

Upstream

Latin American and the Caribbean Region: the last two decades' performance on Oil & Gas

decade: Mexico (-25%), Argentina (-20%) and Venezuela (-10%); on the other hand, Brazil (+60%) and Colombia (+15%) have managed to raise their production.

In terms of reserves, and excluding Venezuela, the top-five is made up by Brazil, Mexico, Ecuador, Argentina and Colombia (that represent 95% of the total oil reserves without Venezuela); Brazil (+70%) and Ecuador (+40%) have seen their reserves surging; Colombia's have been almost flat; and Argentina's (-15%) and Mexico's have diminished. Mexico's case is the most striking of all: its reserves have fallen by 40% in the last decade: from 25B bbls (2000) to 10B bbls (2010). Unsurprisingly enough, they have embarked on the well-known energy reforms (incidentally, the former Colombian ANH Director General, Armando Zamora, is helping Mexico's authorities implement an E&P regulator.)

Natural Gas in LA&C:

The importance of Venezuela in natural gas is still very significant but not as much as in the case of crude oil: Venezuelan gas reserves in 2010 represented two thirds of the total LA&C region. Again LA&C gas reserves without Venezuela have been decreasing from about 110tcf (2000) to 100tcf (2010), that is equal to a decrease of 9% per annum. In terms of

R/P it looks more dramatic: without Venezuela, the ratio started in 24 years (1990), then it went to 17 years (2000) to end up in just 9 years (2010). Again, for reference, Colombia has an R/P of less than 5 years taking only, as in this whole exercise, proven reserves.

The top-five countries, that combined make up just above 80% of total LA&C gas production are Mexico (7.8bcf/d), Venezuela (5.6bcf/d), Argentina (4.5bcf/d), T&T (4.3bcf/d), and Brazil (2.1bcf/d).

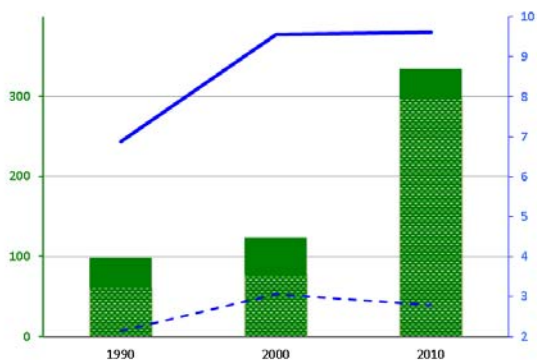
They have all increased their production in the last decade: from 16bcf/d (2000) to 24bcf (2010), a healthy +50%! (N.B. Gas production statistics are tricky: some countries, like Venezuela, include gas reinjection into oil-and-gas-associated fields to improve crude oil production, as 'Gas Production' whereas countries like Colombia only include as Gas Production the share of total production that is actually sold into the market. A matter of definitions!)

In terms of gas reserves, and again excluding Venezuela (with 200tcf!), the top-six (making up 90% of total reserves w/o Venezuela) is comprised by: México(17tcf), Brazil (15tcf), T&T (14tcf), Argentina (13tcf), Peru (12tcf), and Bolivia (10tcf).

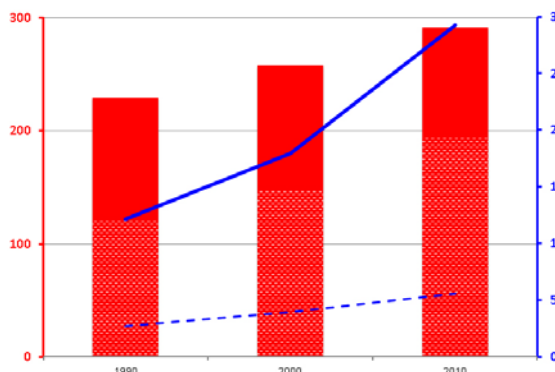
The picture here does not look as good as the one depicted for

production: the gas reserves of these six countries have come from 135tcf (2000) to 80tcf (2010), a reduction of 40% with remarkable cases as Mexico again and Bolivia with a reduction of 60% each, and Argentina with reserves almost halved from 2000 to 2010. The good news comes from Peru and Brazil which have both experienced outstanding increases: the former by +50%, and the latter doubling them.

Bottom-line: Geopolitics may not be the only reason, but it is interesting to note that countries like Argentina, Bolivia, Mexico, and Venezuela show up often when discussing shrinking production and reserves figures (with the exemption of the huge Venezuela reserves increase which resulted from an economic re-definition of the bitumen laying along the Orinoco belt). On the other hand, countries that have embarked on structural changes during the last decade like Brazil, Peru, and Colombia arise when it comes to point out increases. There still are 'outliers' like T&T that reserves-wise should be included into the shrinking category despite its friendly attitude to foreign investment; or Ecuador, that is not doing badly, notwithstanding its not-too-nice approach to certain oil companies.



Crude Oil Reserves and Production in LA&C



Natural Gas Reserves and Production in LA&C