# How to attract investors?



## *Sergio Quintella Franklin*

Board member of Petrobras

WHILE IN THE NEXT FEW YEARS thanks to shale gas the United States will live through an energy revolution, which promises to reorder geopolitics and the global economy, Brazil will have the dual challenge of preparing for the impact of this change on its oil industry and strengthening the basis for exploiting deep sea oil. "It is a logistical, technological, financial challenge," says Sergio Quintella Franklin, member of the Board of Directors of state-owned oil company Petrobras. For him, Brazil's major task today is to attract investors based on a sharing regime. "The presence of the state's deep sea oil is a new fact that foreign investors have not yet absorbed," he says. Quintella also talks about the possibilities for exploiting shale gas in Brazil and about the price of gasoline, and defends an adjustment in the requirements to hire and buy parts locally for the oil and gas industry.

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**_The Brazilian Economy_—What is the basis of the revolution of shale gas in the United States?**

***Sergio Quintella***—We have known about shale gas for a long time, but until recently it was not possible to produce it economically. The innovative element was the combination of drilling techniques developed by Texan George Mitchell, a partner in a mid-sized oil company whose reserves were declining. He battled alone for 10 years to find a new technique for extracting the gas. The Mitchell technique of hydraulic fracturing drills a vertical well nearly two miles deep; when it reaches the shale, it drills horizontally, fracturing the rock with a lot of water, acids, and sand. Today U.S. shale gas costs US$2.20 per million BTU (the traditional unit of energy, equal to about 1,055 joules), while in Brazil –and similarly in Europe or Russia—natural gas costs US$12 to US$14 per million BTU.

**How will this discovery affect the world energy market?**

There will be an unquestionable impact. In just five or six years, the U.S. will be close to self-sufficiency in energy, in terms of

either oil or gas. Estimates of gas reserves indicate it has enough for 150 years at 1.5 billion cubic meters per day. The U.S. will no longer need liquified gas from Qatar. As for oil, the International Energy Agency (IEA) estimates that U.S. imports will decline from 11 million barrels a day—total daily U.S. consumption is 20 million barrels—to 3 million barrels. That means there will be released on the market about 8 million barrels per day, which will certainly influence the oil price unless China's domestic demand grows considerably. One of the most dramatic impacts for Brazil will be in the petrochemical industry. If the U.S. shale gas boom continues, the U.S. will become a local priority for investment in this sector. The same applies to industries that consume a lot of energy, such as aluminum, ceramic, and glass, for example. Recently the president of Petrobras, Maria das Graças Foster created a working group to prepare a plan for researching hydraulic fracturing technology and identifying the most likely places to find shale. The initiative is welcome, because Petrobras has interests in energy, petrochemicals, and nitrogen fertilizer.

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**Why was there not the same interest in researching shale gas in Brazil?**

For many years, there was general Brazilian disinterest in gas exploration. Brazil was devoted to oil exploration, which Petrobras did very successfully. Today Brazil consumes about 90 million cubic meters of gas a day, 30 million of which come from Bolivia. Increased domestic production of both conventional and unconventional gas is critical to safely diversify the Brazilian energy supply. The conventional gas associated with deep sea oil and the possible extraction of shale gas will allow for gas-fired electric plants. Regarding shale, we produce in Paraná state, with old technology, 150 cubic meters per day, which is very little. For some time, the National Petroleum Agency (ANP) has been working on identifying locations where there may be shale gas. But that is still being studied, and results are far from guaranteed . . . . Even though these reserves exist, however, the Brazilian situation in relation to shale gas is completely different from the American for two reasons: First, in the U.S., shale gas is in a region that already has a large pipeline network, which makes the operation more economical. The second factor relates to legislation. In Brazil, as in France, the owner of the land is not the owner of the subsoil. In the U.S. there is no such difference. Each farmer can trade part of his property for drilling, he sets its price, and wins without risk. This does not happen in Brazil because our system

requires mechanisms for granting and bidding.

