



APERC Workshop at EWG54

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2-1. PREE in Mexico

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1. Background of APEC PREE

2. Overview of Mexico

3. PREE in Mexico



1. Background of APEC PREE

Objectives of PREE (Peer Review on Energy Efficiency)

- **Share information** on energy efficiency energy performance as well as on policies and measures for improving and promoting energy efficiency energy in respective economies;
- Provide opportunities for **learning from the experiences** of other economies and for broadening the network among energy efficiency policy experts;
- Explore how **energy efficiency goals** on an overall and/or sectoral basis and action plans could be effectively formulated in each economy under review, taking into account the range of possible strategies that could be used, according to the **circumstances of each economy**;
- **Monitor progress** on attaining energy efficiency energy goals on an overall and/or sectoral basis and implementing action plans, if such goal and action plans have been already formulated at the time of the review; and
- Provide recommendations for **voluntary implementation** on how implementation of action plans could be improved with a view to achieving energy efficiency energy goals.

Background of APEC PREE (2)

PREE Main Responsibilities and Stakeholders

Host Economy

- Plan the review process
- Provide pre-briefing relevant information on energy efficiency.
- Coordinate the Review Team visit.
- Assess the preliminary and the Draft Final Report

APERC

- Prepare the guidelines for PREE
- Liaise with the host economy on logistical and technical preparations
- Lead the expert review team
- Prepare the Draft Final Report.

Review Team

- Conduct the review.
- Present its findings and recommendations to the host economy
- Finalize the Draft Review Report.

EWG

- Discuss and endorse the draft final report
- Ensure appropriate reporting to APEC Leaders.

Background of APEC PREE (3) ~ Previous PREE Exercises

10 PREE exercise and 3 follow-up PREEs





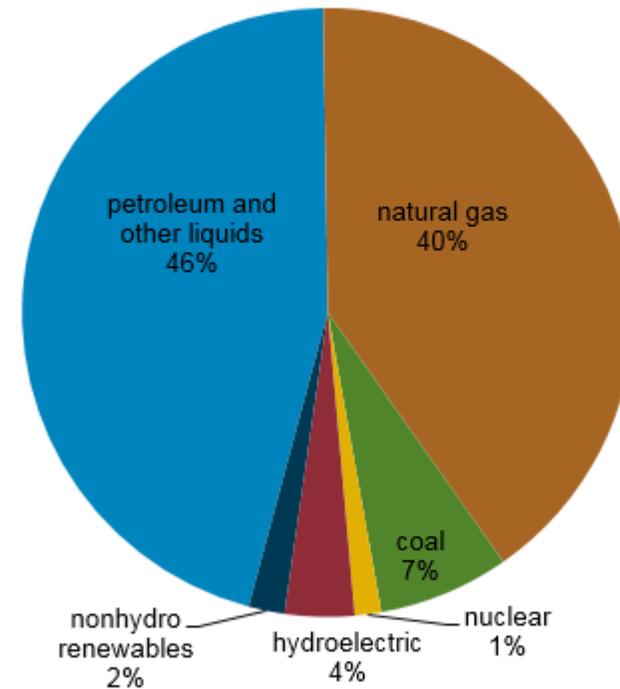
2. Overview of Mexico

Overview of Mexico (1)

- **Population:** 121 million inhabitants
- **GDP (2010 PPP):** 1 943 billion USD
- **Territory:** 2 million km²
- **GDP (2010 PPP per capita):** 15 493 USD



Total energy consumption in Mexico by source, 2015



Source: U.S. Energy Information Administration, BP Statistical Review of World Energy

