The Brazilian Economy

ENERGY

Solange Monteiro

The Brazilian Natural Gas market is trapped in an almost paradoxical situation. On both the supply and demand sides, the industry has plenty of room to expand, because there is plenty of gas associated with deep sea oil production and there is demand for gas from the power sector, which is increasingly dependent on thermal generation. However, each side wants a clear signal from the other, for the supply side guarantees for carrying out expansion projects, and for the demand side regulatory guidelines, such as those related to expansion of and access to pipelines.

There is consensus among those in the market on the growing importance of gas in the Brazilian energy mix and the need to come to agreement in order to match expectations and provide predictability despite all the changes. That will not be easy. “It is clear that we cannot develop the natural gas sector without extensive discussion and exchange of ideas,” says Marco Antonio Almeida, executive secretary for petroleum and natural gas of the Ministry of Mines and Energy (MME), who participated in the recent launch of FGV Energy’s Natural Gas Report. To make a diagnosis of the sector, the report draws upon five months of interviews with industry players by FGV researchers. “Following up on this study, we want to set up working groups in 2015 to make proposals for gas sector expansion,” says Lavinia Hollanda, FGV Energy research coordinator.

On the demand side, the main point of uncertainty for investors, the study found, is the supply of gas for electricity generation. Marcio Zimmermann, MME executive secretary, says that over the last three years the share of thermoelectric in the total consumption of gas rose from 10% to 45%. The 10-year plan for 2023 estimates an increase in gas production of 206 million cubic meters per day, compared to the current 87 million. Investment in gas production, which is explored along with oil production, depends on guaranteed demand,
particularly for electricity. “This sector has been on hold because of intermittent demand and had to turn to liquefied natural gas, paying international prices. Generating electric power with gas is complicated,” he says. “Power generation can be a major consumer of natural gas, but it will have to change its generation to ensure a stable electric base load, and the oil industry will have to adapt to a dependable customer.”

On the supply side, there is uncertainty about supply expansion and stability. According to Hollanda, the doubts are about how much offshore production there will be, when the gas will be available, and whether there will be enough demand to justify investment in production. As for onshore production, there is no consensus on the size of the reserves. And as for imports, Hollanda warned that Bolivian gas may become more expensive after 2019 when the current contract expires. Bolivian imports currently account for 33% of Brazilian consumption.

“I understand the distress of Brazil exporters who compete with other countries where gas is cheap, but the price has to encourage domestic producers to put gas on the market. We cannot ever have the same price as the United States. But we need to get closer to it.”

Marco Antonio Almeida

Of 458 billion of cubic meters of proven natural gas reserves in Brazil:
- 75% are associated with petroleum
- 77% are concentrated in the Southeast

Of 98 million of cubic meters per day of gas available in the market:
- 48.4% are domestic production
- 33.4% are imported from Bolivia
- 19.3% are liquified natural gas

Source: Ministry of Mining and Energy, and FGV Energy.

The value of gas

The price factor is a major challenge for the industry, mainly because relative prices of energy in Brazil are not reliable, Hollanda says. “When natural gas competes with bottled gas, which is price-controlled, the consumer loses the reference to the relative price of energy, which makes long-term investment decisions more complex,” she says.

Another challenge is to the contrast between the domestic gas price and international prices. More efficient producers, such as shale gas companies in the United States, can sell five times cheaper. “Our view is that the gas price has to reflect market conditions, supply and demand or actual market structure. And so expanding the supply becomes even more relevant,” says Hollanda. “Today about 50% of our supply is imported. However, we cannot match domestic prices to competitive international prices,” Almeida adds. “I understand the distress of Brazil exporters who compete with other countries where gas is much cheaper, but the price has to encourage domestic producers to put gas on the market. We cannot ever have the same price as the United States. But we need to get closer to it.”