projects and a means to achieving the minimum percentages of internationally committed clean energy participation. Specifically, these are titles issued by the Energy Regulatory Commission (CRE for its acronym in Spanish) that certify the production of a certain amount of energy from clean sources. As mentioned above, these are established in the legal framework[13] to reach the minimum percentage shares of clean energy in the industry.[14] Likewise, this framework establishes the obligations that configure the CEL market.

10. The CEL market is comprised by a demand-side (consisting of parties obliged by law to acquire CEL),[15] a supply-side (consisting of certified clean energy generators that are granted CEL) and its commercialization (through long-term auctions, a short-term market, and bilateral contracts between market participants). The price of CEL is not fixed but depends on their demand and supply.

11. The CEL acquisition requirements are based on the levels of electricity generation capacity from clean sources required to fulfil national and international goals. Therefore, each year, SENER establishes (three years in advance) the clean energy consumption requirements of parties obliged by the law to acquire CEL. The objective of establishing

[11] COFECE Press Release. COFECE-016-2021, available at: https://www.cofece.mx/wp-content/uploads/2021/05/COFECE-016-2021_ENG.pdf

[12] COFECE Press Release. COFECE-003-2021, available at: https://www.cofece.mx/wp-content/uploads/2021/02/COFECE-003-2021_ENG.pdf

[13] In the LTE and the General Law of Climate Change (LGCC for its acronym in Spanish).

[14] With the 2014 regulatory framework, only generation plants built as of this could receive CEL, the existing ones were counted within the base capacity from which a deficit was set in order to meet the clean energy goals.

[15] Established in article 123 of the LIE, these are the suppliers of electricity, qualified users (high consumption of electricity), final users in isolated supply (those that generate or import electricity to cover their own needs, without transmitting such energy through the networks), owners of the legacy interconnection contracts (corresponding to those of self-supply and cogeneration that do no produce clean energy).

CEL obligations three years in advance is to provide the necessary time for the planning and development of missing clean energy capacity to meet the goals. In 2014, Mexico established a clean energy baseline of approximately 20% of clean energy mostly coming from pre-existing CFE plants. Thus in 2015 established a CEL requirement equivalent to 5% of the total energy consumption for 2018. In 2016, it set a percentage of 5.8% for 2019, and in March 2019, the requirements for 2020, 2021 and 2022 were determined at 7.4%, 10.9% and 13.9%, respectively.[16] It is worth noting that to date the requirements of CEL for 2023 and 2024 have not been established. Said omission may affect the efficient functioning of the CEL market and would imply a lack of development of clean energy capacity to meet Mexico's goals of clean energy generation for 2024, 2035 and 2050, which are 35%, 40% and 50%, respectively.

3.2. Conditions for the efficient functioning of the CEL market

12. The study identified that for the CEL market to function under competitive conditions it is necessary to ensure the following four principles: [17]

1. *On the demand-side*, it is necessary to increase the number of players obliged to comply with CEL obligations, redistributing these obligations among more market participants (since today, the main supplier of electricity is CFE Supplier of Basic Services (CFE SSB per its acronym in Spanish) which offers more than 81% of the country's consumption, and currently is the main source of demand of CEL). As the number of suppliers other than CFE SSB increases, the responsibility of complying with Mexico's clean energy goals will be distributed amongst more players and will not solely depend on CFE SSB.
2. *On the supply-side*, it is necessary to guarantee the generation of electricity from clean sources to encourage the installation of more clean generators that have the right to receive CEL, thus increasing the number of CEL offered in the market.
3. *Regarding CEL commercialization*, it is necessary to ensure the implementation of the mechanisms foreseen in the regulation for the exchange of CEL, especially operation of the short-term market and resuming long term auctions.
4. *Effective monitoring and sanctioning* mechanisms are required to generate sufficient incentives for the purchase of CEL and compliance with the associated clean energy obligations.

13. The following section will address the competition concerns that prevent the fulfilment of these four conditions, and some of the recommendations made by COFECE to address them.

4. Competition problems in the CEL market and their impact on clean energy goals

14. The study presents the situation of the CEL market on December 2020, identifying key competition concerns that affect the efficiency of the market and that have an impact on the achievement of Mexico's clean energy goals. These concerns are described below.

[16] Considering that the LTE established committed percentages of clean energy participation in the generation of electricity of: 25% in 2018 and 30% in 2021.