**Despite expectations for future deep sea oil production, the situation for Petrobras today is complex, with production stagnating and little prospect for growth in 2013, increasing imports of gasoline and diesel, and a fragile financial situation, with pressures from ANP for new investments. How tough will 2013 be for Petrobras?**

Petrobras is a great company with high-level technical staff and has succeeded in deep-water oil exploration in the Brazilian coast. It currently produces 2 million barrels per day, and strategic planning projects raising that to over 5 million barrels over the next decade. This is a huge challenge, not only technological but also logistical and financial and in terms of human resources. The new system for sharing deep sea oil revenues imposes new responsibilities on Petrobras as the sole operator. And with the growth in demand for oil products (gasoline, diesel, jet fuel), new refineries are under construction in the northeast (Pernambuco state), southeast (Rio de Janeiro state), and probably soon in the Midwest. The whole program relies on a solid financial structure with both generation of own resources and external financing. The arrival of foreign investors in deep sea oil will be welcome, and ANP will certainly seek a diversity of nationalities to avoid excessive concentration of power in a few exploration companies and countries. International investors who have great respect for Petrobras are still raising questions because they do not yet understand the structure and the people who will lead the company's deep sea oil exploration.

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**How about decisions to raise the price of gasoline and diesel, which the government has little interest in at this time because of inflationary pressure?**

That had to be solved: prices on January 1 went up 6.6% for gasoline and 5.4% for diesel). The price control has two effects, both negative. Petrobras for many years has had to import gasoline and diesel at one price and sell it for less. The price correction was made to compensate the company, which then faced a low volume of imports of derivatives. Today existing refineries cannot meet domestic market demand, due to the growing fleet of trucks and passenger cars. Price controls also have the effect of discouraging production of ethanol. The price controls also prevent private investment in refineries. There will be no private refineries in Brazil as long as there are price controls. Personally I think pricing for derivatives should be clearly stated in order to reduce uncertainty and attract private sector interest.

**Deep sea oil has created another controversy related to incentive mechanisms, such as legal requirements to hire**

**and buy parts locally, to stimulate generation of a local chain of suppliers to absorb technology and add value. Will this measure be successful?**

Added value is always desirable . . . . The point is to get that increase in added value within economic principles and without creating subsidies that end up burdening taxpayers. The requirement to hire and buy locally is not new, and was well-executed in the case of countries like Korea . . . One must craft an ingenious policy of incentives that sets criteria, deadlines, and gradual phasing out. I believe it is necessary to examine the model of South Korea, which established goals and criteria to stimulate innovation and increase the competitiveness of its emergent capital goods industry.

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**The form chosen by the government to renew leases in the electricity sector raised uncertainty about the risk of breach of contracts. Do you see an improvement of the business environment in Brazil?**

The price of electricity in Brazil, for both industry and households, is extremely high. Because federal and state taxes are a major factor in this cost, the importance of reducing them is evident. The federal government, I believe, correctly diagnosed the problem, but made changes in the compensation to be paid to the concessionaires without the necessary care, for example, such as opening the debate in public hearings. On the other hand, one cannot speak of breaking contracts, because dealers were not required to join the program, as indeed is the case of the Brazilian power company in Minas Gerais state (Cemig) and in São Paulo state (Cesp) among others. The important thing is to open new bids, ensure that there are reservoirs for hydroelectric power, research and produce conventional gas or shale, and develop a pipeline network to locate plants near consuming areas. With these actions Brazilian energy prices would be at international averages. The economic crisis that started in 2008 still affects the United States and to an even greater degree Europe. All sorts of government interventions have been tried, from public financial support to banks and industries (e.g., automobiles in the U.S.) to the loosening of monetary policy by the U.S. and European central banks. Here in Brazil stimulus spending by cutting federal taxes on durable goods was successful. There remains the recovery of public and private investments, reduction of the "Brazil cost" (taxes, labor and pension costs, inadequate infrastructure). There are, in fact, many complaints from businesses about federal government intervention in private activities, discouraging new investment. The Economic Forum in Davos (Switzerland) discussed this issue in relation to Brazil. I hope this perception ends soon, which might be the case with the recovery of the economies of developed countries.