# Brazil: the new energy powerhouse

New discoveries of oil and gas may turn Brazil into an energy powerhouse. They may also help the country acquire leadership in Latin America, overtaking Venezuela and Argentina, both of which are mired in growing populism and severe economic problems.

# by Rudolf ten Hoedt

Brazil's recent discoveries of large reserves of oil and natural gas may herald a fundamental shift in the energy balance of Latin America. If they live up to what they promise to be, Brazil will rank among the world's top ten countries in oil and gas reserves. According to the president of the national oil company Petrobras, Brazil could land 'somewhere between Nigeria and Venezuela'. The country could even surpass Venezuela.

The discoveries will lift Brazil's international stature and may shift the power relations within the region. The findings come at an opportune moment as there is mounting concern about future gas supplies from Bolivia and an aggressive foreign policy from Venezuela. This is probably why president Luis Ignacio 'Lula' da Silva proclaimed that God carries a Brazilian passport. 'This has changed our reality,' a high official of the presidential cabinet declared, 'this will lift the nation to another level'.

The good news was initially met with raised eyebrows in many quarters. Observers suspected that political motives might be behind such a positive message coming at such a convenient moment. The run-up to the presidential elections in 2010 is not far away. Interested parties looked for confirmation of the reserves. Halliburton laptops with secret data of the new findings disappeared mysteriously from a sea container.

Butmore and more sceptics are surrendering as it looks like the new discoveries may live up to their declared potential. 'In the beginning I had my doubts as well,' says Edmar de Almeida, Professor of Energy Economics at the Federal University of Rio de Janeiro. 'But up until now all the preliminary results are very impressive. of them were hits. This suggests that there may be one basin, Professor De Almeida says excitedly. 'They point at what may be a gigantic field or a giant area with many fields. People are amazed. More research is needed but this could turn into something unique.'

#### Tupi and Jupiter

The Tupi field, the discovery of which was announced in November last year, is estimated to contain 7 billion barrels. In January 2008, Petrobras announced the finding of another huge oil field by the name of Jupiter, which is near Tupi and

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The drilling results were positive without exception. It looks very promising.' Eight wells have been drilled at a distance of 400 kilometres from each other. And all possibly of the same size. Together they would double Brazil's proven reserves to 28 billion barrels, placing it on a par with the United States. If Tupi and Jupiter

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Jose Sergio Gabrielli, ceo and president of Brazilian state-run oil company Petrobras, delivers a speech beside a national flag during a press conference in Tokyo on April 7, 2008. Photo: Toru Yamanaka/AFP

indeed are two subfields within a huge basin with many more fields, the reserves could total up to 70 billion barrels or more. That would make it one of the biggest fields in the world and one of the most important findings in decades. It would put Brazil in the same category as Venezuela. And this is not even including the discovery, announced in mid-April, of a new megafield called Carioca, located to the southwest of Tupi, and rumoured to contain no less than 33 billion barrels – a figure that has yet to be confirmed.

Petrobras, the major operator of the field, is still mapping the Tupi area. The company says it will start producing in 2010 with a pilot project that is to deliver 100,000 barrels per day. This would be increased to 500,000 barrels soon after. Sophy Aldebert, director of the Latin American section of Cambridge Energy Research in Rio de Janeiro, expects production to begin between 2012 and 2014. That is to say, 'assuming there is enough equipment and no technical complications will arise'. It could make Brazil a 'consistent net exporter of oil', says Aldebert. In 2006 Brazil became self-sufficient in oil, partly thanks to the success of its ethanol programme. Now it exports mainly heavy oil. 'The Tupi oil is expected to be lighter', Aldebert says. With the discovery of Jupiter, Brazil may also become self-sufficient in gas and reduce its dependency on Bolivia, which is rife with political tensions and has become an unreliable supplier. The development of both Tupi and Jupiter is in the hands of national oil champion Petrobras, which own 65%. The rest is owned by British Gas (25%) and Gal Energia from Portugal (5%).

Exploitation of the fields, however, will be quite a challenge, both financially and technically. The reserves are located 290 kilometres off the coast of Rio de Janeiro and lie deep under the seabed, below the traditional Santos and Campos basins. The drilling must go deeper than ever before. The Tupi field lies in an ultra-deep pre-salt area at water depths of 2,000 meters. Its reserves of oil and gas are stockpiled 5,000 metres below the ocean floor beneath thick layers of sand, rock and salt. The recovery of the petroleum will require the most advanced and expensive exploration and production technology currently available. National oil companies often lack technical know-how, entrepreneurial sophistication and capital to take on project like this. Will Petrobras be able to handle the job? According to De Almeida, 'there is no doubt that they are capable of doing this. Petrobras has worked in very deep water before and the company will team up with British Gas'.

