



Mexico: Setting Course for a Greener Future

By [Fabián Valencia](#)

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A recent excise tax reform, adopted on the eve of the Paris summit on climate change, is about to make Mexico greener. The reform sets excise taxes on gasoline and diesel at levels that reflect the true environmental and public health costs associated with their use.

By setting carbon taxes at optimal levels, Mexico could contribute significantly to its goal of reducing carbon emissions in the medium to long term.

The right tax level

Fossil fuels are an important input in industrial production and in final consumption, but their use has harmful environmental and public health effects.

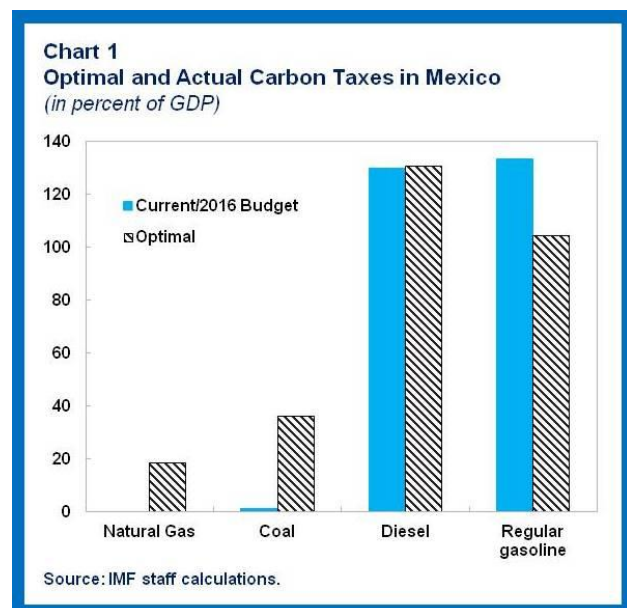
These effects range from the value of lost time in traffic congestion to the costs of climate change and premature human mortality from pollution-related diseases. Many countries set energy prices at levels that do not reflect these costs or are even subsidized.

Our [recent paper](#), which builds on work at the IMF on [energy taxation](#), estimates optimal taxes (proper taxes that reflect these damages) on fossil fuels for Mexico.

We contrast the estimated optimal tax levels with those currently in place for the most important fossil fuels (see Chart 1). It turns out that the recently passed excise tax reform for gasoline and diesel sets those taxes close to optimal. However, tax levels for natural gas and coal remain below optimal.

Eliminating fuel subsidies

The reform substitutes a two-decade old system where an implicit subsidy (or tax) arises when the regulated domestic prices of gasoline and diesel differ from international prices. Since the mid-2000s, when international oil prices rose sharply, this system resulted in a sizable subsidy that was reduced gradually as domestic prices were increased steadily. These adjustments, together with the collapse of oil prices late last year, turned the subsidy into a tax.



Maintaining the soon-to-expire variable excise tax system could have implied an eventual return to subsidies if international oil prices were to turn around sharply. This is no longer the case.

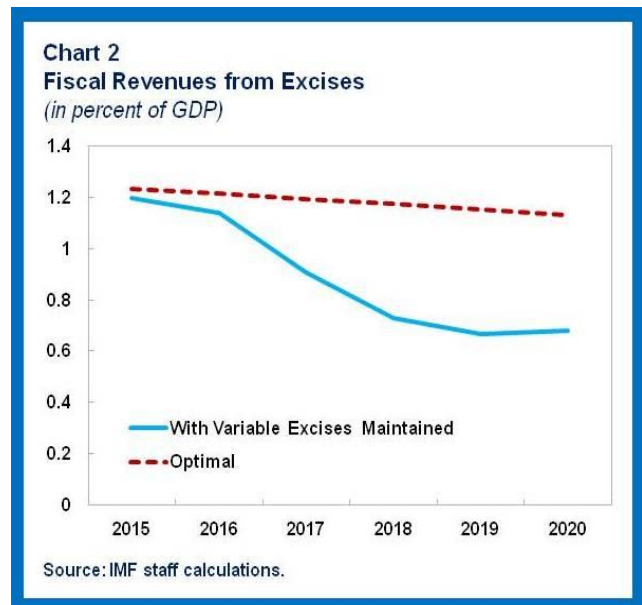
By fixing excise taxes, the reform eliminated fuel subsidies permanently. With this measure, domestic gasoline and diesel prices will be allowed to move more closely in line with international prices. They will initially fluctuate within a predetermined price band for the next two years before being fully liberalized in 2018.

Economic implications

Mexico has been at the forefront among emerging markets in setting up a framework to ensure the implementation of environmentally-friendly policies. In 2012, it passed a climate change law and created the Climate Change National Institute in charge of measuring carbon emissions. In the following year, Mexico released a national strategy for climate change and introduced a small carbon tax on fossil fuels. More recently, in early 2015, Mexico reiterated its commitments to reduce carbon emissions ahead of the Paris summit on climate change.

Our study finds that setting taxes at the estimated optimal level could help reduce carbon emissions by about 6 percent over the long run—which would make a substantial contribution to Mexico’s recent pledge to lower carbon emissions by 25 percent by 2030.

From a fiscal perspective, the recent reform would prevent a likely decline in fiscal revenues of about ½ percent of GDP over the medium term as oil prices recover, compared with keeping the system of variable excise taxes (Chart 2).



Making the right choices

Over the past few years, Mexico has taken important steps to protect the environment. The recent reform of gasoline and diesel excise taxes attests to its commitment to a greener future, which will also have fiscal benefits by helping stabilize nonoil tax revenues. Protecting the poor through targeted programs, such as Prospera, is more efficient than through fuel subsidies. Looking ahead, bringing taxation of other fossil fuels, such as coal and natural gas, closer to their optimal levels would also be desirable.



Fabián Valencia is a Senior Economist in the IMF's Western Hemisphere Department covering Mexico. Prior to his current position, he worked in the macro-finance group of the Research Department and in the crisis resolution group of the Monetary and Capital Markets Department. His research focuses on financial intermediation and the real economy, banks' capital structure, and banking crises, in particular on their consequences and policy responses to resolve them. He holds a Ph.D. in Economics from The Johns Hopkins University.