Quebec: More Energy Efficiency and Renewables, Less Fossil Fuels

The government of Quebec previously committed to reducing greenhouse gas (GHG) emissions by 37.5 percent of 1990 levels before 2030. The government’s energy policy allocates $3 billion over the next 15 years to reach this goal, but the province will have to reduce GHG emissions three times faster than it has in the last two decades. Additionally, Quebec’s new energy policy re-emphasizes the importance of hydroelectricity exports to the United States, and aims to specifically increase wind power exports to the northeastern United States for the first time. The policy also specifically identifies Vermont as an export market for a neighborhood-sized (23 household) battery that Hydro Quebec is developing to store renewable electricity.

Quebec Wants More Renewable Energy and will Slowly Transition Away from Oil

Quebec’s energy policy aims to supply 60 percent of the province’s energy from renewable sources by 2030, which could reduce Quebec’s already low GHG emissions by 70 percent. Slightly less than half of Quebec’s current energy consumption comes from renewable sources, and hydroelectric power stations generate more than 90 percent of the province’s electricity. Quebec’s energy policy re-emphasizes the role of natural gas in the province’s transition to clean energy sources. The government of Quebec hopes to reduce carbon emissions by 70 percent. Slightly less than half of Quebec’s current energy consumption comes from renewable sources, and hydroelectric power stations generate more than 90 percent of the province’s electricity. Quebec’s energy policy re-emphasizes the role of natural gas in the province’s transition to clean energy sources. The government of Quebec hopes to reduce carbon emissions by 70 percent.

Brazil: Solar Power Plan

Although it has nearly 300 sunny days per year, less than one percent of the energy generated in Brazil today comes from solar power. The government’s annual energy plan for 2016 calls for the country to generate almost 9 gigawatts (GW) of solar by 2030. According to Brazil’s Ministry of Mines and Energy (MME), as of December 2015, Brazil’s entire solar output was 32 megawatts (MW). MME’s target includes almost 3 GW of new solar projects awarded in electricity auctions exclusively for solar projects which are expected to come online between 2017-8. Industry experts note that Brazil currently has an over-supply of electricity, largely due to reduced demand during the ongoing recession, and wholesale energy prices are low. Even though growth in energy demand is expected to resume, industry experts are split on whether these solar projects, all of which were auctioned off before the Brazilian economy’s recent decline, will actually come online.

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In addition to these utility-scale projects, Brazil’s energy planners are hoping for growth in smaller-scale production. Last year, MME announced that it anticipates over 18 percent of Brazilian homes will have solar generation systems installed by 2050 (currently, only 1500 homes have such systems). Solar industry analysts agree that the Brazilian market represents a source of untapped potential, both for Brazil, which is looking to satisfy its pledge at COP 21 to increase non-hydro renewables from 12 percent to at least 23 percent of the country’s power generation mix, and for domestic and international corporations who see the lucrative potential in expanding Brazil’s solar market.

Policy to Encourage Distributed Generation Not Suited to Smaller Players

To help hit these targets, the government took a number of steps in late 2015 to spur the growth of renewables, particularly solar, the most high profile of which was the Distributed Generation Program for Energy (ProGD). ProGD, consisting mostly of tax incentives and other financial stimulus measures the government hopes to implement by the end of 2016, aims to generate over $26 billion in investments by 2030. According to the MME, ProGD is aimed at solar producers of all sizes: micro and mini outfits that may produce no more energy than needed to power a single house or small business, as well as mid-sized and larger generators who hope to compete in the utility market. These larger projects would generate over one MW of power, but still pale in comparison to the large utility-scale projects being authorized through public auctions dedicated to solar power. According to some local solar energy experts, the plan’s most noticeable effects to date – setting reference prices for renewable energy and establishing lines of credit for certain projects – mostly benefit larger producers. With excess supply in the wholesale energy market, wholesale energy prices in Brazil already relatively low, and fixed costs to enter the market as a medium- to utility-scale solar producer quite high, industry analysts argue that these firms cannot compete in a market already crowded with traditional power providers.