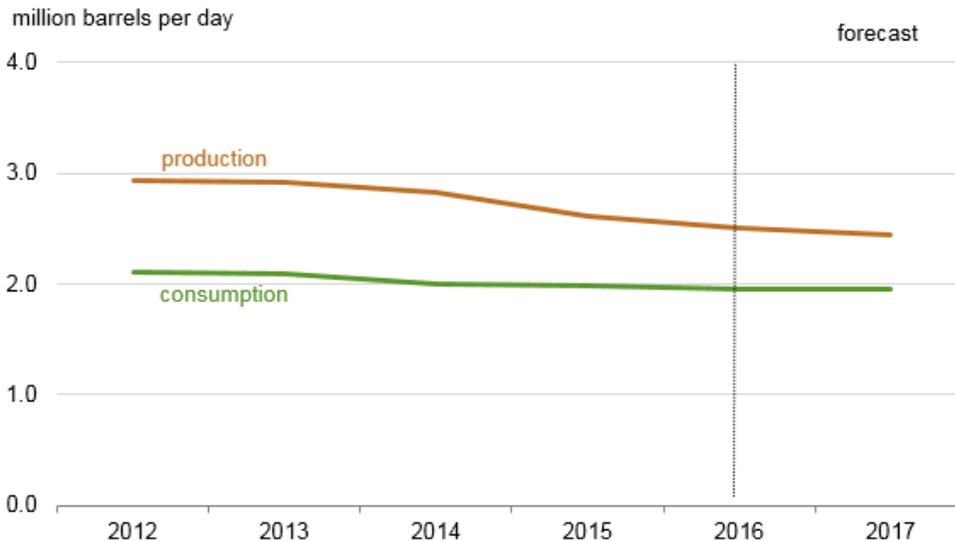
Source: World Bank (2016), EGEDA (2016), EIA (2017).

Overview of Mexico (2) Oil and Gas

- Mexico is a net crude oil exporter.
- Despite lower production, still exporting, most of it to the US.
- Oil production expected to recover with the Energy Reform.

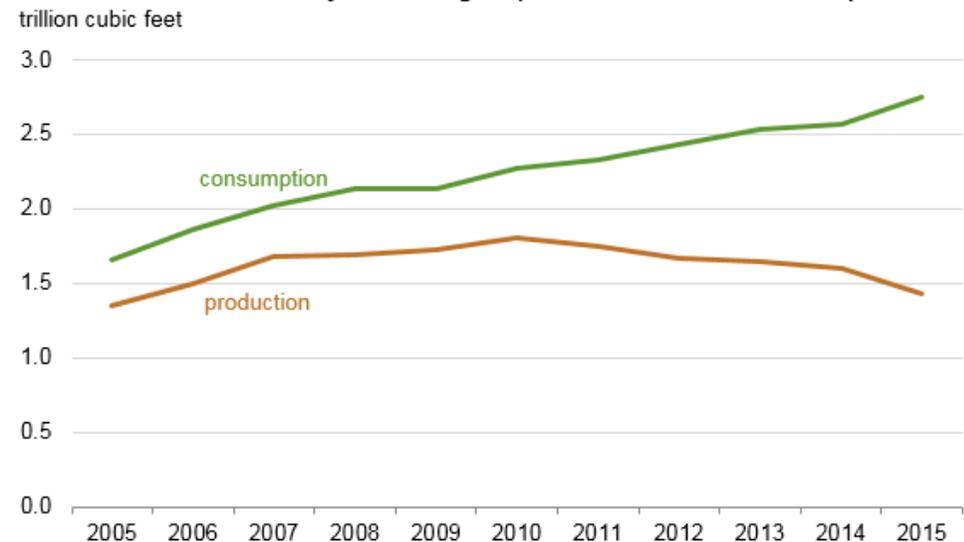
- Mexico has been a net natural gas importer for the past 20 years.
- Consequence of monopolistic regime and high oil prices, with limited resources, PEMEX preferred to invest in oil production.
- Demand growth driven by power generation, but the gap filled with...

