



Introduction

# RIO DE JANEIRO: MARVELOUS ONCE AGAIN?

Rio de Janeiro is one of the world's legendary cities. For countless straitlaced adults shivering through Northern Hemisphere winters, rambunctious Rio — forever partying, a place where escaped bank robbers laugh at the law and life is nonstop Carnival — has long beckoned as a distant, slightly naughty place of tropical sunshine, sea, and not a little sex.

But is Rio really like that? Was it ever? A bit, perhaps, particularly in the past. But Rio has always been much more. It was Brazil's seat of government until the 1960s and remains to this day a rabbit warren of slightly decrepit government offices and seemingly endless retired public employees bronzing on Copacabana Beach. But Rio lost its capital clout to Brasília in 1960, the same time at which it was losing its top-dog economic status to the factories and finance firms of São Paulo.

Did Rio actually decline? Not really. New beach zones were built; a few metro stations were added. But through too much of the final decades of the 20th century, Rio seemed to spin its wheels uncertainly while the rest of Brazil raced ahead.

Now, though, there's a new vibrancy and confidence in the city that still calls itself "marvelous." Foreign tourism has returned as street crime diminishes, and top quality office space is at a premium.

As various stories in this special supplement make clear, Brazil's second-largest city — population 6.1 million in the city of Rio; 11.6 million in the greater metropolitan area — is set to enjoy an accelerating rush of investment. We report on the enormous potential of the oil sector, which is driven by the discovery of huge new offshore fields. Then there's the likely impact of the 2014 World Cup football



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One sign of Rio's new economic self-confidence is the city's posture toward São Paulo. No longer is the metropolis of 19.5 million population seen as a usurper or a threat. Today, Rio's leaders speak of complementarity between their city and the national economic capital.

"Rio has the capacity, if we do things right, to be a global city for the whole continent of South America," said Mayor Eduardo Paes. "Of course, some roles cannot be played by Rio; São Paulo has been the financial center of the country for the past two decades, and that is something that we, as a city, will never regain. So we do not think about that anymore; instead we look to the future. The location of Rio, close to São Paulo, means that both cities can be considered as one."

At the top of the integration wish-list is a high-speed rail link between the two city centers. A recently published study calls for a train reaching 280 km/hour on the 410 kilometer journey, at a cost of roughly US\$17 billion. It's likely that the federal government will provide up to 50 percent of the funding through some form of public-private partnership or concession. The project cost has almost doubled since planning started many years ago, because of the decision to put some 90 kilometers of track into tunnels sloping gently beneath the sheer-sided coastal mountains (Rio is at sea level, while São Paulo lies at about 800 meters). Planners reckon on the 93 minute journey would cost US\$75 to US\$100 one-way, half the cost of the air shuttle, and would attract at least half of the approximately 20,000 people who make the intercity journey each day.

competition, plus further development if Rio is successful in its bid to host the 2016 Summer Olympics. But there's so much more going on — the state government reckons that investments totaling some US\$50 billion are under way right now.

In addition to the offshore oil development, major projects include the upgrading of two petroleum and petrochemical refineries, in part to substantially increase the processing capacity for natural gas piped ashore. Gas pipelines are being built to flow the gas inland, and a liquefied natural gas reception terminal is being constructed within Rio's Guanabara Bay to backstop local supplies at peak moments, and to protect against supply interruption.

If the project sounds ambitious, consider this: The government hopes to put it out to tender by the end of this year and have it running in time for the 2014 World Cup.

There is a final reason for Rio's renewed confidence. It's because Brazil is confident. With the economy bouncing back fast after a sharp slowdown at the end of 2008, the country is reaping the rewards of recent years of conservative economic planning.

"Brazil can be considered a privileged place because we are not suffering as badly as other countries. I'm convinced that when the crisis ends we will be in a stronger position to lead the way to recovery," said business leader Olavo Monteiro de Carvalho, chairman of the Monteiro Aranha investment group.

## Interview

## Q&amp;A

Peninsula Press talks with Eduardo Paes, mayor of Rio de Janeiro since Jan. 1, 2009.



## SHOW THE WORLD — Rio de Janeiro

For Mayor Eduardo Paes, the 2016 Olympics would represent an important opportunity to show his city to the world. But it's just part of Rio's resurgence as a major international center. Paes is driving economic development coupled with investment in transport, policing and education. The city's greatest advantage for businessmen is the wonderful lifestyle.

### Whether or not Rio is chosen for the Olympics, how do you see the city developing — in addition to tourism, obviously?

