

MEXICAN TAX CARBON (from the gray to the green)

1. A huge energy, and environmental tax reform has been taking place in Mexico the last two years, the one in 2014 has been particularly important. Of course it is necessary to approve some details for its proper application which will happen around these weeks and will culminate in 2015.
2. The process began in 2012 with the approval of the General Law on Climate Change, which was a consequence of the commitments made voluntarily by Mexico in 2010 during the Climate Change Conference held in Cancun in that year.
3. This new law was followed by a constitutional reform in december 2013 that allowed private investment in specific areas on the oil and power industry, which until then were state monopolies.
4. The January 1, 2014 enter into force two new taxes for environmental protection: the carbon tax and the tax on pesticides.
5. Later in the month of August of 2014, the Mexican Congress, following this great energy, environmental and tax reform, approved 9 new laws, amended 12 and abrogated 5. New laws are:
 - a) PEMEX Law
 - b) Law of the Federal Electricity Commission
 - c) Hydrocarbon Law
 - d) Coordinated Regulatory Bodies Act on Energy

- e) Law of the National Industrial Safety Agency and Environmental Protection of Oil Sector
- f) Electricity Industry Act
- g) Geothermal Energy Act
- h) On Oil Revenue Law
- i) Law of the Mexican Petroleum Fund for Stabilization and Development

6. I won't mention all the environmental and energy reforms. Every thing shows that Mexico made the "homework" after the commitments made in Cancun, but can it really be described as successful this task?. Hard to tell because the reform has not fully landed. What we do need is wider review of the environmental tax reforms.

7. I will talk about two environmental tax measures: the carbon tax and revenue law on hydrocarbons.

8. In the first case it is, among other things, the approval of the first tax on the sale or import of fossil fuels. Beyond the amount, which is really insignificant compared with the total revenues of the federal government, it's necessary to remark the context in which this reform has develop: 1) Mexico had until a few weeks ago a monopolistic oil industry through public body called PEMEX, this has change with the legal reform; 2) In addition, it is a tax setting in the second Latin American economy; 3) the introduction of a carbon tax reaffirms the commitment of Mexico to reach their emission reduction targets of 30% by 2020.

9. This new tax is inserted into the limited experience tax fossil fuels in developing countries (Costa Rica has one and Brazil, Colombia and China are discussing the establishment of a similar tax but not yet materialize).

10. Considering that Mexico estimated each person emits 3.8 tons of CO₂ per year this tax would help reduce consumption and at the same time be a major gain for public finances.

11. Unfortunately, this new proposal isn't as good as we wish. In fact legislature actually adopted a different one. In my opinion, the Mexican Congress went so far from the initial project. It was transformed into a emissions trading system instead of a fiscal instrument.

12. Indeed, as I understand, carbon taxes and emissions markets systems are used to reflect the price of the marginal social cost of the negative externalities associated with carbon. However, they differ in their construction and in the final result.

13. With taxes, the government sets the price of carbon and the market determines quantities resulting emissions and energy consumption. Taxes ensure the price and send a signal to consumers to reduce their consumption and make efficient use, depending on their sensitivity to change in price, while on a trading system emissions reduction target for emissions is fixed and the price is built in the market allowing to vary.

14. However, a tax has several preferences over a trading system, such as adjustability for individuals who face the tax and ease and generality in application characteristics.

15. To calculate the price of carbon, the Mario Molina Center created an index, weighting the price of several European international markets, New

Zealand and California, in the United States of America. With observed data October 2012 to June 2013, an average price of USD 5.70 per tonne of carbon was obtained.

16. Moreover, to know the carbon content of each fuel sold in Mexico, emission factors published by the Intergovernmental Panel on Climate Change (IPCC) of the United Nations in its 1996 guidelines were used to determine emission inventories of greenhouse gases, in which the carbon content of each fuel according to their physicochemical characteristics is established; ie, the values indicated by the IPCC do not change with time.

