



Whether it's the development of conventional or renewable resources, or the deployment of New Age environmental technologies, energy is a major

source of fuel for Canada-Europe trade and investment. **Could we do even more?**

# ENERGY BUILDERS

Canadians and Europeans share a lot in common, but in few other economic sectors are the linkages and opportunities more pronounced than energy.

While Canada-Europe trade and investment across the energy landscape is generally positive, experts involved in an invitation-only conference taking place at Canada House in London today say more could be done to further advance business.

The gathering – the Energy Roundtable – involves just 125 participants, mainly energy-sector decision-makers from Europe, the UK and Canada.

Jason Langrish, president of event organizer the Canada-Europe Roundtable for Business, says the formal launch of Free-Trade-Plus negotiations now underway, which he describes as “possibly the most ambitious trade negotiations Canada has ever undertaken,” reflect the generally positive nature of Canada-Europe trade and investment relations.

Part of this dialogue includes promoting a ‘raw materials strategy’ on the energy file, he says, noting that Europeans are increasingly motivated to secure resource and energy assets in light of rising competition and political risk in their traditional supply markets, such as Russia, Africa and the Middle East.

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Jason Langrish,  
President, the Canada-Europe Roundtable for Business

will ship bitumen to Europe, but possibly LNG. Canada will certainly continue to be an investment destination for European companies.”

While Mr. Langrish applauds the Government of Canada’s efforts to advance trade with the EU, he adds, “Energy poses a challenge, given that Canada doesn’t have an energy policy. It’s fragmented – it makes it difficult to enter into collaborative agreements with other countries.”

Shane Fildes, executive managing director and head of Canadian energy at BMO Capital Markets, says while the notion of a Canadian energy strategy raises the spectre of the disastrous National Energy Program, he says from a business standpoint a national strategy could help Canada diversify its customer base.

“Capital can flow to any jurisdiction,” he says. “Think about it in terms of the oilsands: there is no way we could fund that development domestically. Making sure we have a competitive royalty regime and fiscal policies will influence resource development.”

Mr. Langrish notes that several European nations have shown that effective national approaches to energy development can result in industrial leadership. “Spain is now a world leader in wind, France in nuclear, and Germany in

coal and solar technologies. These are the results of concerted national strategies.”

He also commends Canadian provinces such as Ontario for progressive policy making. Ontario recently announced its Green Energy Act, legislation designed to attract clean energy investment as a means of building Ontario’s economy and energy security.

Despite Canada’s lack of a national strategy, Canada-Europe energy trade and investment remains positive.

“The biggest focus of EU investments has traditionally been on the oilsands. With the bottom now off oil prices, interest in the oilsands has renewed,” says Mr. Fildes. “Some of the early EU interests in gas plays should also be reinvigorated when prices rise again.”

He adds, “There is a very active market going the other way too,” noting that “a raft of TSX-listed Canadian energy companies with 100 per cent foreign assets are garnering the support of EU investors.”

Traditionally, EU capital would look at Canada for commodity or exploration investment, but we’ve seen management teams of Canadian domicile acquiring oil and gas assets in Peru, Latin America and Central Asia partially financed by EU capital.”

Mr. Fildes also says EU energy interests on Canadian soil are broadening to include

shale gas, wind energy and nuclear.

While UK multinationals such as Shell, BP, British Gas and global engineering giant AMEC are among the British heavyweights with well-established presences in Canada, opportunity is growing for mid-sized firms with expertise that Canada needs, says Paul Paynter, director of UK Trade & Investment in Calgary.

“As oil becomes an increasingly scarce and more difficult to find commodity worldwide, Canada’s huge resources are growing in importance to UK companies, particularly those that offer Canada ways to develop its resources as cleanly and efficiently as possible.”

He says independent oil and gas exploration and production company Tullow Oil, for example, which operates the Hewett Carbon Storage project in the UK, is interested in building relationships with Canadian firms focused on injecting and storing CO<sub>2</sub>.

Similarly, CO<sub>2</sub>Sense, a not-for-profit owned by the Regional Development Agency for Yorkshire and Humber, wants to compare the CCS opportunity in Yorkshire with that of Alberta, and share learning in areas including technical issues in pipeline development, financing and investor engagement, and public understanding. The potential for collaboration is well founded.

Like Alberta, Yorkshire is

grappling with substantial CO<sub>2</sub> emissions. In Yorkshire’s case, it is primarily due to the massive Drax coal-powered electricity generation plant, which supplies about seven per cent of the UK’s electricity needs. CO<sub>2</sub>Sense and Drax are exploring the potential to capture the plant’s CO<sub>2</sub> emissions and safely sequester the greenhouse gas in southern North Sea storage sites.