I have been mayor of Rio for only a few months, but even before that as a local councilor and federal congressman I have been trying to make Rio a city where important people make important decisions.

### Of course Rio used to be the federal capital ...

Right, and there's still a legacy of that, with the headquarters of some major government agencies. And it's a city for big companies. Petrobras is headquartered here, and all the



Copacabana Beach

world's leading oil companies have their Brazilian offices in Rio.

### In what other ways will Rio develop?

The second thing — and we have much to do in this respect — is to become Brazil's main telecommunications and transportation hub. We're doing OK in telecommunications, but our airport is in poor shape.

Third, I see Rio as a center for Brazilian higher education. Some leading universities and research institutes are based here, so Rio is a city of people with doctorates and masters degrees. And with today's technological advances, we no longer need to be a place where people are producing goods.

Fourthly, Rio has the vocation and the will to play an important economic role in the areas of innovation, information technology, design, fashion, entertainment and so on. Brazil's two biggest TV networks are based here, Globo and Record, and Rio is still the cultural capital of the country.

### Rio lost some of its glitter because of reports of violence ...

We are putting a lot of effort into security — the other day we had a meeting to study public order cases like that of Rudy Giuliani in New York. Rio is not yet 100 percent safe, but just as in most major cities around the world the goal of total safety is impossible. However, we can vastly improve our security and I do believe that Rio is now gaining ground. We also have urban problems; the favelas (shanty towns) have grown too fast and the city has expanded without proper government planning. We are working hard on that. However, now is a special moment for Rio, because it's the first time in many years that the mayor, the state governor and the national president are all working together for the city.

### Rio is jammed between mountains and the sea, and that creates major transport problems. What are the solutions?

Well, we are working with a clear vision of getting the infrastructure that the city needs. We want urban development to be friendlier, more in harmony with the people living here. So we are working to extend the metro

(subway) lines and to introduce a Bus Rapid Transit system.

### What other goals do you have for your four-year mandate?

I am trying to make the city a champion in elementary education, starting in infancy and going up to the age of 14. Also, I am trying to offer the kind of governance where people will notice a real difference in public services. I want Rio to be the capital of good-quality lifestyles, and I want it to be the most important tourist destination in the country. Rio already has this vocation, so if we could reduce the great divide between rich and poor and if we could get rid of the security issue, then Rio would be the most fantastic city to live in.

### What are the advantages for foreign investors?

I love Paris, New York and San Francisco, but there's no place like Rio for the quality of life and for doing business. Even the people who have to work in the financial district of São Paulo always end up coming back to Rio. It is simply a very nice place to live and invest.



## Q&A Sérgio Cabral Filho is the governor of the state of Rio de Janeiro

## 'LIVE YOUR PASSION' AT RIO OLYMPICS!

### We asked governor Cabral, a former journalist, about the benefits — for the city, the country and the Games themselves — of holding the Olympics in Rio:

First of all, holding the Games in South America is a tremendous opportunity to expand the Olympic spirit, to create the possibility to practice sport and promote friendship in new countries and new continents. The Olympics have been held in Oceania, Asia, Europe and North America but never in South America. This is the first time a South American city has made the final selection (for the Games).

Next, Brazil is the leader of South America and our country has been going through a fantastic time — our macro-economic fundamentals are solid, inflation is under control, we have huge markets and Lula (President Luiz Inácio Lula da Silva) is an important leader in global geo-politics.

Also, Rio is the main city in Brazil for hosting big events. More than one million people come to Rio every year to enjoy Carnival without problem, and the New Year's Eve

party on Copacabana Beach is fantastic with over two million people. We had the Rolling Stones playing on Copacabana Beach (in 2006, with over one million fans). And of course we staged wonderful Pan-American Games in 2007. During those Games the leaders of many kinds of sports told me: 'I have never seen Pan-American Games like these with so many people on the street, and so much enthusiasm.' That's why our Olympic campaign slogan is 'Live Your Passion', because we believe we can offer Games with a very special atmosphere.

Another thing is the fantastic synergy between the (2014) World Cup, for which Rio will be one of the key cities, and two years later the Olympic Games. Many countries, many cities have hosted the World Cup after the Olympic Games or the other way round. We showed the members of the International Olympic Committee (IOC) that this synergy is very, very important. Between the three levels of government we are making a lot of investments in infrastructure, subways, public trains, new housing and so on, and we are investing in favelas — we have changed the lives of these people.

