

MEXICO LIGHT-DUTY VEHICLE CO₂ AND FUEL ECONOMY STANDARDS

ICCT POLICY UPDATES

SUMMARIZE

REGULATORY

AND OTHER

DEVELOPMENTS

RELATED TO CLEAN

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WORLDWIDE.

A regulatory proposal published by the Mexican Government on July 12, 2012, aims to regulate CO₂ emissions and the fuel economy equivalent for new passenger vehicles, including cars, pickup trucks, and SUVs. The goal of the proposal is to obtain an average new car fleet average fuel economy of 14.9 km/L (35 mpg) in 2016. The proposal is aligned with the U.S. National Highway Transportation Safety Administration (NHTSA) 2012-2016 standards and represents the final step in harmonizing passenger vehicle fuel economy/greenhouse gas standards throughout North America during that time frame. The proposal has been published in the *Diario Oficial de la Federación (DOF)* and is now open for a 60-day public comment period. The agencies involved will then respond to comments, make any necessary adjustments to the proposal, and publish the final standard.

BACKGROUND

Three key agencies—Environment (SEMARNAT), Energy (SENER), and Economy (SE), with the support of the National Institute of Ecology (INE), which is the research arm of SEMARNAT—have been working together since 2009 to develop this proposal. Mexico has not had any fuel economy standards or labeling requirements in place for passenger vehicles since 1990.

This is the first national standard in Mexico to set targets in accord with the recently adopted General Law on Climate Change. This rule meets the requirements set out within the framework of the following plans for national development, climate change and energy:

- » *PND: Plan Nacional de Desarrollo* (National Development Plan) for 2007-2012 includes strategy 10.3, the adoption of international vehicle emissions standards for CO₂.
- » *PECC: Programa Especial de Cambio Climático* (Special Program on Climate Change) for 2009-2012 includes Goal 24, implementation of fuel economy and CO₂ standards for new light-duty vehicles.
- » *PRONASE: Programa Nacional para el Aprovechamiento Sostenible de la Energía* (National Program for Sustainable Energy) for 2009-2012 includes Action 1.1.1 to publish an efficiency standard for new light-duty vehicles.

- » *LGCC: Ley General de Cambio Climático* (General Law on Climate Change) includes Article 102, which requires mitigation of climate change through actions that include raising energy efficiency of the passenger vehicle fleet through the establishment of efficiency standards for new vehicles and control of emissions for imported vehicles.

THE SITUATION TODAY

New light vehicles sold in 2011 averaged 13.1 km/L, up from 11.8 km/L in 2008,¹ an 11% increase in fuel efficiency and an annual rate of improvement of 3.5%. In terms of CO₂ emissions, new vehicles decreased from a fleet average of 198 gCO₂/km in 2008 to 180 gCO₂/km in 2011, a 9.3% reduction.

Compared to the U.S., vehicles sold in Mexico tend to be smaller (average footprint of 4.1 m² as opposed to 4.5 m²) and less powerful (approximately 25% lower for MY2008). At the same time, the average fuel economy of new vehicles in Mexico is higher (U.S. was 12.2 km/l in 2011), which means that Mexico is starting out with higher efficiency than the U.S. and requires a lower annual rate of improvement—2.6% compared to 3.7%. As a result, the manufacturers have less of a hurdle to overcome to meet the proposed standards.

KEY ELEMENTS OF THE PROPOSAL

The proposal is for a regulation on new-vehicle emissions of CO₂ in grams per kilometer, and provides the equivalent regulatory metrics for fuel economy in km/L. The overall goal is to achieve an average new-vehicle fuel economy of 14.9 km/L for the model year 2016. This overall goal is not a standard for each individual vehicle, but refers to the fleet average of all passenger cars and light trucks that are sold in Mexico by 2016.

The regulation would be implemented for new vehicles from model year 2014 through 2016, and credits generated in 2013 can be used towards compliance in the following years. Automakers must submit data for each year and, if the target is exceeded in any year, credits can be counted forward and backward throughout the full period of the regulation, allowing greater flexibility to automakers. Also manufacturers can pool compliance for additional flexibility.

Manufacturers must comply with standards that will vary based on the sales-weighted average size and composition of the vehicles they sell. Separate compliance curves based on the vehicle size or “footprint” (area between the four wheels of the vehicle in m²) are provided for two categories—passenger cars and light trucks (SUVs, minivans, pickups). The regulation pertains to light vehicles with gross vehicular weights up to 3,857 kg.

The proposal is based upon the U.S. NHTSA Corporate Average Fuel Economy (CAFE) curves for passenger cars and light trucks. The proposal does not include technology credits of any sort, but it does include 1% and 2% reductions from the original U.S. fuel economy targets for passenger vehicles and trucks, respectively, in order to add flexibility

¹ *Nota técnica sobre la evolución de las emisiones de bióxido de carbono y rendimiento de combustible de los vehículos ligeros nuevos en México 2008-2011, INE, June 2012*

for Mexico-specific technology deployment strategies. The technologies considered in the modeling of the expected compliance with the regulation are existing technologies that are present in other markets, and the regulation does not require fleet composition shifts or advanced technologies like hybrids and diesels that are currently more costly.

EXPECTED EFFECTS OF THE REGULATION

The National Institute of Ecology estimates the following benefits from the application of the standard over the period from 2013 to 2030.

- » Reduction in fuel consumed: 70 billion liters
- » CO₂ emissions avoided: 170 million tons of CO₂
- » Health benefits due to diseases and deaths averted (through reduced upstream pollutant emissions): 4,170 million pesos (approximately \$314 million)
- » Fuel savings equivalent to 513 billion pesos (US\$39 billion), with federal government savings of 103 billion pesos (US\$8 billion) associated with fuel subsidies.

