

# GIANT

## PARTNERS

{ BY JOSE LUIS VITTOR AND TIM R SAMPLES, HOGAN LOVELLS US LLP }

Embedded in the Brazilian narrative as early as the national anthem, the image of Brazil as a giant with nearly infinite future potential has been a steady theme throughout history. In 1954, with then-President Joao Café Filho on the cover, *Time* magazine published an article titled “Giant at the Bridge,” about Brazil’s economic challenges and massive growth potential in the post-Vargas era. Thirty years later, *Time* returned to the “giant” analogy with an article addressing Brazil’s return to democracy, titled “Waking the Sleeping Giant.” Now, more than ever before, the giant of tomorrow is making an impact today.

**L**arger than the contiguous United States, with a population of 190 million and a GDP of approximately \$2.1 trillion, the Brazil of today illustrates that the image of Brazil as a giant is more than just a convenient literary device. Brazil is also stirring excitement as the future host of the World Cup in 2014, and Rio de Janeiro will become the first South American city to host the Olympics in 2016. The Brazilian economy presents huge and diverse opportunities in energy, infrastructure, agriculture and technology, to name just a few areas of potential growth.

The Houston metro area, as the fourth-largest city in the United States, with a gross product of \$395.4 billion in 2010, is a giant in its own right. Only 26 countries other than the United States have a larger economy than that of metro Houston. With a broad economic foundation in energy, medical research, aeronautics and high-tech industries, Houston is home

**From the Brazilian National Anthem:**

*Nature made you a giant,  
A beautiful, powerful, indomitable colossus,  
And your future will match this greatness  
Gigante pela própria natureza,  
És belo, és forte, impávido colosso,  
E o teu futuro espelha essa grandeza*



PHOTOS: STOCKYARD (TOP), VEER

to more than 3,500 energy-related firms and 23 companies on the 2011 Fortune 500 list. Together, Houston and Brazil are building a dynamic and meaningful partnership.

**BILATERAL TRADE AND ECONOMIC LINKS**

As corporate activity between Houston and Brazil continues to grow, some 770 Houston companies are doing business with Brazil. *Univworld Business* reports that 311 Houston-area firms are operating 961 subsidiaries in Brazil. Of those firms, 44 are

headquartered in Houston and account for 122 subsidiary locations throughout Brazil. Meanwhile, major Brazilian players such as Petrobras and Odebrecht have established a significant presence in the Houston area. Petrobras represents the energy industry, while Odebrecht provides the engineering know-how to support energy development. Many more Brazilian companies have set up operations in Houston representing industries from manufacturing to pro-

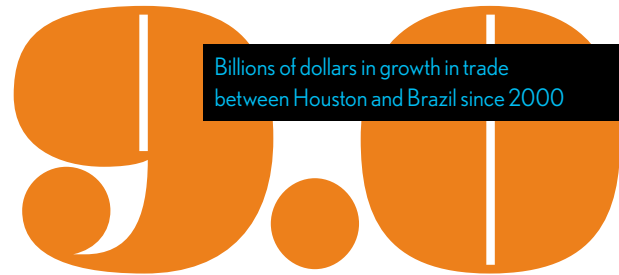


## DIAMOND IN THE DEEP

Diamond Offshore Drilling, Inc., a Houston drilling services company, owns and operates one of the largest fleets of offshore drilling units in the world. Diamond has been awarded \$4.6 billion in total contract backlog in Brazil and currently operates 16 rigs there. In 2009, Petrobras accounted for 15 percent of Diamond's total consolidated revenues. OGX, Brazil's largest privately owned oil and gas company, is also one of Diamond's major clients. In explaining the relationships in Brazil, a Diamond executive said, "Our goal . . . is to be the preferred drilling contractor for Petrobras and OGX. We work hard every day to fulfill that goal. Right now Petrobras is Diamond Offshore's biggest customer and OGX is growing. We have to perform."

professional services to chemical distribution. Papaiz Industria E Comercia Ltda, Tramontina, and Votorantim Group all have subsidiary locations in Houston representing the manufacturing industry. SMAR Equipamentos Industriais LTDA, offering professional scientific and technical services, and Braskem S.A., engaged in plastic manufacturing and chemical distribution, also operate in Houston.

Houston and Brazil are deeply linked through trade as well. The Houston-Galveston Customs District ranks as Brazil's second-largest U.S. trade partner, with annual trade valued at \$11.3 billion in 2010. Meanwhile, Brazil is Houston's fourth-largest international trade partner. Since 2000, trade between Houston and Brazil has grown by \$9 billion. As the primary



Billions of dollars in growth in trade between Houston and Brazil since 2000

gateway to Latin America, Houston offers 14 direct-service flights to Rio de Janeiro and São Paulo per week.