Finally there is security, where we have also invested a lot. I spoke with members of the IOC about this, and told them that in terms of security we could be ready to host the Olympics in a couple of months. We have the know-how to receive the Olympic family. But we want more; we want to offer security for all of our citizens, all of the time.

Spotlight on Rio

# OLYMPIC GOLD

“An exceptional Olympic experience” — that’s what Rio organizers are promising the International Olympic Committee in their plans for 2016. The goal is to make full use of Rio’s privileged location near sea and mountains, as well as the city’s natural vocation for tourism. One innovation: giant Jumbotron screens at public “live sites” throughout Brazil and at least 15 major locations worldwide.

## GOLD REASONS

### SOLID FINANCES

The games are budgeted at US\$3.3 billion, using 2016 prices. The government will put up 25 percent of funding, with the rest coming from sponsorships, ticket sales, and so on. Stadiums, general infrastructure, and the like require another US\$13.5 billion (95% is capital investment; 5% for city decoration, security, cultural events, etc.). Many of the big infrastructure projects already figure in public investment plans. The Olympic Village will become private housing after the games.



### 2 BEACHES, LAKES, AND MOUNTAINS

Olympics in Rio mean Olympics beside the sea. The city winds along a coastal strip, often less than a mile wide, between ocean and mountains. The older downtown region fronts onto Guanabara Bay, so competitors and tourists will never be far from either the ocean or tropical greenery. The Olympic Village lies a couple of miles back from Barra beach, alongside the Jacarepaguá Lagoon, adjacent to the main events area. Organizers estimate that 75 percent of the Olympic athletes will be housed less than 25 minutes from their competition venues.



# RIO DE JANEIRO

## Olympic city



### 3 PACKED VENUES

Brazilians love sports, and *Cariocas* — people from Rio city — are perhaps even more fanatical. People throughout the country are passionate about soccer, but *Cariocas* are ardent fans of volleyball, track and field, swimming, and sailing as well. They also love playing by the sea; look for beach volleyball (now an Olympic sport) and the more exotic “foot volley” to be popular at the games. This national devotion to sports translates into packed stadiums: In 2007, 90,000 people watched the opening ceremony of the Pan-American games, and 20,000 worked at the event as volunteers.



### GAMES IN ONE PLACE

A frequent complaint about recent Olympic games is that several events have been staged at distant venues, which undercuts the “all together” atmosphere among athletes in the Olympic Village. One trump for Rio is the ability to hold virtually all the events inside the city. Only soccer may require additional locations.



### A LINK ACROSS TIME



### 1940- LEGACY

One of the world’s great soccer venues, Maracanã Stadium was built especially for the 1950 World Cup; it was the first and only time the prestigious sporting event has been played in Brazil. With 200,000 spectators, the final game of that year’s competition figures in record books as hosting the world’s largest crowd of soccer fans ever. Unfortunately, Brazil lost the match 2-1 to Uruguay, resulting in a trauma the country has never completely recovered from...

1940



2009

### 2009

Renovations to add seating and improve safety have cut capacity to 87,000, thus costing Maracanã its “biggest in the world” title. The stadium is owned by the city of Rio and hired by local soccer clubs, in particular Flamengo and Fluminense. However, Maracanã is also frequently used for entertainment events: Frank Sinatra, Tina Turner, and the Rolling Stones performed at the stadium, and Pope John Paul II celebrated a mega-mass there.

2014

### 2014 – AND 2016?

If selected for the 2014 World Cup, Maracanã will become the second stadium (after Mexico’s Azteca) to host two finals. It received major upgrading for the 2007 Pan-American games, during which it hosted soccer games and the opening and closing ceremonies. If Rio is awarded the 2016 Olympics, that may well happen again. Likely upgrades include extending the roof to fully cover all seats.



## Shaping the Olympic Dream

Carlos Arthur Nuzman made his Olympic debut in Tokyo, in 1964, as a member of the Brazilian volleyball team. Now the 67-year-old lawyer and president of the Brazilian Olympic Committee is the driving force behind a roughly US\$50 million bid, strongly backed and bankrolled by the federal government, to bring the Summer Olympics to South America for the first time. “The Northern Hemisphere has organized the vast majority of the Olympic games. The Southern Hemisphere has hosted only two, both in Australia. But South America is a continent of 400 million people, 180 million of them under the age of 18,” Nuzman said, expounding arguments he has used to propel Rio into the final runoff for 2016 host city against Chicago, Madrid, and Tokyo on Oct. 2, 2009. He believes strongly in the power of the Olympic movement to inspire young