17. Based on the above, the government proposed to set specific quotas for fuel, considering the tons of carbon dioxide per unit volume and the result was as follows:

Type of fuel	Fuel Tons of CO2 per unit volume	unit of volume tax	Tax over unit volume	unit of measure for the tax
Natural gas	16.893	Mil metros ³	11.94	Cents per thousand of meters ³
Propane	1.485	10 litros	10.50	Cents per liter
Butane	1.820	10 ³ litros	12.86	Cents per liter
Gasoline and gasavión	2.294	10 litros	16.21	Cents per liter
Turbosine and others kerosene jet fuel	2.647	10 ³ litros	18.71	Cents per liter
Diesel	2.712	10 litros	19.17	Cents per liter
Fuel oil	2.935	10 ³ litros	20.74	Cents per liter
Petroleum coke	2.686	10 kilograms	189.85	Pesos per ton
Coking coal	2.730	10 ³ kilograms	192.96	Pesos per ton
Coal	2.523	10 kilograms	178.33	Pesos per ton
Ton of CO₂	1.000	Ton	70.68	Pesos per ton

18. However, Congress took two directions contrary to this logic. On the one hand reduced the applicable rates without economic justification, being as follows:

H) Fossil fuels	Fee	Unit of measure 1
1. Propane	5.91	cents per liter.
2. Butane	7.66	cents per liter.
3. Gasoline y gasavi3n	10.38	cents per litter.
4. Turbosine and others kerosene	12.40	cents per litter
5. Diesel	12.59	cents per litter
6. fuel oil	13.45	cents per litter
7. Petroleum coke	15.60	pesos per ton
8. Coal coke	36.57	pesos per ton
9. Coal	27.54	pesos per ton
10. Others fossil fuels	39.80	pesos per ton of carbon in the fuel

19. As can be seen, the reduction was nearly 50% breaking this way the weighted index that was proposed to avoid the tax payment become uncertain because its value will be determine by the free market

20. On the other hand, the congress also allowed to pay the tax through the delivery of carbon bonus, becoming this charge a system of emissions trading.

21. It is true that the constitutional courts in both Mexico and elsewhere have pointed out, respect for the rule of law, that the quantitative elements of tax (the base rate) should be determined by the law or at least it should be indicated elements necessary for its determination, leaving other instruments of lower rank, the calculation of the base rate, as in this case, by the "rules of a free carbon market". We can find here a violation of certainty principle.

22- There are, however, two important aspects introduced by the legislature to be emphasized: first, the recognition of those subjects who produce, sell or import coal for other industrial processes, different from those subjected to combustion, so they were given fiscal stimulus.

23. On the other, congress excluded tax over the gas, which was included in the initial relationship proposed by the government. I understand that proper combustion of gas is harmless to the environment. If adopted as proposed, tax had lost its environmental character and in that case would become an regular consumption tax.

24 Finally, I would like to talk a few words about the Revenue Law on Hydrocarbons. It is a law that regulates different contributions: two different taxes and fees.

25. The first tax there regulated is actually an income tax, but with special conditions for its determination, for instance, a special base, special rules and rates for deduction of investments, on tax losses, restrictions to tax in particular regime, etc.

26. Another important thing that I would like to underline is that the actions or activities that should be taxed by value added tax, in deed are subject to 0% rate for tax purposes.

27. Another tax is the one established over the activity of exploration and extraction of hydrocarbons. In this case, the taxpayers are the contractors and the assignee. The base rate is related with the Contract Area or Area

Allocation, respectively, according with the contract or the assignment agreement or applicable.

28. The tax is calculated using monthly per square kilometer comprising the Contract Area or Assignment Area, the following fees:

- I. During the exploration phase 1,500 pesos, (approx. \$ 110 dollars or € 90)
- II. During the extraction phase 6,000 pesos (approx. \$ 440 dollars or € 360)