“Many UK companies have introduced exciting innovations that help reduce energy consumption, increase efficiencies and reduce emissions,” says Mr. Paynter, noting that Oilflow Solutions, which has offices in Calgary, has been successful in Alberta by offering technology that significantly reduces the energy required to break up heavy oil in order to transport it efficiently.

While firms like these have established their pedigrees globally, Mr. Paynter laments, “There are a number of companies achieving success here, but I think they have to work very hard at proving themselves in a Canadian context.”

Mr. Langrish shares that view. “Canada can be resistant to implementing technologies that have been proven in other markets, many of which have higher environmental standards than our own. It isn’t logical.

We should be looking at these, and if they are a fit, put them to use.”

International competitiveness lagging

## Canadian renewable energy momentum growing, but fast enough?

Whether it’s wind, solar, small hydro or other systems, renewable electricity is gradually becoming a bigger part of Canada’s energy mix. Experts at the forefront of developing Canada’s vast renewable energy potential, however, say more could be done to encourage it.

Sasha Jacob, president and CEO of Jacob Securities, which finances renewable power generation and clean technology projects worldwide, says several drivers are propelling global interest and

investment in renewables including a fundamental, ever-rising demand for electricity, renewable energy’s growing price competitiveness, and legislation mandating and supporting green energy development.

“Almost every Canadian province and U.S. state has a renewable portfolio standard (RPS), typically 15 to 20 per cent,” says Mr. Jacob.

Vancouver-based green energy company Plutonic Power is among the Canadian firms poised to capitalize. Company vice-chairman and

CEO Donald McInnes says, “We think B.C. and Canada can lead the world in clean energy development and make a significant impact on climate change. The clean energy industry can drive our country’s economy through challenging economic times with jobs and stimulus.”

Plutonic, which is now less than one year away from beginning operations on its first project, has some \$4-billion worth of projects on its books in B.C. alone, including a slate of run-of-river hydro projects and a proposed wind

farm with partner GE.

“We’re blessed with being located in a jurisdiction with renewable energy opportunities. And, being domiciled in B.C., we’ve had a provincial government that has been on the leading edge of clean energy development for some time,” says Mr. McInnes, who sees even greater potential.

“A lot of jurisdictions are catching up and they are looking for partners to help them develop renewable energy,” he says.

While Mr. Jacob says business at his firm is brisk, fewer than 20 per cent of its deals are presently done in Canada, a fact that raises questions about the competitiveness of Canadian policy surrounding clean energy development.

“In the U.S., beyond legislative requirements, you have significant tax incentives to build renewable power,” says Mr. Jacob, explaining that U.S. incentives cover some 30 per cent of a project’s capital costs. “In a normal power project you have a debt-to-equity ratio of about 70/30, so essentially the U.S. tax credits replace the equity portion. We don’t have anything remotely close to the impact of the U.S. offer.”

Canadian Wind Energy Association president Robert Hornung says, “In addition to the stimulus package, the Obama administration is pursuing a national renewable electricity standard and a cap and trade system to reduce carbon emissions, all designed to provide the long-term policy certainty and stability required for investors to

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Jacob Securities

support the transition to a low carbon economy.”

He says the sharp contrast between Canadian and American federal policy frameworks for wind energy is having an impact on investment choices. “Some international companies have begun to shift their focus away from Canada to the U.S., and a number of American investors are starting to pull back from Canada to refocus their efforts on the U.S. Even Canadian companies, for the first time, are exploring wind energy development opportunities in the U.S. instead of Canada.”

In Ontario, the recently announced Green Energy Act, which includes a number of mechanisms to promote clean energy industry development, is hailed as Canada’s most progressive. Yet, Mr. Jacob says, “Some provinces are committed to renewable targets and are encouraging developers to come in, but in general we don’t yet see the structure like you do in Ontario, or guaranteed rates that would allow for bigger returns.”

While Mr. McInnes says Plutonic is balancing growth opportunities while ensuring it doesn’t overextend itself, he is among those who see broad value in a robust Canadian clean energy sector.

“The better we do at home – the better we build our engineering and financial skills – the better positioned we will be to export them to help others catch up on clean power development. First we need to build a healthy domestic industry.”



Canada has some of the greatest potential in the world for clean energy development.

With the beginnings of a framework of policies and incentives designed to support and encourage an emerging industry, Canada is embracing developments in this new and exciting sector. We have the opportunity become a world leader in clean energy technologies and power production, creating jobs today and a legacy of clean energy for future generations.