people, integrate them, and help build a better world. “We owe the Olympic movement to the youth, to bring them together. They can come by airplane, by bus, by car, or by bicycle; it doesn’t matter. Sports are the one thing that can rapidly change the concepts and understanding of young people. Heroes can change the lives of a lot of people, even though most of them will not become Olympians, medalists, or champions. They will, however, go on to become doctors, sculptors, or journalists.” Like most candidate cities, Rio sees the games as an instrument to bring about accelerated development, and its leaders are eager to convince Olympic officials that the US\$12.8 billion

provisional capital cost will leave a lasting legacy of better highways, airports, metro systems, and the like. Planned investments include planting 24 million native trees to help repair decades of damage to the Tijuca forest that adorns Rio’s postcard coastal mountains, and totally offsetting all carbon emissions. Of course all these things could happen without the whiplash of a 2016 deadline. But in the real world, playing host to the world can force a city to change gear. “Something that would normally require 50 years to alter can be changed in these seven years,” Nuzman said.



## Black Gold



## Q&amp;A



## Almir Guilherme Barbassa

Chief Financial Officer, Petrobras

**Petrobras has just announced a US\$174 billion investment program for 2009-2013, which is a 55 percent increase on the 2008-2012 plan. Can you afford so much during a crisis?**

We thought really hard about this — about prices, exchange rates, interest rates, and equipment costs. Everything is so volatile in the current market and so imprecise that it's worrying. But Petrobras has discovered a lot of oil, and we have a solid portfolio of projects.

**Is it viable without a big rise in oil prices?**

Well, we don't worry about the price today; we are investing now for oil that we will sell in 2014 and beyond. By then a barrel of oil will certainly cost more. Right now the world is consuming 85 million barrels of oil per day, but this comes from depleting fields. If no new fields are brought online, then today's 85 million barrels of oil per day (BOPD) production would fall to 25 or 30 million BOPD by 2020. So even if demand stabilizes at today's levels, the world must add around 50 million BOPD over the next 10 or 12 years. And that's just around the corner for the oil industry. But be all that as it may, Petrobras will still be profitable if prices stay at US\$40 or US\$45 per barrel.

**What are your plans for the U.S. market?**

It's important. We have prospecting and production operations in the Gulf of Mexico; a trading operation, commercial office, and refinery in Houston; and a representative office in New York. But that's more for financial matters. And it's cheaper to ship oil to the United States from Brazil than from the Middle East.

## THE NEXT OIL BOOM

**Brazil in OPEC? Well, that may or may not happen, but what's pretty certain is that the largest country in Latin America, long a major exporter of foodstuffs and minerals, will soon join the happy band of nations with lots of oil to spare. One snag, though — Brazil's oil reserves lie deep under the ocean and will be tricky to get out.**

Think of major oil exporters and the image is normally camels, deserts, and the Persian Gulf, or perhaps the frozen wastes of Russia's western Siberia. But look some years ahead and be prepared to include the often stormy waters of the South Atlantic as Brazil gears up to join the select ranks of global oil giants. By 2020, Brazil could be a top-five producer and a major exporter.

The main player is Petrobras, the Brazilian oil giant whose shares are traded on both the Brazilian and New York stock exchanges, but in which the Brazilian government keeps tight control through a majority of voting-class shares. By 2020, according to the latest company projections, Petrobras will be producing 5.1 million barrels of oil and gas per day in Brazil — twice as much as it is now. Of that, 3.9 million barrels would be oil and the rest natural gas. Allow for the fact that other oil giants are also investing in Brazil, and the country's total 2020 production could be globally significant. By way of context, current top producers Saudi Arabia, Russia, the United States, and Iran pumped an average of 10.8, 9.9, 7.3, and 4.3 million barrels of oil respectively in 2008.

Brazil's breakthrough came after decades of climbing slowly toward self-sufficiency by probing farther and farther out into the ocean. In late 2007, President Luiz Inácio Lula da Silva proudly announced a huge strike of what is called "sub-salt petroleum." These deposits are buried beneath a thick layer of gooey salt, which is a nightmare to drill through because it tends to ooze back into a normal well-shaft. Compounding the problems: This layer of salt can be up to 2,000 meters thick; the oil itself can be as far as 7,000 meters below the seabed; and the sea is



Petrobras P-51, the first semisubmersible production platform built entirely in Brazil: 48,000 tonnes and almost US\$1 billion to produce 180,000 BOPD in 1,255 m of water, on stream January 2009

2,000 meters deep, if not more. Finally, put all of this 200 to 300 kilometers out in the ocean, which implies an additional challenge for helicopters shuttling rig crews.