Mexico's petroleum and other liquids production and consumption



eia Source: EIA Short-Term Energy Outlook

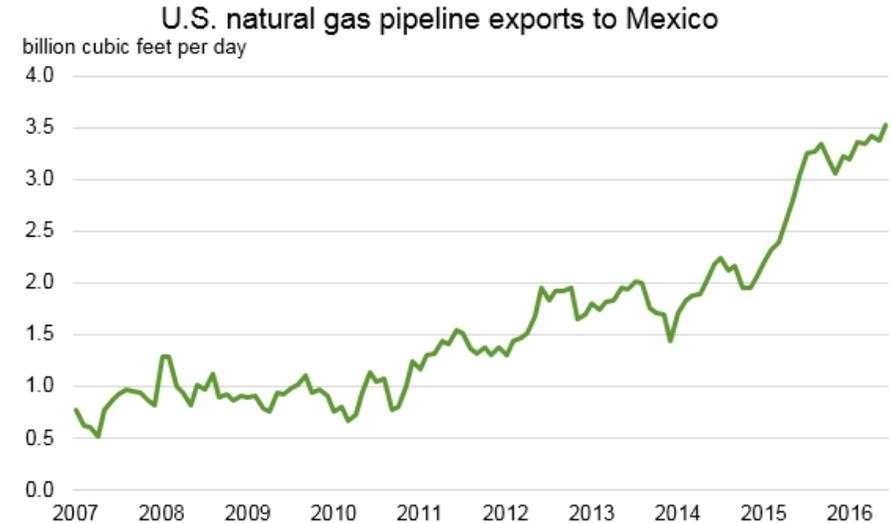
Mexico's dry natural gas production and consumption



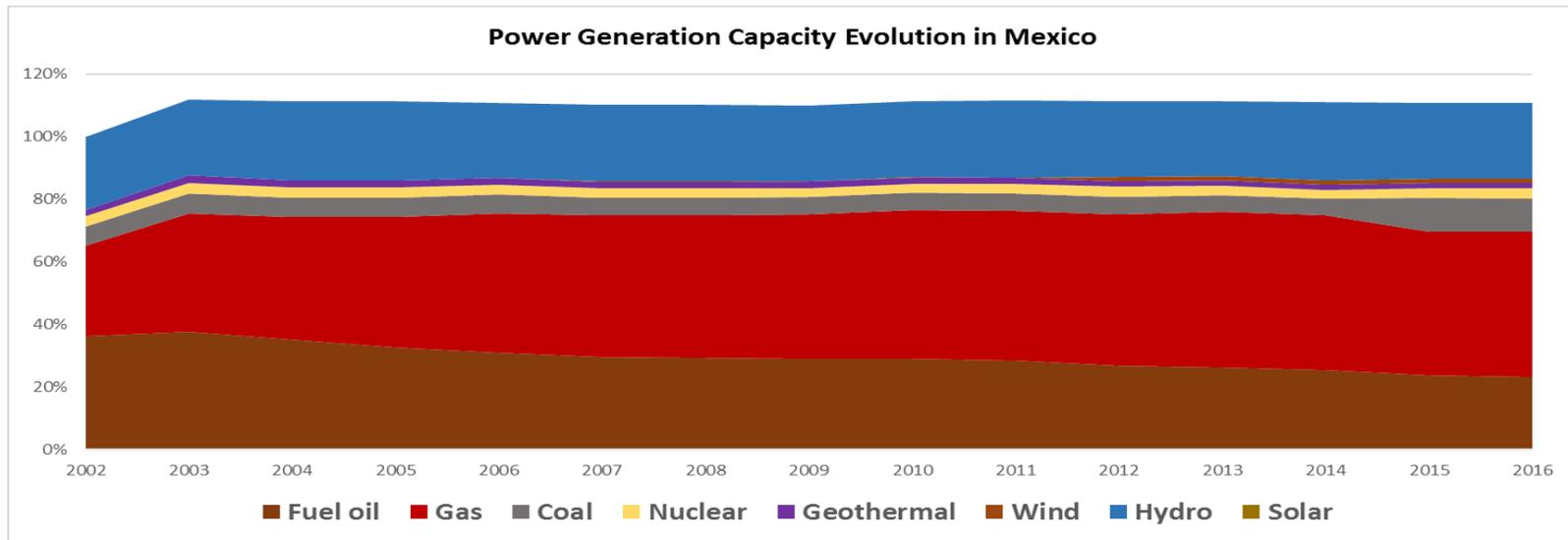
eia Source: U.S. Energy Information Administration