Out of all the national oil companies, Petrobras is one of the most efficient and technologically advanced. That has not always been the case but in recent years the company (55% owned by the state with the rest quoted on the stock exchange), has developed into a relatively efficient producer, with an output of more than 2.2 million barrels of oil equivalents per day. It is among the world's leaders in the development of advanced technology in deep and ultra-deep water oil production.

# A shining example of the new Brazil

Petroleo Brasileiro SA (Petrobas) was founded in 1953 as part of a populist strategy of state controlled and heavily protectionist industrialisation. Although successful for some time, this development strategy also led to crony capitalism, corruption, an appallingly inefficient economy and widespread poverty. It left Petrobras in the hands of politicians and insiders.

From 1990 onwards, Brazil slowly opened up to international competition. Petrobas lost its monopoly under president Henrique Cardoso who allowed foreign competitors to explore for oil and gas. In 1997, the company's corporate structure was changed and 45% of its shares were floated on the stock exchange.

Liberalisation is slowly progressing in Brazil, despite heavy political resistance. Pressure to renationalise the oil industry and return Petrobras completely into state hands is never far away. As a result, Brazil is still one of the most protected markets. Its economic growth is modest and lags behind Asia's.

Still, Brazil can boast of some successes due to liberalisation. Fuelled by high commodity prices, Brazil's exports keep beating records. Foreign reserves are climbing. Public finances are stable. And the country now counts a growing number of multinationals befitting the size of its economy, such as steel producer Gerdau, aircraft company Embraer and mining company Vale do Rio Doce. There are 13 Brazilian companies among the 100 most successful multinationals from emerging countries, as ranked by the Boston Consultant Group. A decade ago, there were none.

Petrobras is leading the Brazilian pack. It is a shining example of a modern Brazilian multinational. It has undergone a great transformation in recent years. Its reserves have raced upwards while production costs have gone down. Since its partial privatisation, Petrobras has doubled its oil production and expanded internationally. The company now operates in 27 countries. It is heavily involved in the Bolivian gas industry, it is the first foreign company with US approval to explore a floating platform in the Gulf of Mexico, and it has established a strong presence in Angola.

## Status

The recent oil findings may bring Brazil significantly closer to its bid for great power status. Since the beginning of the 21st century, Brazil has stepped up efforts to bring the country closer to South American leadership and into the ranks of regional powers with a global geopolitical projection, comparable to Russia and China. Early landmarks are the founding of the Mercosur trade zone in the Southern Cone and the G20 group of poor countries that lobbies for rich nations to open up farm trade.

Brazil is climbing towards continental leadership in South America at a time of rising tensions, intimately related to energy. Resource nationalism and growing state control in some countries are leading to declining output and shortages. Venezuela and Ecuador, both hostile towards private oil companies, are seeing their production drop. Gas producer Bolivia is unable to fulfil its contracts for export to Brazil and Argentina. Argentina instituted price caps that have led to lack of investment and shortages. The country is now cutting off its supplies to Chile. The loudest voice to come from South America has been that of Venezuelan president Hugo Chávez. Brazil almost suffered humiliation in 2006 when Petrobras seemed to lose vast gas assets thanks to a nationalisation drive in Bolivia under President Evo Morales, inspired by Chávez' 'Bolivian Revolution'. The Brazilian military apparently made an offer of intervention to President Da Silva. But after political pressure, Brazil's national oil company has come back to Bolivia as the main foreign energy investor.

The Brazilians are pursuing a two-pronged strategy in Bolivia, according to the American think tank Stratfor. On the one hand, they are reducing their dependence on Bolivian gas for its industrial heartland São Paulo; on the other hand, they are trying to extend their grip on Bolivia's energy resources. Thus, while Brazil is divorcing itself from an unreliable supplier, it is at the same time freeing up Bolivian capacity to supply Argentina with Bolivian reserves, controlled by Petrobras. Brazil's motive for this tour de force is geopolitical. It wants to win back the influence it lost to Chávez. In addition, the Brazilians do not want to leave Bolivia's gas reserves to Venezuela's

national oil champion PdVSA. Tupi and Jupiter will back up Brazil's strategy. 'The country will have more power to impose its interests,' says De Almeida.