[17] COFECE 2021, pag. 95, available at: https://www.cofece.mx/wp-content/uploads/2021/05/CEL_doc_vb2.pdf

4.1. Demand-side problems

15. As mentioned in the previous section, most Mexican end-users receive energy supply from CFE SSB. Although users could voluntarily migrate from the basic supply scheme (i.e. that offered by CFE SSB) to the Wholesale Electricity Market (MEM for its acronym in Spanish), they have not done so. In particular, the study identified several problems that favour the concentration of CEL demand in CFE SSB, mainly related to factors that discourage or hinder migration to MEM and which inhibit competition among electricity suppliers. These factors are: 1) the migration mechanism to the MEM is optional; 2) the current threshold for migrating (of 1MW) may be too high and has not been modified since August 2016;[18] 3) CRE has established complex migration procedures and compliance with its requisites may delay the migration processes; 4) the methodology for the calculation and adjustment of the final tariffs for basic supply[19] has been changed several times and CRE has not published a definitive methodology; this uncertainty regarding the regulated tariff in the basic scheme has disincentivized the entrance of private suppliers to the MEM which, in turn, discourages voluntary migration into the MEM by consumers due to reduced options and difficulty to find better conditions;[20] and 5) there is competition with the licensees of the previous regime – which allowed, since 1992, the participation of private parties in self-supply and cogeneration modalities and that have acquired rights that may prevent equal opportunities in the market.[21]

16. In order to address these concerns, some of the recommendations made by COFECE in the study are the: 1) establishment of a progressive program that will allow an accelerated migration of users into the MEM in order to diversify the CEL compliance obligations which currently are mostly due for CFE SSB , 2) issuance of a definitive methodology for the transparent and traceable calculation and adjustment of final tariffs of CFE SSB, that allows potential competitors in the qualified supply to offer more attractive terms that encourage migration, 3) evaluation of the continuity of operations of licensees of the previous regime, in order to favour their migration into the MEM.

4.2. Supply-side problems

17. In 2014, the Ministry of Energy (SENER for its acronym in Spanish) established the requirements to receive CEL,[22] starting in 2018 and for a period of 20 years. These requirements underwent a modification in 2019, in order to approve the granting of CEL

[18] This happens even when the article 60 of the LIE provides that the Ministry of Energy can periodically adjust downwards the levels of consumption or demand that oblige Final Users to register as a Qualified User.

[19] This tariff applies to CFE SSB and is regulated by CRE.

[20] The methodology for calculating the final tariffs of CFE SSB has been constantly modified which has make it difficult for regulated users to compare the costs between the basic and qualified supply.

[21] According to the Public Service of Electrical Energy Law (LSPEE per its acronym in Spanish).

[22] The *Guidelines that establish the criteria for the granting of Clean Energy Certificates and the requirements for their acquisition* establish that Clean Generators who are entitled to receive CEL are those who represent: i) Clean Power Plants who began operations after August 11, 2014 (that is, new generation projects), ii) Clean Legacy Power Plants (those that when the LIE entered into force were not included in a permit for electricity generation) who began operations before August 11, 2014, as long as they had conducted a project to increase their clean energy production, and iii) Clean Power Plants whose capacity was totally or partially excluded from a CIL in order to be included in an Interconnection Contract in the terms of the LIE. These guidelines are available, in Spanish, at http://www.dof.gob.mx/nota_detalle.php?codigo=5366674&fecha=31/10/2014

to CFE's Legacy Power Plants that had entered into operation before 2014, thus increasing CEL supply, without increasing the obligations to acquire CEL (demand) to compensate for this increase in supply. It is worth highlighting that the modification does not contemplate non-CFE Legacy Plants (private generators), implying a discriminatory treatment and a regulatory bias in favour of *CFE Generación*.[23]

18. In the study, the Commission identified that this measure would, on the one hand grant an exclusive advantage to *CFE Generación* and, on the other by increasing CEL supply without the increasing demand accordingly, cause a reduction in their price and the profit margins of private generators that choose to invest in clean technologies. This decrease could lead to the exit of some suppliers from the market or the modification of their portfolios towards a greater use of fossil fuels. Moreover, this leads to *CFE Generación* becoming the largest player in the CEL market, allowing it to block the entry of new clean energy plants that could be potential competitors. Finally, *CFE SSB* could cover its demand for CEL from *CFE Generación* through an intercompany transfer, one of the reasons why the effective legal, accounting, operational and functional separation of CFE should be regulated and monitored.[24]