INTERNATIONAL CONTEXT

The regulation is harmonized in design and stringency to that of the U.S. regulation (“Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards” published jointly by the US Environmental Protection Agency and the National Highway Traffic Safety Administration in 2010) and aligned standards adopted by Canada (“Passenger Vehicle and Light Truck Greenhouse Gas Emissions Regulations” published by Environment Canada). The regulation would create the only vehicle fuel economy standards in Latin America.

Figure 1 shows how fuel economy standards around the world are causing significant improvements in fleet average fuel economy. This proposal is an important first step, putting Mexico on track for a rate of progress equivalent to that seen in the other important auto markets of the world.

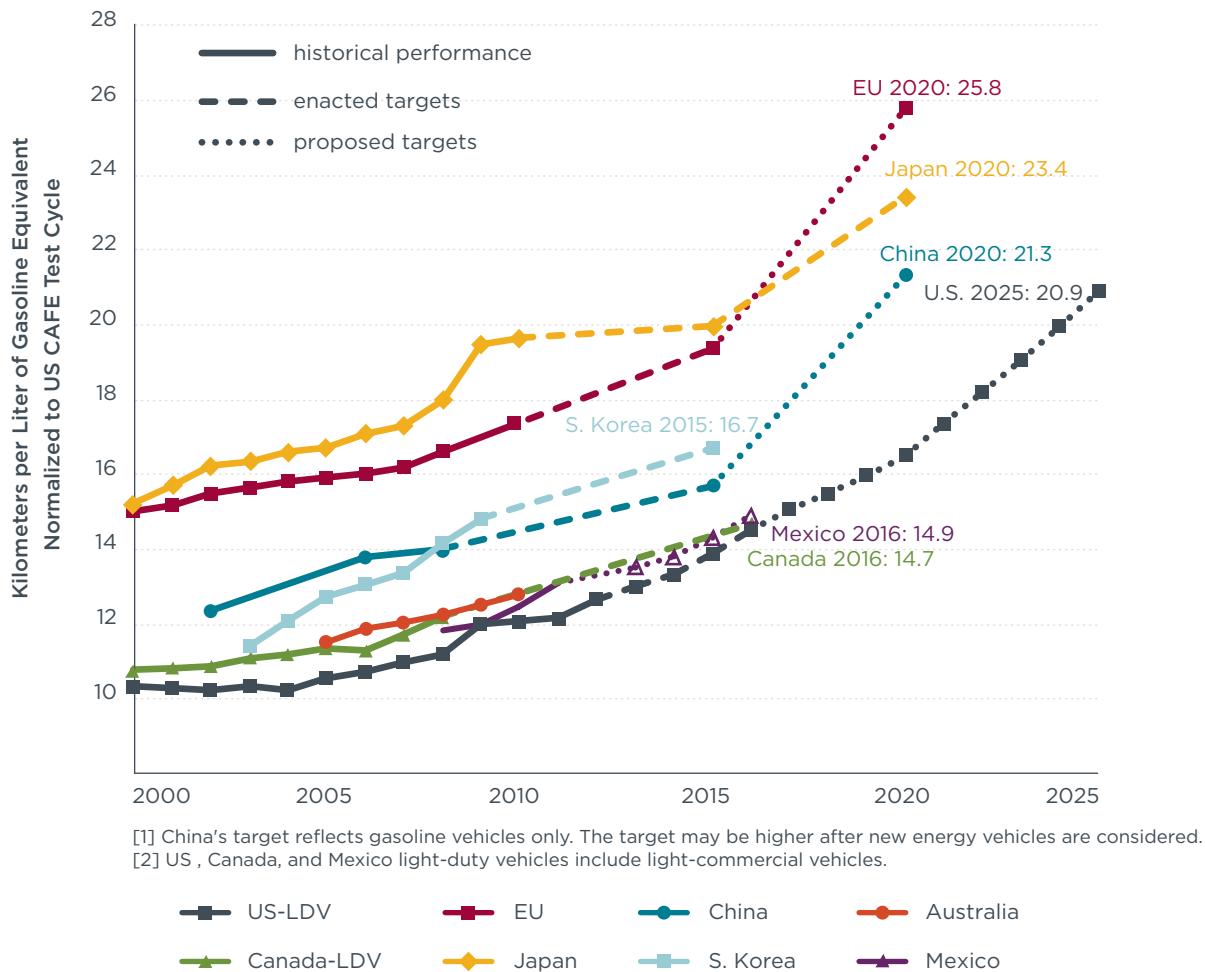


Figure 1. Comparison of global standards for CO₂ and fuel economy, in terms of fuel economy (km/L) as measured on the U.S. CAFE test cycle.

REGULATORY PROCESS AND NEXT STEPS

On May 9, 2012, regulatory advisory committees of the each of the three agencies—SEMARNAT, SENER, and SE—held meetings and approved the draft regulatory proposal. Committee members were given 30 days to provide comments on the proposal. On July 4, 2012, the committees convened once more to review the responses from the government to the comments that had been received. All three committees again voted to approve the proposal and publish it for public comment. On July 7, the regulatory impact assessment (Manifestación de Impacto Regulatorio or MIR) was published by the Mexican Regulatory Commission, COFEMER, and on July 12, the proposal (Proyecto de Norma Oficial Mexicana) was published by the DOF.

Publication in the DOF opens a 60 calendar-day public comment period, after which the government will publish a response to comments and a final regulation (Norma Oficial de Mexicana).