'There is a good chance that Brazil will strengthen its grip on Bolivia,' concurs Pitou van Dijck of CEDLA, the Amsterdambased centre for Latin American Studies. According to the Dutch scholar, there are several areas where Brazil is digging in its heels against Venezuela's leadership aspirations. 'For one, Brazil has started a nuclear energy programme with Argentina. That is remarkable.' Van Dijck also predicts that Brazil will say no to the 'gaseoducto' proposed by Chávez. This planned pipeline would go through the Amazon rainforest, connecting Venezuelan gas fields with Brazil and Argentina. Cambridge Energy researcher Aldebert agrees. 'Venezuela does not have enough gas and the costs are too high. It is unlikely that this will go ahead.'

It is difficult to predict how Chávez will react to Brazil's ambitions. Venezuela has been building up more armaments in recent years than any other South American country. Accusations that it



Brazilian President Luis Inacio Lula da Silva (L) is greeted by state-owned oil company Petrobras' workers during a visit to the site where the P-53 oil platform is being built, in Rio Grande, southern Brazil, April 2008. Photo: Jefferson Bernardes/AFP

is supporting the narcotics-financed guerrillas in Colombia are gaining ground. And Venezuelan military are all over the place in Bolivia. The Brazilians for their part have announced the development of a nuclear submarine and a 50% increase of the defence budget shortly after Tupi came to light.

### Feet of clay

'I think Brazil will slowly but steadily gain leadership within South America,' says Pitou van Dijck. He believes the populist camp is in trouble. Chávez and Morales have few successes to boast of economically, despite high energy prices. 'I don't think Morales will be able to continue to tie himself to Chávez.'

Jean Paul Faguet, a lecturer in development economics and Latin American specialist at the London School of Economics, agrees. He thinks that luring Bolivia into a Bolivian Revolution will not succeed in the long run. 'Chávez is now giving away money for free. I have seen it myself. In remote areas of Bolivia, president Morales is handing out cheques signed by the president of the central bank of Venezuela. But in the end Brazil is far more important to Bolivia. What Chávez is doing is like asking a child to distance itself from a rich grandfather. Besides, Morales could fall from power before the end of his term.'

Bolivia has also signed a gas deal with Gazprom for the Russian giant's participation in Bolivia's gas industry. But



A Petrobras petrol station selling gasoline, natural gas and alcohol as car fuels. Photo: Bart Eijgenhuijsen / Hollandse Hoogte

most observers do not think that Gazprom will stymie Brazil's power play in Bolivia. Gazprom's involvement will only enhance Bolivian gas production. 'Any investment by Gazprom is good news for Brazil. There is nothing like competing with Gazprom for Petrobras,' says Aldebert. Besides, it will take at least five years or even more before Gazprom could start adding to production. 'The problem is that new contracts need to be approved by the Bolivian Congress. That will take time.'

Brazil's biggest threat probably comes from inside. Internal politics could jeopardise Brazil's prospects as an energy powerhouse. Oil dollars could tempt politicians to go on spending sprees. But many analysts doubt that it will come this far. As for Petrobras,



Workers of the Brazilian-Korean shipyard Maua/ Jurong demonstrate against the decision of the Brazilian state-run oil company Petrobras to put out an international tender for the construction of a new oil platform. Photo: Antonio Scorza/AFP

or the oil sector before, but they haven't. I do not see why they would do it now'.

There are, however, some worrying signs. The Government is starting to interfere with Petrobras for political reasons. President Lula said in April that he expected Petrobras to order new oil platforms in Brazil, even if they are between \$50 and \$100million more expensive than imported ones. 'Petrobras has to think of the wealth it can create in Brazil', Lula said. Changes in oil legislation are imminent with unknown consequences for foreign companies, after Mines and Energy minister Nelson Hubner cut the most promising oil blocks near the Tupi field from an exploration and production auction last November. There might also be claims from movements of

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the Brazilian state owns only 55% of the company and cannot use it as a cash cow the way Venezuela and Mexico do with their national oil companies. Brazil also does not depend on oil revenues as much as Venezuela does. Finally, De Almeida says that 'there is no political mood for radical change...Brazil's leftwing government is in power for a second consecutive term. They could have changed the status of Petrobras the landless and unions for oil money. And Brazil's already strong record of corruption and political patronage might get another boost. Brazil has disappointed before.

Nevertheless, for decades, Brazil has been a giant on feet of clay. An eternal promise that has yet to deliver. Perhaps oil can help it to live up to its potential and promises. Everybody would win. ■