BRAZIL

Updated: March 2012

INFRASTRUCTURE & ENVIRONMENT

Overview

GDP
US$2,090 billion (2010)

Population
193.3 million (2010)

Per capita GDP (PPP)
US$11,219 (2010)

Real GDP Growth
7.5% (2010)

Infrastructure Opportunities: According to the Instituto Brasileiro de Geografia e Estatistica, Brazil's construction industry growth could average 7.1% per year between 2012 and 2016. Despite a number of barriers there is great potential for future investments in infrastructure. This is driven, in part, by preparations to host two major sporting events: the World Cup in 2014 and the Olympics in 2016. In addition to the sporting events, the current government is planning to implement the 2nd phase of the Growth Acceleration Program (PAC II) which will see over US$500bn invested between 2011 and 2014. Infrastructure spending, which will account for a significant portion of the PACs total budget of US$965bn, is to be directed to increasing the country's energy production capacity (US$461bn), building homes (US$278bn) and schools (US$23bn), improving transportation (US$104bn), water and electricity (US$30.6bn), and sewage, security and urban mobility (US$57bn).

Business Opportunities

The 2014 World Cup and the 2016 Rio Olympics are piquing the interest of corporations around the world due to the vast investment opportunities related to both events. US$11.3bn has been pledged by federal, state and municipal governments to be jointly invested in preparations to host the World Cup in 2014. Renovations and major upgrades are required for the stadiums, urban infrastructure, and airports in the 12 cities selected to host the soccer games. US$14.4bn has been budgeted for Rio to host the Olympics in 2016. A significant portion of this spending will go towards the required sports facilities as well as infrastructure investments included in Rio's Olympic bid. Public transportation, subways, water & sewage infrastructure, IT, security and tourist facilities in Rio all require significant investments.

Officials expect the World Cup and Olympics to draw 600,000 and 380,000 international visitors to Brazil respectively.

Major Infrastructure Projects

Power: Brazil's vast oil, considerable natural gas resources and massive hydro-electric capabilities help make the nation one of the most energy self-sufficient countries in Latin America. The focus on power generation is likely to remain on hydro but with a strong possibility of longer term expansion to the country's modest nuclear sector. Brazil is also in the forefront of renewable power projects such as biomass and wind power. Between 2009 and 2017 it is expected that US$80bn will be invested in the country's energy sector. Around 78% of this will go towards generating capacity, the bulk of which is for hydropower projects, adding 54,000MW to installed capacity. Transmission projects will add 36,387km of lines. In April 2010, the government awarded a contract to build the 11.4GW Belo Monte hydropower project to a consortium formed by a group of Brazilian engineering firms and state-owned corporations. This followed the Rio Madeira hydro power project awarded in 2008 and currently under construction which will add 6.22 GW to the grid, in a US$ 16.67bn investment.

Roads: Brazil's land transport infrastructure has historically suffered from inadequate funding and a lack of focus. Poor road infrastructure has held back the distribution of goods in the country. Under the proposed 2nd phase of the Growth Acceleration Program, roads and railways are due to account for the largest investments in transportation infrastructure.

Railway/Urban Transportation: Brazil has fewer than 30,000km of railways, of which only about 1,600km are electrified. More than 6,000km of railway are currently under construction in the country. The flagship project is the 520km high-speed railway (a.k.a. Bullet Train or TAV) that is planned to link Rio de Janeiro, São Paulo and Campinas. The project is expected to cost US$15bn and is planned to be executed under a Public-Private Partnership (PPP) model. Other significant projects include the Oeste-Leste railway between Ilhéus and Barreiras (US$2.38bn), the expansion of Sao Paulo's Metro Line 5, and the construction of the Transnordestina (Trans-north-east) railway in Brazil's northeast.

Airports: Brazil's airports are overcrowded and investments have been highlighted as priorities for the 2014 World Cup and 2016 Olympics. The average real growth for the sector is forecast at 11.7% between 2010 and 2014. Brazil's PAC programme envisages an investment of US$1.4bn for the upgrade and expansion of 20 Brazilian airports. The Civil Aviation Ministry (Secretariat) is responsible

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for the auction of concessions for Brazilian airports; Infraero, Brazil's State-owned company that has historically operated all airports in Brazil, is required to be a minority shareholder in all winning consortiums with a maximum participation of 49%; Investment will likely be done on a 30%/70% equity/debt ratio. BNDES is expected to finance between 50-70% of the investment.

Water: The government is planning to invest US$2.4bn in 109 sanitation projects. US$1.6bn will be used to finance sewerage projects and US$800mn will be spent on potable water projects. The state of São Paulo has received loans from the World Bank to support infrastructure and water pollution control projects worth US$166.65mn and US$104mn respectively.