Retail Model Attractive to Small Consumers, but Financing is the Challenge

In contrast to MME’s possible approach, industry analysts said focusing instead on increasing the number of individual customers generating power on either the micro (up to 100kW) or mini (up to 1MW) scale holds more potential. While wholesale energy costs are low, retail costs have been on the rise for small consumers since the government was forced to roll back subsidies in 2015, and analysts argue demand for smaller distributed generation projects would exist if opting out of the traditional retail energy market were a realistic option for Brazilian consumers.
Each year, Quebec imports more than $700 million of medical equipment and supplies. The United States consistently provides over one-third of Quebec’s medical equipment and supplies, followed by China and Germany at 21 percent and ten percent respectively. Over the past five years, U.S. and Chinese market shares of Quebec’s medical equipment imports have fallen slightly as Germany and Mexico’s market shares rose. In 2015, monitoring devices and medical supplies were among the top U.S. exports to Quebec; Chinese exporters looked to therapy equipment and orthopedics, German exporters focused on imaging and monitoring equipment, and Mexican exporters were concentrated on therapy equipment and medical supplies in Quebec’s market. Industry experts believe that technological advances will increase Quebec’s demand for medical supplies used to treat age-related symptoms, like orthopedic and prosthetic equipment. Quebec’s most recent medical equipment inventory survey showed that out of the 11,300 pieces of medical equipment in the province, the government of Quebec estimates that over 2,600 - more than 20 percent - have outlived their useful life and care providers should consider replacing them.

Quebec’s Health and Social Services Ministry (Ministère de la Santé et des Services sociaux – MSSS) is under public control and Quebeckers benefit from universal health insurance. The MSSS allocates healthcare related budgetary constraints and general policy, which is subdivided into 17 regional healthcare agencies responsible for regional planning and 95 medical centers throughout Quebec. Local health centers, such as hospitals, make purchasing decisions for new equipment to implement the guidelines set forth by the MSSS with the budget allocated by the regional healthcare agencies.

Regional Group Purchasing Organizations Procure Half of Quebec’s Medical Equipment

Quebec hospitals may choose to purchase medical equipment and supplies either directly from producers, or through one of Quebec’s three regional Group Purchasing Organizations (GPOs), which the MSSS uses to purchase equipment for multiple hospitals at once. Quebec abides by Canadian federal safety and quality standards, and Quebec hospitals can only purchase devices that Health Canada’s Medical Devices Bureau has approved. Quebec healthcare providers are required to use the Quebec government’s public Electronic Tendering System (Système électronique d’appel d’offres - SEAO) for all medical device purchases over CAD $100,000. Although Quebec’s strategic goals call for GPOs to be responsible for 70 percent of new contracts, currently only half of the province’s medical equipment calls for pro-

Types of Medical Equipment Scheduled to be Replaced in Quebec

![Graph showing the scheduled replacement of medical equipment in Quebec]
recommendations, guides, and methodologies that Quebec health centers use to evaluate new medical devices. U.S. companies that export medical devices to Quebec often collaborate with one of a dozen local medical device distributors that are accustomed to helping foreign companies enter Quebec’s market. Medical supplies, surgical instruments, and medical furniture are Quebec’s top medical exports, and the province imports much of the equipment that its healthcare sector uses. Quebec also has its own niche medical diagnostic manufacturers, as well as medical equipment makers, and orthopedic producers.

Quebec is home to roughly 350 medical device manufacturers, more than half of which are SMEs with less than 25 employees. Proposals are tendered through GPOs and the other half are tendered directly by hospitals. GPOs purchase medical equipment, like imaging machines, more often than medical supplies, like bandages. In Quebec, trade shows are one of the best ways to market new products to Quebec medical device purchasers.

Hospitals Form Committees to Evaluate Medical Devices and make Purchasing Decisions

After a hospital considers purchasing new medical equipment to fulfill a goal set forth by the MSSS, it may work with a committee of physicians at the health center or a health technology assessment (HTA) team to determine the therapeutic value of the medical device and its competitors. Quebec provincial legislation mandates that all teaching hospitals have an HTA team, but HTA teams do not always influence medical device purchasing decisions, and HTA bodies are not always involved in the process. GPOs, or hospitals, define the contractual requirements and standards. In the past, Quebec procurement authorities looked at acquisition cost when issuing the contract, but now they are moving towards the total cost of ownership (TCO) methodology, which adds a high value to future support for training, consulting, and support services. Quebec healthcare providers do not pay the Canadian Agency for Drugs and Technology in Health (CADTH) to assess the budgetary impacts and feasibility of adopting new technology, but instead allocate this power to local HTA teams. In 2011, Quebec launched a provincial institute for excellence in health and social services (L’Institut national d’excellence en santé et en services sociaux - INESSS), which develops public recommendations, guides, and methodologies that Quebec health centers use to evaluate new medical devices.