Petrobras has several foreign minority partners in its deepwater operations, but not from any lack of know-how. The company is by far the world's leading producer in deep waters, which is classified as wells lying under at least 300 meters of water. Last year, the company says, it was responsible for 22 percent of global deepwater production, with ExxonMobil, Royal Dutch Shell, and Norway's StatoilHydro trailing at around 14 percent each. This year Petrobras is producing off the Brazilian coast in 2,200 meters of water, which is classed as ultra-deep, and next year it aims to break 2,500 meters in the Gulf of Mexico. So, despite the formidable technical challenges of ultra-deep water prospecting and production, Petrobras is confident it can develop the necessary robotics technology to develop the sub-salt fields lying in the Santos and Campos basins off the São Paulo and Rio de Janeiro coast.

## EYE ON ELETRONUCLEAR

Brazil is privileged among major economies in that it derives most of its electricity from rivers. Last year 72.5 percent of the nation's power came from dams. Less than 2 percent came from coal-powered stations, compared with a global average of 41 percent, in part because Brazilian coal is scarce and stony. The result, happily, is that Brazil has a very clean energy matrix. Nevertheless, as the economy grows and the power grid becomes more complex, the need increases for more thermal generation to backstop the hydro stations for peak supply in big cities that lie far from the hydro dams, and to help out in the dry season. Recently the country has added a few natural gas generators, but there's not enough gas to build many of them. Some relief is coming from cogeneration in sugarcane and ethanol, through the burning of cane bagasse, but once again the fuel is limited. Thus, the federal government has decided to resume its nuclear power program. Currently Brazil has two pressurized water reactors

(PWR), both at Angra dos Reis on the coast west of Rio. The first is a 657 megawatt station built by Westinghouse, which came online in 1984. Angra 2 is a 1,300 megawatt station from Siemens-KWU of Germany, which started operations in 2000. And work has restarted on Angra 3, another 1,300 megawatt PWR, after building was halted for more than 20 years. It uses technology from Areva. "The governmental plan is to build four to eight nuclear plants by 2030. After that, the number of nuclear plants will grow because the number of (new) hydro plants will diminish," said Othon Pinheiro da Silva, president of Eletronuclear, a state-run company. He said technology partners for the new stations have not yet been chosen but mentioned Westinghouse (part of the Toshiba group), DVR of Russia, and Areva-Mitsubishi as possible options. While Brazil buys in some reactor technology, it can handle its own fuel needs. "We have a lot of uranium and we have fuel-cycle technology. As it stands, only



Othon Pinheiro da Silva  
President, Eletronuclear

three countries in the world combine these two advantages: the United States, Russia, and Brazil," da Silva said.

Despite the renewed interest in nuclear power, Brazil's energy matrix will remain predominantly hydro. "We don't need a lot of nuclear power," da Silva said. "But one energy source is not better than another. The combination, how to combine all these sources in the best interest of society, is the challenge."

"The Santos Basin is now one of the world's most important hydrocarbon regions and will be a major source of global supply for decades to come," Frank Chapman, chief executive officer of Britain's BG Group, said in a statement this May as the Tupi field, Brazil's first major sub-salt strike, started test production. BG is a minority partner of Petrobras in Tupi, along with Portugal's GALP Energia.

Brazil's pre-salt geological formation is a strip some 800 kilometers long and up to 200 kilometers wide on the edge of the continental shelf. Nobody yet knows just how much oil it really contains, and one nearby Exxon well recently came up dry. But the Tupi strike has been confirmed in the range of 5 to 8 billion barrels, and total sub-salt strikes so far total 8 to 12 billion barrels. This has been sufficient for

the government to cancel all further sub-salt exploration license auctions while it ponders how to ensure the bonanza goes to Brazilians rather than multinational oil companies. Suggestions have included a special fund to improve education, reduce poverty, and/or invest in infrastructure.