**Building Canada’s Clean Economy  
We can’t imagine a better legacy.**

**Plutonic**  
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# Electricity planning: green myths threaten common sense



By Don MacKinnon,  
*President  
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The assumed benefits of “green” energy for Ontario’s economy are taking on mythical proportions.

Proponents believe that planning on more renewable distributed generation with conservation and the addition of smart-grid technology will solve a multitude of Ontario’s problems: meet future growth in electricity demand, create green jobs, enhance economic competitiveness and tackle climate change. Unfortunately, common sense fundamentals are absent in the rhetoric – electricity planning is about reliability, affordability, security of supply and environmental responsibility.

Reliability means having adequate supply for a range of electricity demand scenarios, while maintaining the power quality that an information technology-based economy relies on.

Ontario’s temporary surplus generation has led some to conclude that coal and nuclear generation will not be needed in the future. Instead, these pundits promote the myth that renewables like wind and solar power, along with conservation, will suffice. They assume that Ontario’s traditional industries, like auto manufacturing, will not rebound but will be replaced by green industries.

Wind and solar generation only provide electricity intermittently and not necessarily when needed. Furthermore, the Ontario Power Authority has not been able to validate all the province’s conservation program results. The fallback supply is natural gas generation and electricity imports from our neighbours. Ironically, much of this replacement power will come from American coal stations with higher emissions than Ontario’s coal stations, often at higher prices.

The revival of Ontario’s traditional industries will quickly end the days of surplus power. Almost 60 per cent of Ontario’s GDP depends on the export of goods and services. The top three goods are automobiles, motor vehicle parts and transport vehicles. Recent reductions in business taxes and billions of dollars in funding to the auto and forestry sectors are already having a positive impact. On top of that, electricity demand will increase because Ontario’s population is expected to grow by about four million people and due to electrification of the economy with new technologies such as electric cars.

Affordable electricity is critical to a competitive economy. And, even though Ontario has a temporary electricity capacity surplus, consumer prices are going up due to new wind and solar generation and conservation initiatives. Unfortunately, Ontarians are not being told about the real costs of these projects. Experience in Denmark and Germany suggest the costs are high: consumers pay two to three times more for electricity than Ontarians, and industrial prices are subsidized to keep them competitive.

Nor is much being said about energy security. Ontario’s economy is becoming increasingly dependent upon natural gas, a fuel subject to increased competition from U.S. industry and consumers. In addition, some supplies come from politically

unstable jurisdictions. This means increased natural gas price volatility putting upward pressure on home heating costs. When increased pricing really takes hold, Ontarians may not appreciate having to decide whether they can afford to keep the lights on or

heat their homes.

Ontario can have a reliable, affordable, secure and environmentally responsible electricity system by taking three actions:

- First, build “Made in Ontario” proven, CANDU 6 reactors now, to provide

abundant, greenhouse gas emission-free, reliable and affordable baseload electricity and create tens of thousands of manufacturing and construction jobs.

- Second, accelerate investments to develop “Grown in Ontario” biomass supply and

infrastructure from the agricultural and forestry sectors. This provides renewable electricity when needed and carbon-neutral fuel to co-fire with coal and natural gas, and creates jobs.

- Third, invest in carbon capture and storage research to

ensure Ontario has the opportunity to benefit from Canada’s vast, secure coal supply and associated manufacturing spinoffs.

Practical solutions like these are what Ontario needs, not a fantasy premised on green rhetoric.

## ELECTRICITY FUNDAMENTALS WORTH REMEMBERING

Reliability, affordability, security and environmental responsibility are four goals of any good electricity planner.



Reliability 24/7 is even more important now as our economy has become more reliant on information technology.

Affordability is critical because Ontario must sell our goods and services in the highly competitive global marketplace.

Security of electricity supply and price is dependent on security of fuel supplies. Fuels like oil and natural gas are subject to volatile price swings and geopolitical unrest—and natural gas is in great demand for other uses like home heating. Canada has abundant, affordable coal supplies but Ontario has outlawed its use while other countries throughout the world expand their use of coal power.

Unfortunately, conservation and intermittent power from wind and solar will not be near enough to meet the needs of a growing economy and population.

The best ways to ensure reliable, affordable, secure and environmentally responsible electricity in the future:

- Build “Made in Ontario” proven, emission free CANDU 6 reactors now, and
- Use “Grown in Ontario” carbon neutral biomass in our coal and natural gas plants

From the people who help keep the lights on.



**POWER WORKERS' UNION**  
A voice of reason