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Argentina: New Renewable Energy Regulations and Thermoelectric Capacity Tenders Published

The Macri administration published its new renewable energy regulatory framework on March 31 (see Ministry of Energy website for more information: http://www.infoleg.gob.ar/infolegInternet/anexos/255000-259999/259883/norma.htm). The framework uses a mixture of tax incentives and programs to promote the development of renewable energy. The Argentine government has targets to increase renewables in its energy mix to eight percent by 2017 and 20 percent by 2025. Separately, the Ministry of Energy and Mining issued a resolution on March 22 to auction up to 1,000 MW of new thermoelectric generating capacity. Companies can submit proposals to CAMMESA, the wholesale electricity market regulator, for contracts of five years minimum and ten years maximum.
El Salvador has historically relied on heavy fuel oil and hydro-electric generation for the country’s power needs. The dependence on these two sources has made El Salvador vulnerable to oil price fluctuations and periods of extended drought, leading to high energy prices and damaging the competitiveness of export industries. The government subsidizes electricity prices for low-use households. For the period 2010-2015, the subsidy totaled $909 million. In 2009, the government created the National Energy Council (CNE), which has worked to design and implement a comprehensive National Energy Policy that sets the framework and incentives for a diversified energy matrix. Beginning in 2013, El Salvador launched the first of three energy tenders designed to diversify its sources of electricity generation and promote cleaner energy investments. Government officials say they intend to reduce the participation of oil-fired power plants from 45 percent in 2016 to 31 percent in 2020, and increase market share for cleaner sources from 54 percent to 69 percent over the same period. Along the way, government officials forecast $2 billion of energy investment by 2019 and 50 percent more generation by 2020 — boosting El Salvador’s installed capacity to 2,500 MW.

Hydro and Geo: Diversifying Public Energy Investment

CEL, the state-owned energy company, is making significant investments to increase the hydroelectric and geothermal components of the national energy mix. On the hydroelectric front, CEL officials expect to finish construction of the “Chaparral” 67 MW power plant by autumn of 2017 at an estimated cost of $290 million. Additionally, CEL is refurbishing the “November 5th” hydroelectric power plant to increase its installed capacity from 100 MW to 180 MW. The project has an estimated investment cost of $189 million, and CEL officials believe it will come online in late 2016 or early 2017.

CEL plans to increase geothermal production in the coming years. CEL is also exploring the possibility of investing in solar and wind projects. Energia del Pacífico (EDP), a Salvadoran energy consortium, is seeking to develop the largest energy project in the history of El Salvador and, potentially, the first natural gas plant in Central America.
The Ecuadorian government is taking steps to reduce taxes and streamline regulation within its mining sector in order to increase foreign direct investment and generate new sources of revenue. Over the past year, Mining Minister Javier Cordova has been a regular presence at mining industry functions to promote those reforms, including at the annual Prospects & Developers Association Conference (PDAC) in Toronto, Canada. In early March, he led a delegation of Ecuadorian government officials to attend PDAC, widely considered to be the leading convention within the mining industry. The country has attended PDAC and participated as a “Country Sponsor” of the event in an effort to promote the mining industry in Ecuador.

Minister Cordova hosted a well-attended meeting with mining executives to tout the country’s commitment to mining development. Additionally, a mining consultant with Wood Mackenzie, presented an overview of the current tax regime which showed Ecuador’s taxes falling within the range of its regional competitors, albeit at the high end.

The Fraser Institute, a Canadian think tank, publishes an annual survey of mining company executives which assesses the impact of mineral endowments and public policy factors on mining investment. This year’s survey shows that Ecuador’s regulatory and tax reforms are starting to influence mining executive’s perceptions of the country. Ecuador improved in several areas, including the survey’s “Room for Improvement” score. This measure identifies those jurisdictions that would benefit most from reforming their mining-related policies; the higher the score, the more the jurisdiction would benefit from reform. Last year, Ecuador placed eighth of 122 jurisdictions on this measure, the second worst result within South America. This year, Ecuador improved to 44th out of 109 jurisdictions. Ecuador also showed improvement in the policy perception index, a metric that measures a jurisdiction’s overall policy attractiveness.