Overview of Mexico (2) US gas imports & power generation

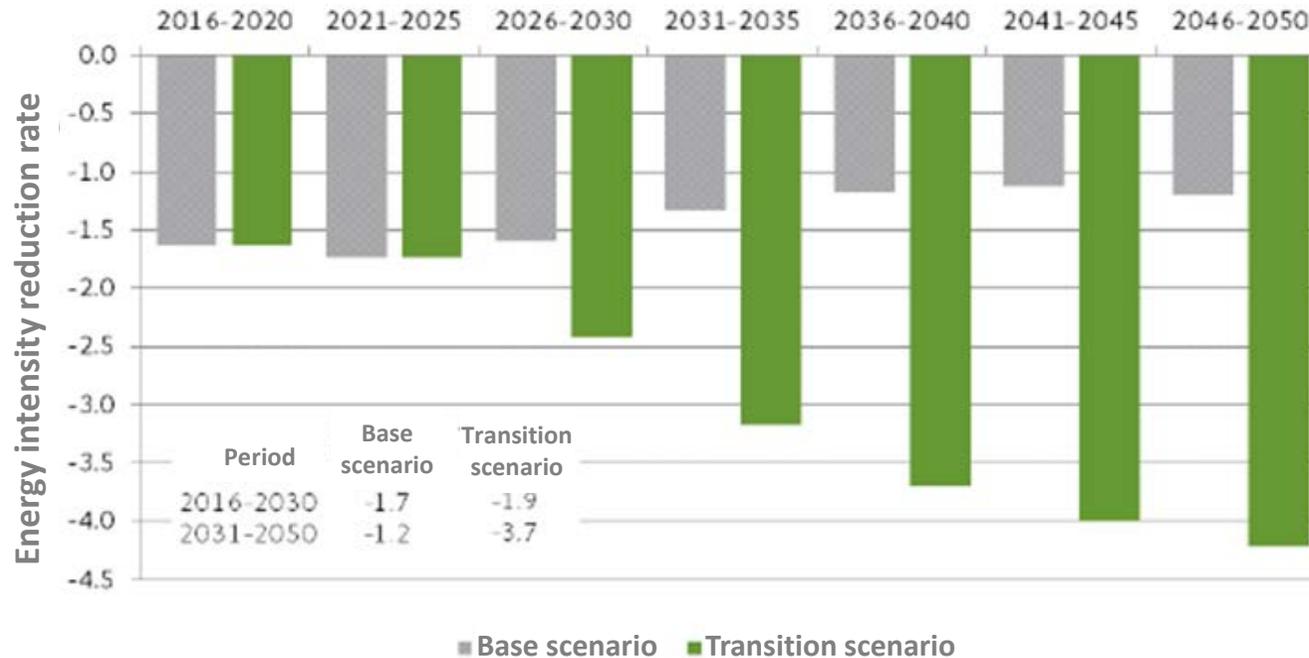
- The gap covered by increasing natural gas pipeline imports from the US.
- Shale revolution brought prices dramatically low to the border.
- Fuel shift in power generation from oil to natural gas; cheaper and less pollutant.



eia Source: U.S. Energy Information Administration



Overview of Mexico (2) Energy Efficiency Goals



Mexico's Energy Efficiency Goals	
2016-2030	2031- 2050
Average annual rate of 1.9% of reduction in final energy consumption intensity.	Average annual rate of 3.7% of reduction in final energy consumption intensity.