Fortifying Houston and Brazil's ties, GHP partnered with a Brazilian counterpart, Associacao Comercial de Santos (ACS), in May of this year in an effort to promote both countries' mutual interests in the fields of international trade, investment, business information and other commercially oriented activities. As a result, GHP and ACS will take the initiative to exchange information about trade and business opportunities and disseminate it to their respective business communities. In addition, both organizations will coordinate efforts to attract distribution centers to Houston, opening new markets for Santos-based companies.

PHOTOS: STOCKYARD (BELOW, LEFT); CORBIS



Brazilian GDP in trillions of dollars

Trade between Houston and Brazil represents a wide array of industries, which in turn affects a diverse assortment of companies in the Houston region. While petroleum products account for nearly 40 percent of total trade value, the next-largest trade values represent industrial machinery and computers (15 percent), organic chemicals (12 percent), plastics (6 percent), and electrical machinery (3 percent). This mix in trade goods has a ripple effect on supporting industries, such as transportation and warehousing, retail and wholesale trade, finance and insurance, real estate, and other services. Cargo and vessel activity at the Port of Houston creates jobs for railroad and trucking companies moving cargo to and from the marine terminals, dockworkers, steamship agents, freight



## HOUSTON- AREA ENERGY COMPANIES

### MAKING A SPLASH IN BRAZIL

Brazil is the largest market in the world for flexible pipe. Deeplex, Inc., a Houston-based manufacturer of composite pipe, received \$33 million in funding to increase production and expand its technology center, with one of the primary investors being Promon International, a leading Brazilian engineering firm.

Noble Corporation, based in Sugar Land, recently signed a memorandum of understanding with Petrobras for contracts valued at \$4 billion for its five deepwater rigs currently operating offshore in Brazil. In addition, the agreement provided for upgrades worth \$175 million each to Noble's three drillships.

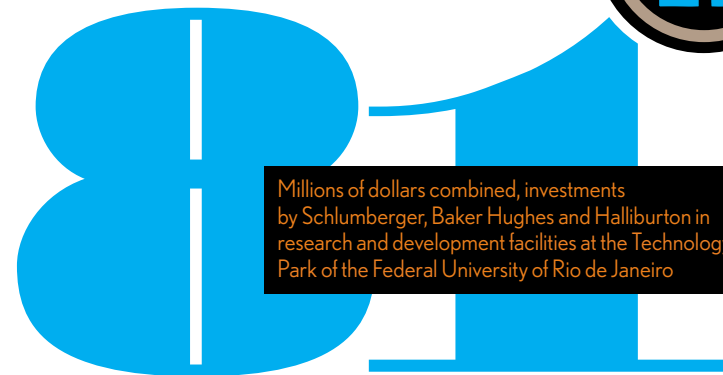
Schlumberger, Baker Hughes and Halliburton have invested a combined \$81 million in research and development facilities at the Technology Park of the Federal University of Rio de Janeiro, according to market research compiled by Rio Negócios.

Headquartered in The Woodlands, Anadarko Petroleum Corporation has made major offshore discoveries in Brazil in joint ventures with Devon and Ecopetrol.

Repsol, a Spanish oil company with its U.S. headquarters in The Woodlands, ramped up its presence in Brazil last year when China Petrochemical Group acquired a 40 percent stake in Repsol's Brazilian unit for \$7.1 billion.



Number of direct-service flights from Houston to Rio de Janeiro and São Paulo per week



Millions of dollars combined, investments by Schlumberger, Baker Hughes and Halliburton in research and development facilities at the Technology Park of the Federal University of Rio de Janeiro

forwarders, ship chandlers, warehouse operators, bankers, lawyers, terminal operators, and stevedores.

It is important to note that these trade figures do not capture the intangible exchange of professional and scientific services, such as engineering, architectural design, and computer development. The trade in services is a strong and ever-growing bond between the two countries.

#### ENERGY CONNECTIONS

Since 2007, Brazil has been making international headlines with announcements of colossal pre-salt discoveries along the coastlines of Rio de Janeiro and São Paulo. Underneath two kilometers of Atlantic Ocean and another five kilometers of sand, rock and a shifting layer of salt, Brazil's pre-salt oil and gas discoveries present novel challenges for exploration and production. But they also have the potential to turn the country into one of the world's leading oil and gas exporters.

According to official figures, by the end of 2010, Brazil's proven oil reserves reached 13.986 billion barrels. The international energy industry took notice. Energy companies with either headquarters or a major presence in Houston have been at the forefront of Brazil's pre-salt exploration and are poised to play a major role in production as well. As the Permanent Secretariat of the World Energy Cities Partnership, Houston also had a key part in Rio de Janeiro's being invited to join into this partnership among energy cities worldwide.