Ever since Brazil opened up its petroleum sector to foreign companies in 1995, the government has awarded prospecting rights in simple auctions, with the winner being whoever offers the highest cash bid. But Lula was quick to compare the sub-salt discovery to "a winning lottery ticket," and said the old bidding system must be revamped for new sub-salt prospecting licenses. With discussions still going on, one latest proposal leaked to the *Folha de São Paulo* newspaper called for companies

to pledge to hand over a percentage of oil to the government, via a new state company to be created for this purpose. Winners would be the companies offering the highest percentage handover. Additionally, according to this latest proposal under discussion, the government would make Petrobras the lead operator in all new sub-salt prospecting licenses. Any company, Brazilian or foreign, would be able to bid for a sub-salt license, but the winner would have to make a minimum share available for Petrobras, which would be responsible for carrying out prospecting work and developing any field discovered. Mines and Energy Minister Edison Lobão said the new model was still under discussion. He said Petrobras would enjoy "a privileged position," but no decision had been made about sole operator status.



Shipyard Industry



Q&A



Jorge Luiz de Mello

President, Rio de Janeiro Docks Company – CDRJ

**Brazil's foreign trade has been growing rapidly, up by some 280 percent in 10 years from US\$97 billion in 1999 to US\$371 billion in 2008. What does this mean for ports?**

This has been a major challenge, because more than 90 percent of trade moves through our seaports. So we have had to make a giant leap both in our infrastructure and the way ports are managed. In fact, the starting point came back in 1993 with the port reform law; before that everything was run by the government. Now it's like a condominium where port authorities – federal or not – handle security, regulations, and control, while the terminals themselves inside the ports are leased to private operators.

**What's the situation now, in Rio de Janeiro?**

One major challenge has been changing the mentality within the Rio Docks Company (which is controlled by the federal government). Employees had the vision of public employees – they under-performed in exchange for being underpaid. We're putting in a new market-based career and salary plan, so now we can demand efficiency. And people will be promoted on merit, not on length of service like before.

**Any message for foreign investors?**

The role of the Rio Docks Company is to generate business opportunities. Our door is open for investors who want to grow together with Rio and Brazil.

# FAIR SAILING FOR RIO PORTS

Market-oriented management, massive investments in logistics, and the happy proximity of the burgeoning offshore oil industry are all combining to bring new business – and investment opportunities – to Rio's four seaports.

On New Year's Day in 1502, Portuguese sailors maneuvered their tiny caravel out of the Atlantic swell and past a giant bare-rock mountain, becoming the first Europeans to glimpse one of the world's great natural harbors. Given the date, and their assumption – wrong, but understandable – that the 380-square-kilometer bay must be the mouth of a giant river, they called it “Rio de Janeiro.”

Over the centuries, the city that sprang up there became not just a byword for beaches and bohemia but also one of Brazil's busiest ports. In recent years, however, it has lost ground, plagued by shallow draught, quays choked amidst city sprawl, retreating industry, and outdated management and labor practices. Now there are plans to reverse the tide with a combination of efficient management (see interview on the left) and private investment.

The growing number of cruise ships that bring European, Japanese, North American, and, increasingly, Latin American tourists into Rio should soon enjoy modern berthing facilities that will more resemble an airport lounge

than a grimy dockside. Existing terminals for steel products, vehicles, and containers will soon be joined by another for containers, raising current capacity five-fold, and additional dedicated terminals for pulp and paper and for general cargo are under study. Combined with dredging to increase the draft, all this development promises to significantly raise annual cargo movement, currently just under 10 million metric tons, and spells opportunities for private investors.

Three other ports in Rio de Janeiro state are also attracting investment. Niterói, across the bay from the city of Rio, has found a new lease on life in supplying services to the booming offshore oil industry and now boasts the highest average cargo value of all Brazilian ports, some US\$3,500 per metric ton, according to the Rio de Janeiro Docks Company. Angra dos Reis, located some 115 kilometers to the west, is another busy oil support station. But for many, the greatest interest lies in expansion plans for the port of Itaguaí. Roughly 40 kilometers west of Rio,

it sits inside the sheltered Sepetiba Bay. Dating from the early 1980s, Itaguaí currently handles cargo ships with a deadweight capacity of up to 280,000 metric tons, mainly for coal, iron, steel, aluminum, and containers. Ambitious plans are under way to make use of the flat hinterland for a variety of major iron and steel projects.

The port is currently served by a broad-gauge (1.60 meter) rail link to the neighboring states of Minas Gerais and São Paulo, both of them industrial centers. Right now truck access via the BR-101 federal highway is less than adequate, because heavy traffic is thrown into the congested North Zone of metropolitan Rio. As a result, the federal government is constructing a 100 kilometer, US\$380 million beltway in a semi-circle around the city. This new highway will link Itaguaí directly to major interstates, avoiding metropolitan congestion.



Itaguaí Port



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