19. Another factor that affects the supply of CEL is the delay in the granting of generation permits. For example, generation permit requests, which by law should be resolved in 75 working days,[25] may take more than 230 days of evaluation by CRE.[26] Most of the pending requests are related to clean generation sources. The situation was made worse when SENER published in 2020 an Agreement in light of the COVID-19 pandemic indefinitely suspending the timeframes and terms of its procedures.[27] In a similar sense, in January 2021, CRE established a suspension of timeframes which considerably delays the granting of generation permits and creates uncertainty in the interconnection process.[28]

20. Another factor that negatively influences supply is the lack of investment in the expansion and modernization of the RNT and RGD. The study shows that current public expansion projects of the RNT do not report advances in their implementation, and 76% present a mean delay of three years. In this regard, the legal framework allows SENER to involve private market participants in expansion and modernization works of the network, but this alternative has only been used on one occasion (and this only project proposal was ultimately cancelled). Furthermore, the LIE allows the installation of private networks (for isolated supply or to deliver energy into the RNT or the RGD), which could be acquired by

[23] At the time of publication of the study, the modification remained without effect until the final resolution of several *amparo* lawsuits filed by electricity industry participants, based on definitive suspensions granted by the Federal Judiciary.

[24] In May 2019 the Commission issued an opinion regarding the competition concerns identified in relation to the modification of the Terms for the Strict Separation of CFE (TESL per its acronym in Spanish), OPN-003-2019, available at: https://www.cofece.mx/CFCResoluciones/docs/Opiniones/V112/4/4791684.pdf

[25] According to the information provided by CRE, updated up to 03 October 2020, available at: https://www.gob.mx/cre/documentos/solicitudes-de-permisos-de-generacion-de-energia-electrica-en-evaluacion?idiom=es

[26] There are also ongoing applications for modification and transfer permits that have been under review of the regulator for more than 300 working days.

[27] Agreement available at: https://www.dof.gob.mx/nota_detalle.php?codi-go=5594134&fecha=29/05/2020

[28] Agreement available at: https://dof.gob.mx/nota_detalle.php?codigo=5609975&fecha=18/01/2021

state-owned carriers and distributors if CRE determines that these add a net benefit to the electricity system. However, the latter mechanism has not been implemented because the General Criteria for the assessment of the net benefit of expansion works of the RNT and RGD, to date, has not been published.

21. Finally, recent regulatory modifications, especially the Reliability Policy published by SENER,[29] have sent adverse signals to private investment, which severely affect the supply-side of the CEL market, because these were aimed at preventing equal access to transmission and distribution networks and eliminating economic dispatch mechanisms, arguing that clean energies are intermittent and affect the reliability and stability of the national electric system.[30] It is worth noting that COFECE filed a constitutional controversy at the Supreme Court (SCJN for its acronym in Spanish) against this Policy. In October 2020, the Supreme Court ruled in favour of COFECE, declaring unconstitutional the provisions of the Policy that most affect competition. Given this ruling, SENER issued an agreement declaring the Policy void.

22. Among the recommendations made by COFECE in its study to address the aforementioned concerns are: 1) that CRE respects the timeframes and conditions to decide on generation permits requests as an expedite granting of permits would allow to promote competition in the market, 2) the implementation and strengthening of a planning and monitoring program of the networks' infrastructure as well as the publication of general criteria that would allow the expansion and modernization of the system 3) the strengthening of the strict separation of CFE, and 4) the non-adoption of measures that severely affect the supply-side (included in the Reliability Policy and the reform to the LIE).

4.3. Problems in the commercialization of CEL

23. The regulation provides for the commercialization of CEL (sale and acquisition) through three types of transactions: i) a short-term market (also known as spot market) held by the National Centre for the Control of Energy (CENACE per its acronym in Spanish), ii) Electricity Coverage Contracts through long-term auctions, and iii) Bilateral Contracts between private parties.

24. Of these three mechanisms the latter two are the only ones that have been implemented given that the short-term CEL market has not operated since it came into force. With respect to long-term auctions, these have the purpose to allow the signing of competitive contracts to sell electricity and CEL providing a stable source of income that contributes to the financing of investments in new power plants (typically for wind and solar photovoltaic technology) or to repowering existing ones. However, in December 2019 SENER mandated CENACE to cancel the long-term auctions, which eliminates the possibility of competing to sell electricity and CEL.