#### ENERGY REFORMS AND BIDDING ROUNDS

Brazil's legal framework for the energy sector has undergone major transformations recently. "There have been important regulatory changes that will impact the deal flow and commercial ties with Houston," said John Cuttino, Director, Portal Consultoria em Logistica Empresarial Ltda. First, a constitutional reform in 1995 relaxed investment restrictions on private companies and international entities in the energy sector. Two years later, the Brazilian Petroleum Law of 1997 created the National Petroleum, Natural Gas and Biofuels Agency (ANP) to oversee energy regulation in Brazil. More recently, in 2010, a specific regulatory framework for the exploration and production of the pre-salt areas was enacted.

Brazil's ANP is responsible for promoting bidding rounds and entering into contracts with concessionaires for exploration, development and production projects. To date, the ANP has successfully held 10 rounds of bidding for such projects, leading to agreements with 74 exploration and production concessionaires in 23 different basins. Among concessionaires already active in Brazil are such Houston-based companies as Anadarko, Devon and El Paso.

Another major bidding round is currently getting under way in Brazil. The ANP announced on April 24 that its 11th Bidding Round for exploration and production was approved by the National Council for Energy Policy (CNPE) and is expected to be held later this year. With sites located in nine different states, the

11th Bidding Round will include a total of 174 blocks, 87 of which are in offshore areas, adding up to 123,000 square kilometers for exploration. Brazil's highly anticipated bidding of pre-salt areas is slated for subsequent rounds and is not likely to occur this year.

While the major pre-salt discoveries tend to capture the most headlines, there are significant opportunities in natural gas as well. According to the ANP, Brazil's proven natural gas reserves reached 417 billion cubic meters in 2010. Current exploration will continue to bring major discoveries of tight gas and other unconventional deposits. Experience with the horizontal drilling and hydraulic fracturing techniques employed in the Eagle Ford, Haynesville and Barnett shale plays will put Texas producers in an advantageous position to take on unconventional natural gas in Brazil.

#### PETROLEO BRASILEIRO (PETROBRAS)

In 1953, during the second presidency of Getúlio Vargas, the Brazilian Oil Company (Petrobras) was created. Evolving from a primarily downstream company Petrobras has become a balanced and integrated player in the energy industry, offering highly sophisticated technical capabilities. Petrobras is the largest company in Latin America by market capitalization and revenue and the third-largest energy company in the world. On May 13 Petrobras reported \$6.72 billion in net profit for the first quarter of 2011.

In many ways, Petrobras has broken the mold of the archetypal state-owned energy company, by adapting to market conditions and developing an internationally competitive platform. For instance, Petrobras has established itself as a worldwide leader in deepwater exploration and production, and in 2007 helped Brazil reach its goal of being self-sufficient in oil. As Edison Lobão, Brazil's Minister of Mines and Energy, was quoted by *Foreign Affairs* in 2009 as saying, "We owe our self-sufficiency in petroleum to Petrobras. We're proud of its international efficiency and competence."

With a presence in the United States since 1987, Petrobras America, Inc., is headquartered in Houston. In 2008, Petrobras acquired the Pasadena refinery on the Houston Ship Channel, with refining capacity of 100,000 barrels per day. According to the Petrobras Web site, the company's Houston trading and procurement office accounts for another 550,000 barrels of oil per day. Petrobras has also expanded its presence in the Gulf of Mexico with the Cascade and Chinook developments, which employ a cutting-edge floating production, storage and offloading facility to accept production from the two fields—the world's deepest facility of its kind.

#### RENEWABLES AND ALTERNATIVE ENERGY

Brazil is a world leader in renewable energy, having invested in a diversified energy matrix

as long ago as 1931, with ethanol production and research. Brazil also holds vast hydroelectric resources—including the Itaipú Dam, the largest hydroelectric plant in the world—and a solid power generation and distribution sector. In the wake of the oil shocks of the 1970s, the country carefully included and promoted alternative energy sources. Brazil held its first wind-only energy auction in December 2009 and looks to continue diversifying its energy matrix with major wind and alternative components in two auctions for power contracts scheduled for July 2011.

Texas leads the United States in wind power capacity, and 32 percent of the City of Houston's total electricity is generated by wind. In 2010, nearly 8 percent of the state's electric grid was generated by wind—more than three times the national average—and Brazil is a major supplier of wind blades to Texas wind farms. Houston-based ConocoPhillips made its push into the alternative energy sector earlier this year through a partnership with GE and NRG Energy to invest \$300 million in early-stage energy technology firms.

While oil and gas have been the historic flagship in Texas since Spindletop, access to resources, expertise and technology affords Houston the potential to make a major impact in alternative energy as well. The successes of the Brazilian experience in this area are certainly worth noting for a city seeking to expand its aura as the most relevant energy center in the world.★



Percent of the City of Houston's total electricity generated by wind, with Brazil as a major supplier of wind blades to Texas wind farms

PHOTOS: (LEFT) GHP; (RIGHT) CORBIS