Ports: Investing in the port sector is an ongoing priority in Brazil which is export-dependent for much of its economic growth. The country's ports are underdeveloped by global standards. The sector still suffers from lack of a clear regulation that encourages private investment, although several corporations active in Brazil already own and manage terminals in the country. Brazil's ports are in need of US$23.4bn worth of investment to upgrade capacity and meet significant long-term growth forecast for the sector. Over 200 projects have been identified to bring the country's port sector up to standard, through Greenfield port projects but principally through the upgrading of existing facilities.

Green Energy

Brazil's population is expected to increase by 40% (or 78 million people) by 2050. This growth will put pressure on Brazil to sustain its resources. As a result, renewable energy projects such as hydroelectric, thermoelectric, bio-fuels, wind, natural gas, and solar power are taking on greater importance. During 2011, Brazil concluded a round of green electricity auctions as part of the effort to expand and diversify electricity sources. 3,962MW of new thermal, hydro, biomass and wind projects were contracted during two auctions for power projects (to come online by 2014). Wind power proved to be the star performer at the auctions, with developers agreeing to deliver 1,928.8MW of capacity across 78 wind farms. There is also growing pressure to implement Green Building practices in the conception, implementation, construction and operation of buildings and constructed spaces. Companies have begun to include energy efficiency in the building process and government agencies are enforcing building codes, labelling and building certifications.

Key Players

Alusa Engenharia Ltda. engages in the construction and assembly of energy and telecommunications systems and it is also one of the largest investors in the power sector in Brazil. Over the past few years the company has been diversifying its activities and also developing large projects in the oil & gas and infrastructure areas.

Andrade Gutierrez S.A. operates in the engineering and construction, telecommunications, power, and public concessions. The Heavy Construction segment engages in the construction of hydroelectric power stations, thermoelectric power stations, petrochemical units and refineries, roads, airports, tunnels, viaducts, ports, etc. The concession business engages in the management and development of concessions in public infrastructure, such as highways, metro-railway urban transport, sanitation, airports, energy, and container port terminals.

Camargo Correa S.A. engages in the engineering and construction, environment, and concessions activities. The company is involved in infrastructure projects, provision of engineering and design services, and construction of ships and offshore platforms. The company's concession division invests in and controls highway concessions and engages in the management and operation of airports, as well as comprises energy and energy self-generation units. Its real estate development, environment, and corporate division develop residential and commercial real estate.

Construtora Queiroz Galvao S.A. engages in construction, public utilities concessions, oil and gas, steel, and environmental engineering. Its construction services include infrastructure projects, hydroelectric plants, sewage systems, water resources, oil and gas exploration, highways, railroads, airports, metro-rail transit systems, ports, and environmental engineering services. The company's public utilities concessions services include highway, urban waste disposal, and energy concessions administration. It also engages in the drilling and production of oil and gas.

Electrobras (Centrais Eletricas Brasileiras S.A.) engages in the generation, transmission, and distribution of electric energy in Brazil. The company constructs and operates nuclear power plants and transmission lines; and holds concessions to provide electric power distribution services. As of December 31, 2010, it owned and operated 29 hydroelectric plants; 119 thermal plants, including coal and oil power generation units; and two nuclear power plants.

Industrias Metalurgicas Pescarmona (IMPSA) provides integrated energy solutions for hydropower and wind energy projects. IMPSA Hydro division engages in the development, design, and manufacturing of

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EDC Infrastructure
www.edc.ca/infrastructure

EDC Country Information
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Other:

Brazil – Canada Chamber of Commerce

Brazil Trade Net

How to export to Brazil (PDF)

Investing in Brazil (PDF)

Canada – Brazil Chamber of Commerce

Consulate General of Canada in Rio de Janeiro

Consulate General of Canada in Sao Paulo

DFAIT – Market Reports – Brazil

Green Building Council of Brazil

turbines, hydro mechanical generators, hydraulic gates, and valves. The company's Wind division offers design services and construction capacity for wind turbines and generators. Its IMPSA Energy division provides project finance to develop, design, build, and operate hydroelectric and wind generation projects. IMPSA is a part of IMPSA Corporation.

Odebrecht provides integrated engineering, procurement, construction, installation, and management services for civil and industrial construction, and specialized technology projects. The company invests in projects in various sectors, including energy, industrial plants (petrochemicals and ethanol), infrastructure, and public services concessions.

Conclusion

The expansion and improvement of Brazil's physical infrastructure is a priority and President Dilma is fully committed to this agenda. Given the rapid pace of GDP growth and improved income distribution, infrastructure is a bottleneck that Brazil needs to tackle. Hosting the major sporting events gives added impetus to the implementation of infrastructure projects, while also helping to attract new investment and trade to Rio de Janeiro and to the country as a whole. The sheer infrastructure needs surrounding the two sporting events will likely require national firms that typically dominate the industry to look outside Brazil for help. Note however that expensive and bureaucratic tax regimes and strong local and foreign competition present challenges for exporters and investors. To succeed in Brazil, Canadian companies must develop a local presence, be committed over the long-term, and adapt to the competitive market requirements.