25. Therefore, of the three mechanisms for the purchase and sale of CEL, only one (bilateral contracts) still operates.

[29] The *Policy for the Reliability, Security, Continuity and Quality in the National Electric System* was published in May 2020 by the Ministry of Energy with the intention of introducing changes to the Rules of the Market of the National Electric System, particularly the ones regarding the interconnection. The Policy is available, in Spanish, at https://www.dof.gob.mx/nota_detalle.php?codigo=5593425&fecha=15/05/2020

[30] The argument was deemed unjustified as the generation of intermittent clean energies only represents 7.9% of the total generation of electric energy.

26. In this regard, amongst other recommendations COFECE has stated that: 1) long-term auctions should be resumed, and 2) the short-term CEL market is implemented, and its Operational Provisions published.

4.4. Lack of monitoring and sanctioning mechanisms for non-compliance

27. CRE is the body in charge of granting CEL, of keeping their registry and verifying compliance of the requirements derived from the obligations of acquiring them. To manage all these tasks and the information related to the process of CEL, the CRE established in 2017 the S-CEL platform. Even when the regulation foresees the publication of an operational manual for this platform, to this day it has not been issued.[31]

28. Moreover, SENER should prepare a public detailed report, at least each year, with information about total and unitary cost of CEL by technology, market tendencies, clean energy penetration and their impact on costs and tariffs. However, this report has not been published since April 2020. In this same line, the regulation also foresees that CRE should keep a traceable monitoring and surveillance of the number of CEL in the market, but this has not happened as registry information (i.e. coding, date of issuance and the information about clean power plant) of CEL that have been granted and commercialized so far has not been gathered. Therefore, it is difficult to estimate the number of CEL in the market.

29. While the regulation contemplates fines for non-compliance with the obligations for acquiring CEL, to date CRE has not imposed sanctions for non-compliance. The lack of enforcement of sanctions *de facto* hinders the operation of the CEL market because it discourages their purchase.

30. In this regard, COFECE has recommended: 1) the publication of the S-CEL operational manual, 2) periodic improvements to the S-CEL, 3) to assign a registration code for each CEL, allowing their traceability, and 4) the elaboration of a public report which includes the number of CEL in force, as well as the performance and trend of the CEL market.

4.5. Non-compliance with Mexico's clean energy goals

31. Finally, the study provides an assessment of compliance with the CEL obligations and with clean energy goals. For this, two scenarios were created:[32] scenario A (called the expected scenario) which considers the level of compliance of the clean energy goals and CEL obligations under the assumption that all the clean energy generation projects foreseen in the official planning are conducted in due time and form; and scenario B (called the realistic scenario) which uses available data related to installed capacity, generation and the entry into operation dates for 2018-2019 to make a projection for the 2020-2024 period.

32. COFECE's estimates indicate that although in 2021 Mexico's clean energy goals (30%) would be met, the slowdown in investment in clean energy, and in particular renewable energy, implies that in 2024 only 33.6% would be reached in Scenario A and 29.8% in Scenario B, compared to the 35% goal. In conclusion, Mexico would not meet the committed goal of clean generation by 2024.

[31] This manual should contain instructions, rules, directives and procedures to be followed for the administration and operation of S-CEL.

[32] COFECE 2021, pag. 87, available at: https://www.cofece.mx/wp-content/uploads/2021/05/CEL_doc_vb2.pdf

33. In order for Mexico to meet its international and national clean energy goals it would be necessary to approve and allow the development of new projects for the generation of electricity based on clean sources. However, the likelihood of reaching even COFECE's estimates seems very unlikely if the constitutional reform proposed last September by the Federal Executive were to be passed and enacted. Among other aspects, this reform seeks to grant CFE 54% of the market for the generation of electricity, cancels all permits granted to private parties for the generation of electricity, allows CFE to regulate itself and disappears other regulators like CRE, whose functions would be transferred to the Ministry of Energy. Moreover, this reform ultimately cancels the CEL.

34. All of the modifications proposed in the aforementioned reform are made based on the grounds that the State will be in charge of the energy transition in Mexico. Moreover, it foresees that the State will use, in a sustainable way, all the clean energy sources that the Nation has, in order to reduce greenhouse gases by establishing the necessary scientific, technological and industrial policies to ensure stability of the electricity industry as a requisite for national security.[33] However, as established in COFECE's CEL market study, Mexico's clean energy goals will unlikely be reached if the government counter reform measures are enshrined in the constitution and the participation of the private sector in this industry is curtailed.

[33] Initiative from the Federal Executive. Draft Decree by which articles 25.27 and 28 of the Political Constitution of the United Mexican States in matters of energy are reformed. The complete document is available, in Spanish, at http://gaceta.diputados.gob.mx/PDF/65/2021/oct/20211001-I.pdf