MarketWatch

Opinion: Why Big Oil might secretly wish for a carbon tax

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Exxon Mobil and its rivals would benefit because it would hurt coal producers and, in turn, electric-car companies

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A deep analysis of Exxon Mobil's financial outlook reveals two things: The energy giant is planning for a stringent carbon tax on the oil it extracts, and that this might be just about the best thing to happen to Big Oil.

Those sound like contradictory statements. After all, a carbon tax of $80 per ton — implicit from Exxon's XOM, +1.77% "proxy price" in its company disclosures — could add about 70 cents to the price of a gallon of gasoline. Presumably, this would hurt oil consumption, and therefore hurt Exxon and other oil majors.

But our analysis of the outcome of such a levy shows that a carbon tax will hit the coal industry harder, increasing electricity prices that would, in turn, discourage the electrification of cars.

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And, really, the biggest threat to the world's largest oil extractor by market value is not a carbon tax, but rather the electrification of cars. Globally, transportation accounts for 62.3% of petroleum consumption. Thus, the biggest threat to Exxon is not a carbon tax; it's Tesla TSLA, -3.88%

The $80 carbon price assumption, disclosed in Exxon's most recent Energy Outlook Report, is a more stringent scenario than is typically assumed.

Under that scenario, the company also sees no material decline in its production levels through 2040, confirming its claim that none of its oil will become too uneconomical to exploit because of such a carbon tax, according to a new Entelligent analysis of Exxon's environmental performance.

The takeaway for policy makers: Given still-low oil prices, perhaps now is the time to push for a carbon tax or levy. This is the craziest election year in history so who knows whether such a feat could be accomplished. Donald Trump's support would certainly get headlines!

Given the precipitous fall of gasoline prices from 2014 highs, such a levy would be unlikely to crater consumer demand for gasoline-powered cars, especially given improving fuel efficiency. Indeed, lower oil prices have weakened electric cars' sales expectations despite disruptors like Tesla. The average consumer still chooses the improving fuel efficiency of gasoline engines over paying the CO_2 abatement premium associated with electric cars.

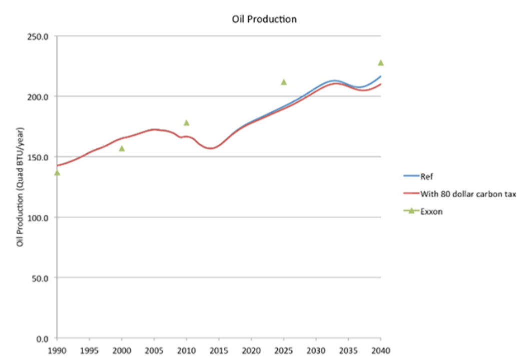
Policies may therefore need to evolve beyond a carbon tax to include measures more directly stimulating the electrification of transportation. That would dampen oil demand and production, possibly leading to an increase in the amount of oil that becomes too uneconomical to extract, called "stranded assets."

The takeaway for investors is to remain acutely alert for policy changes, which will likely drive market reaction. Investors who have a clear idea of which companies can make the transition to a lower-carbon economy will be most likely to come out ahead.

A carbon tax or levy would make renewable energy more competitive and speed new investment, and help the U.S. and other countries meet their obligations under the Paris climate change accord reached in December.

Under the scenario where the industry moves to an $80 CO_2 tax, Exxon forecasts oil demand will increase from 2010 levels of 178 quadrillion British Thermal Units (Quad BTUs) to 228 quad BTUs in 2040.

However, Exxon also sees higher sustainable energy production — energy from biomass/waste will increase from 49 to 56 quad BTUs over the same time period, hydro energy will rise from 12 to 20 and other renewables will rise from 7 to 29 over the same time. That would still be a modest share of the total global energy mix, but represents the largest percentage growth.



Comparing Entelligent's modeling to Exxon's forecasts, an $80 tax on carbon won't adversely affect the economics of production. Exxon forecasts demand that is above, but directionally similar, to Entelligent's modeling. The negative impact on demand from an $80 carbon price doesn't appear to change until 2040.

The Paris climate agreement signed by nearly 200 governments is intended to slow the use of fossil fuels and promote clean energy use. When analysts at Entelligent sought to measure the impact of the Paris deal, we used a carbon tax of $50 per ton of CO_2. Placing a high price on carbon of $80 per ton is in keeping with the earlier assertion from Exxon Chief Executive Rex Tillerson, who said that climate change is a priority because it is a "risk-management problem."

Publicly, Exxon may acknowledge regulatory pressures to reduce emissions but privately they may realize the risk of policies designed to more directly incentivize the electrification of transportation, perhaps explaining why oil executives voice support for the Paris accord and a universal price on carbon.

Thomas Stoner Jr. is the CEO of Entelligent, a provider of data on carbon-intensive industries, and companies' readiness for a new energy economy.