3. PREE in Mexico

- **Mexico PREE visit to Mexico City (6-10 March 2017)**
 - – 8 focus areas and overarching issues
 - – 6 nominated experts from APEC member economies
 - – 20 discussion sessions
 - – 1 site visit to CENACE (the independent power grid operator).
 - – 31 participants from Mexico (*Ministry of Energy, CONUEE, FIDE and CENACE*)
 - – **46 recommendations**

PREE in Mexico (2) ~ Peer Review Team: Responsibility Sharing

	Peer-review Contents	Leading Review Expert	Number of Recommendations
	Review Team Leader	-Mr. Takato Ojimi (APERC)	
1	Overall/Institutional Context	-Dr. Kazutomo Irie (APERC)	4
2	Energy Efficiency Goals, Targets and Strategy	-Mr. Borwornpong Sunipasa (THA)	6
3	Energy Data Collection and Monitoring	-Ms. Elvira Torres Gelindon (APERC)	6
4	Policy Measures-Government and Buildings	-Dr. Zhang Shicong (China)	5
5	Policy Measures-Industrial Sector	-Mr. Pramesh Maharaj (NZ)	7
6	Policy Measures-Transport Sector	-Ms. Elizabeth Yeaman (NZ)	5
7	Policy Measures-Electricity Sector	-Mr. Graham Parker (USA)	6
8	Policy Measures-Appliances and Equipment	-Dr. Ming-Shan Jeng (CT)	7
	Total		46

1 INSTITUTIONAL CONTEXT

Recommendation 3: Enhance the capabilities of subnational governments in order to adequately oversee, assess and enforce energy efficiency codes, programs and policies.

2 ENERGY EFFICIENCY ENERGY GOALS, TARGETS AND STRATEGY

Recommendation 8: Ensure the most life-cycle cost efficiency programs and targets are undertaken and established to mitigate any potential economic impact.

Recommendation 10: Promote capacity building, research and development, and financial support for energy efficiency projects.

3 ENERGY DATA COLLECTION AND MONITORING

Recommendation 11: Enhance cooperation with relevant actors in conducting household energy consumption surveys.

Recommendation 15: SENER should reinforce its ties with other government institutions to have better data quality by sharing information and communicating more effectively with them.

4 POLICY MEASURES-GOVERNMENT AND BUILDINGS

Recommendation 19: The government should continue undertaking measures to improve energy efficiency in its own buildings.

Recommendation 20: SENER should continue including residential and commercial buildings in pilot and demonstrative projects to raise awareness.

5 POLICY MEASURES-INDUSTRIAL SECTOR

Recommendation 22: The government should continue expanding the Learning Network approach for large energy users.

Recommendation 28: The government should adopt a low-cost building energy performance-rating scheme.

6 POLICY MEASURES-TRANSPORT SECTOR

Recommendation 30: The government should prioritize funding to public transport and non-motorized modes over additional road infrastructure.

Recommendation 32: Consider mandatory fuel economy labelling of vehicles at point of sale or in advertising.

7 POLICY MEASURES-ELECTRICITY SECTOR

Recommendation 38: Develop a framework and incentives to strengthen demand response, including adopting tariff reform to better reflect true costs and incentivize demand reduction and response programs.

Recommendation 39: Promote and encourage the development of micro-grids.

8 POLICY MEASURES-APPLIANCES AND EQUIPMENT

Recommendation 40: Benchmark energy efficiency standards with other APEC economies.

Recommendation 41: Increase resources in CONUEE for Minimum Energy Performance Standard (MEPS) implementation to enable a more proactive establishment and revision of standards, particularly in fast-moving technologies such as LED lighting.

PREE in Mexico (5) ~ Conclusions

- Energy efficiency currently a key part of energy policy in Mexico and progress, already evident.
- However, still faces considerable challenges that require:
 - greater attention from relevant institutions
 - more funds and labour dedicated to EE policy
 - increased awareness from the public.
- Successful EE strategy will render, among others:
 - Economic benefits by reducing costs
 - Enhancing energy security via reducing fuel imports
 - Sustainable development with less pollutant emissions, among other advantages for Mexico.
- This APEC PREE will help recognise Mexico's progress on energy efficiency abroad and reinforce the importance of reaching further achievements domestically in coming years.

An aerial photograph showing a cityscape with a volcano on the left, a complex highway interchange in the center, and a large solar farm on the right. The image is overlaid with a blue banner containing text.

Thank you for your kind attention

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