



Tech Talk - Venezuela after Hugo Chavez

Posted by [Heading Out](#) on March 10, 2013 - 1:30am

With the death of the Venezuelan President Hugo Chavez, the future production and exports of Venezuelan crude are [gaining a little new attention](#). I had noted in [the last post](#) that there is a difference of around 400 kbd between the 2.379 mbd that outside observers report to OPEC that the country is producing, and the 2.768 mbd that Venezuela itself reported. The question now becomes one as to whether the new President will be able to resurrect an industry that has overseen a slow decline in overall production, with a more rapid decline in exports.

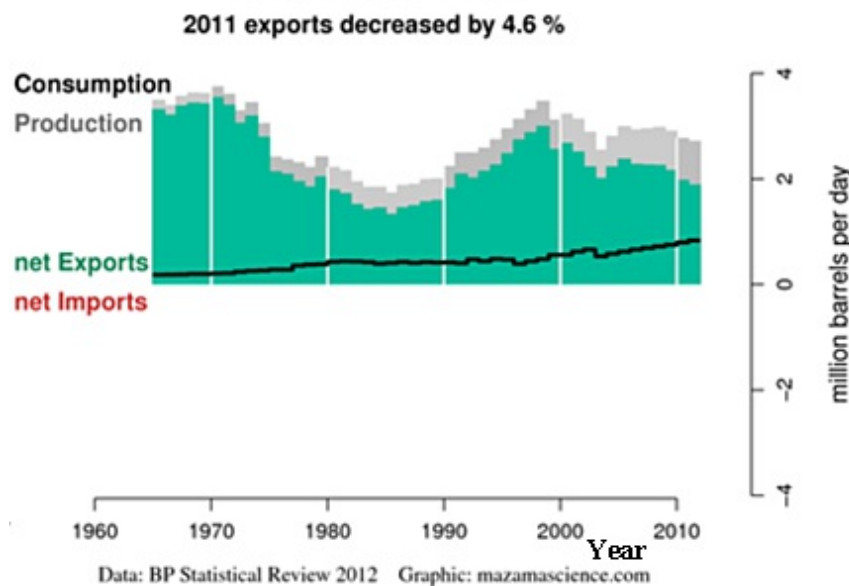


Figure 1. Venezuelan oil statistics ([Energy Export Databrowser](#))

My short answer to that question is No! It is based on a number of reasons and may be swamped by the voices who note that the country has a vast remaining pool of oil in the Orinoco Basin, one that the [USGS has estimated](#) to be more than a trillion barrels in size, of which some 513 billion barrels are technically recoverable. But there have been a number of posts about those numbers and the more critical number, which is that of the rate of oil production.

Colin Campbell reminded us in his [2006 Review of the country](#) that the Venezuelan Government was one of those urging the creation of OPEC, [back in 1960](#). Back when that piece was written Colin expected that production, which had been falling as the reserves in the Lake Maracaibo region declined, would start to wind back up, as the heavy and extra heavy oils of the Orinoco were brought into a higher level of production. And he anticipated that, by now, the country would be producing around 3 mbd, which it is not.

One of the requirements before one can market the heavy oil is to have refineries that can process the oil. The United States, which imports around 1 mbd of Venezuelan crude, [has the](#)

[Citgo refineries](#) that are wholly owned by PDVSA (the Venezuelan oil company). Whether that will influence their switch to Canadian crude if the Keystone pipeline is put in place is an open question. But easing the American demand might help with Venezuelan relations with China.

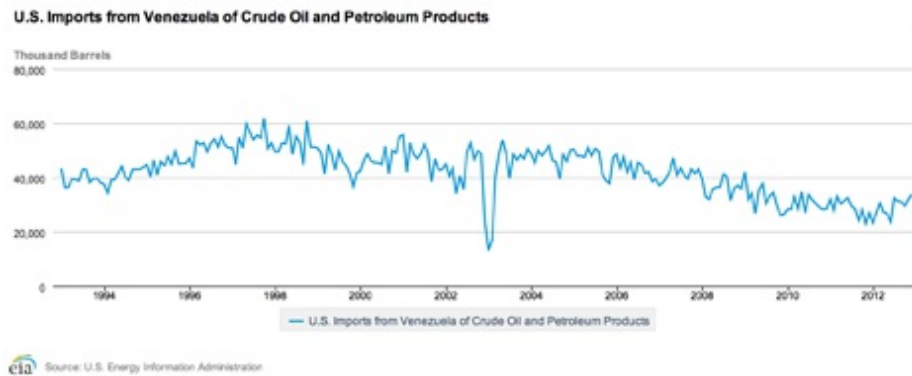


Figure 2. US Monthly imports of crude and Petroleum Products from Venezuela ([EIA](#))

China, which has refineries Sinopec built that can also handle the crude, has stepped in here and [spent over \\$40 billion](#) with much of this in loans to be repaid through increased oil exports. Back in 2007 China had made the decision to pull out of Canada and to [concentrate its investments](#) in Venezuela instead. Since that time they loaned Venezuela over \$20 billion in return for a commitment for oil exports that were to [reach 1 mbd in 2012](#). The date to reach that target has now [slipped to 2015](#) as overall production has continued to decline.

Last August President Chavez announced a [\\$130 billion plan for investment](#) in the Orinoco.

He said that there are 150 different clusters of oil wells in the Belt, but the goal in the next six years is to increase that number to 500. Before the nationalization of the Belt, there were just 37 clusters.

The clusters are comprised of 24 separate oil wells, each of which extract around 1,200 barrels per day. At these facilities, hydrocarbons are extracted using 45-meter drills purchased in Venezuela and assembled in Venezuela.

“All this has been nationalized, which before was the property of multinationals, and production has also been increased,” the president said. He recalled that before the government took control of the Belt, there were just 2,800 wells, while now there are more than 4,000.

Because the Orinoco crude is [very heavy](#), to an API gravity of 9 degrees, it is [difficult to produce](#) and requires a considerable energy investment to extract and process the crude.

Last September [two joint ventures](#) came on stream. That at Petromiranda, where PDVSA has Russian partners who began producing 1,500 bpd, after an investment of \$800 million, with a goal of eventually reaching 45,000 bpd. At the same time Petromacareo, where PDVSA is partnering with the Vietnamese, came on line at 800 bpd, with an initial target production of 4,000 bpd. (The project has slipped from a target [start date of early 2011](#), and the ultimate goal of 200 kbd from Petrimacareo is in more doubt.)

The crude has to be upgraded and TNK-BP is partnering to double the capacity of the Petromangas upgrader from 120 to 250 kbd. Until that capacity is increased, Orinoco production

may be limited.

There is thus a history of project slippage and missed targets that is unlikely to improve in the short term. New plans for further investment either by the Chinese, Indians or Russia are now on hold while the presidential election to replace President Chavez is decided, but the experience in the last couple of years is likely indicative that progress in increasing production will be difficult to achieve and when set against a rising domestic consumption (as the Export Land Model predicted) is already leading to a fall in exports.

One of the drivers for this increase in domestic consumption is that the price of gasoline in Venezuela is \$0.04 per gallon ([four cents](#)). In contrast, in Saudi Arabia it is [around \\$0.61](#). The low price of gas means that there has been a significant increase in demand, exceeding that domestically available. As a result the country has been importing gas [at up to \\$100 a barrel](#) to sell it for \$5 – you can't balance those books by increasing the volume of sales!!

Yet cutting back on domestic consumption or increasing prices could prove difficult for the incoming President. So maybe it would be a good idea to invest in the Keystone pipeline as a simple precaution??



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