Ecuador: Creating an Attractive Mining Investment Climate

- Policy is shifting towards increasing foreign investment in various aspects of the Ecuadorian economy
- Government led by President Correa is encouraging investment in mining sector and have taken the following positive steps
  - Wood Mackenzie has been advising the Government since 2013 to evaluate competitiveness of Ecuador’s mining policy and fiscal regime
  - Revision of Mining Law
  - Establishment of Mining Ministry
  - Recovery of VAT for mining industry effective 01/01/18
- Successful and timely completion of Exploitation Agreement negotiations
- Negotiations of Investment Protection Agreement underway
- Government reviewing labor law to improve productivity

LUNINGOLD

"...tell Ecuador and the world that there is no going back with the development of the mining industry in Ecuador"

President Rafael Correa, Visit to Fruta del Norte, March 3, 2016

Ecuador: Mining Industry Executives Warm to Ecuador as Government Demonstrates Long-Term Commitment to Sector

Fraser Institute Study Shows Modest Changes in Mining Executives Perceptions of Ecuador
Quebec (continued from page 1)

ations in the transportation sector, which currently accounts for over 40 percent of the province’s GHG emissions, by creating “multi-fuel” stations across the province to offer consumers the choice of refueling with electricity, natural gas, hydrogen, or biomass fuel.

Despite the energy plan’s focus on Quebec’s commitment to fighting climate change, the province’s energy policy also acknowledges the importance of fossil fuel consumption. Quebec will develop robust environmental and technical standards to regulate fossil fuel extraction and create a new legal framework to ensure safe transportation of fossil fuels. In the future, the government envisions a streamlined process for energy project permits – instead of applying for permits with many different government organizations, a prospective energy company would apply through one government body. At the same time, the government hopes to eliminate coal and significantly reduce its consumption of petroleum by making alternatives more desirable for consumers. The energy plan will also help remote northern communities replace diesel generators with wind energy and small dams.

Quebec to Provide Consumers & Businesses with Incentives to Increase Energy Efficiency

Quebecers consume 48 percent more energy per capita than the rest of Canada because cheap and abundant hydroelectricity have made electricity prices in the province some of the cheapest in North America. Quebec’s energy policy aims to use the fight against climate change to stimulate economic development. The government of Quebec will issue grants that will help businesses and consumers improve energy efficiency, reduce carbon footprints, and implement energy-savings programs with new green technologies. The government will create a new agency within the province’s energy regulator (Régie de l’Énergie) that will be responsible for financing green technology, and supporting R&D that can reduce energy usage.


On December 21, 2015, Newfoundland and Labrador-based Beothuk Energy formally announced plans to construct an offshore wind farm 20 km from southwestern Nova Scotia, near the Canadian town of Yarmouth. The proposed 120 turbines (7-8 MW each), installed in stages, will be 18-20 km offshore and will produce approximately 1,000 MW of power. That power will be exported via a 205-nautical mile subsea cable called the Can-Am Link to the New England market, making landfall near Boston, Massachusetts and close to existing transmission facilities. The company announced it has formed a strategic partnership with Jacob Capital Management, Siemens Offshore Wind, Talon Energy and Maderra Engineering. Initial plans have the energy produced all flow to the United States.

Beothuk Energy previously announced a CAD $466 million, 180 MW offshore wind farm in St. George’s Bay, Newfoundland and Labrador (NL). That project was cited by The Globe and Mail Report on Business as one of fifteen smart ideas to create a flourishing Canadian economy. The company’s long-term plan is for five offshore wind farms throughout Atlantic Canada totaling 2270 MW to supply both Canadian and U.S. power requirements, putting the region on par with the wind farm intensive North Sea in Europe.
Other resources for anyone interested in overseas business news:

For Caribbean and Latin American Markets, the Department of Commerce has many resources to assist U.S. firms including market research, trade show calendars, trade delegation calendars, etc. Check out their “Trade Americas” and “Look South” websites:
http://export.gov/tradeamericas/index.asp
http://export.gov/tradeamericas/looksouth/index.asp

The U.S. Government’s main website to assist U.S. businesses at home and abroad. URL at http://business.usa.gov/

The Business Information Database System (BIDS) is a portal built to help U.S. businesses learn about significant international commercial opportunities. The site connects U.S. business to detailed information about each project as well as information to contact U.S. embassies overseas. URL at http://bids.state.gov/

The Direct Line program provides a unique opportunity for American businesses, particularly small- and medium-sized enterprises, to engage directly via webcast with U.S. Ambassadors overseas. The program is open to U.S. companies – whether they are already in the country where the Ambassador serves or if they are interested in expanding their businesses there. Webcasts will vary in topic according to the specific needs for business in a given country. URL at http://www.state.gov/directline/

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