

Toronto Board of Trade

Powering Opportunity: Sustainable Energy in Ontario

“How Ontario’s electricity Sector is creating significant new opportunities for addressing climate change”

A presentation by

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Toronto Hilton Hotel

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- Good morning everyone. It's nice to be back here at the Board of Trade. Thank you all for coming. And a special thanks to those of you who came last year—and still came back again this year.
- I'm told it's another sell out audience, and for those of you who were here in 2009 you will recall that this gives me another year of bragging rights in my epic battle of one-upmanship with my little brother, the recording artist.
- I'm not sure which annoys him more, me selling out a room, or at age 43 still being referred to as my "little brother."
- Although, truth be told, I will have to confess that this year I brought in reinforcements to ensure a good turnout—my Chair, John Beck. Thank you, John, for explaining what our mandate is as well as for providing insight into how our role is evolving at the OPA.
- And I am also pleased to introduce our board members who are here today, including Adele Hurley, Ron Jamieson and Rick Fitzgerald.
- We thought we would try something a little different this year – more time on questions, less on speeches and to that end we have enlisted another John—the author and journalist John Lorinc—to get the questions going.

- I'm going to make some general comments about the economic opportunities available to you under a number of programs at the Ontario Power Authority—whether as an investor or project proponent in our Feed-in Tariff, or FIT program, and through the significant incentives to reduce your costs by participating in our conservation programs.
- But before that, I'd like to take a step back and fill you in a little bit about what the OPA has accomplished in the past year and where we're going
- While Canada was portrayed in a less than flattering light at the recent climate change talks in Copenhagen, Ontario has a very different story to tell. A very good story to tell.
- In fact, with the passage of the Green Energy and Green Economy Act last May, Ontario is on a very different course for the province's energy future.
- The Act positions Ontario as a global leader in both conservation and renewable energy. It's expected to encourage billions of dollars of investment in Ontario's electricity sector and create 50,000 green collar jobs in its first three years. And serve as a catalyst for the greening of other parts of the economy such as transit and vehicles.
- As John explained, our mandate at the OPA is to ensure we have a reliable and sustainable electricity system for Ontario's citizens. Implementing the Green Energy Act largely falls on our shoulders.

- The OPA clearly recognizes that reliability and sustainability are based on having an integrated and diversified supply of resources—including gas, hydro, nuclear and renewable energy along with the appropriate conservation and transmission resources—to meet our electricity needs.
- I ask you to think about how far we have come in a relatively short period of time. Six years ago blackouts were a real possibility. We went through several summers with our fingers crossed about keeping the lights and air conditioners on. Now, in the Toronto area alone, we've contracted new electricity resources in Halton Hills, Southwest GTA, the Northern York Region and Portlands and we're moving forward with these opportunities.
- This year the OPA turns five. We now have 13,000 megawatts of new and replacement supply under contract, representing a \$14-billion investment in the sector. 2010 will bring another 4500 megawatts and additional investment. In all, over the next three years generation contracts under OPA management will double in megawatts and triple in dollar value to over \$44-billion. On a 35,000 megawatt system—give or take—that's a lot of investment and a lot of growth.
- What else does this mean? IESO is confident about our outlook for the next 18 months, the time horizon they look at, and I am happy to say that the OPA planners feel we are in a good place looking out to 2014.

- Beyond that we have some serious decisions ahead of us, but we have some room, and many options to choose from.
- Conservation will always be our first priority – after all the cheapest megawatt is the one you don't have to generate in the first place. We have the most ambitious conservation targets in North America—6,300 megawatts or the equivalent of taking one in five households off the grid altogether.
- And with the local distribution companies taking on a greater role in conservation, not only are we well on our way to meeting our second milestone—roughly the halfway mark, we are looking at accelerating and exceeding the overall target.
- While 2009 was about designing and launching our Feed in Tariff renewable energy program—which is the most comprehensive and the first of its kind in North America—this year, a major focus at the OPA will be on the successful implementation of this program.
- FIT is our primary vehicle for building our supply of green energy here in Ontario, and it is enabling us to eliminate coal from our supply mix by the end of 2014—North America's single largest climate-change initiative underway right now.
- In fact, we are the only jurisdiction in the world to be getting out of coal entirely.

- And without going into elaborate detail since Laura Formosa of Hydro One, and Paul Murphy of IESO, would be far more eloquent on the subject, we are also in the midst of a significant rollout to install smart meters and update our grid. The OPA is collaborating closely with them—both on design and the implementation of the smart grid.
- To sum it up, Ontario is one of the few, if not the only, jurisdictions to be taking this kind of a holistic approach – ambitious conservation, greener generation, significant transmission investment and long-term planning—in transforming its electricity system to meet the economic and environmental challenges of today. With significant investments in every part of the sector, Ontario will reap economic benefits and involve more engaged consumers in a smarter, more reliable, cost-effective and sustainable electricity system.
- So what does this mean for you? This is where the plugs come in—no pun intended—although now that I think about it “plugs come out” is probably more appropriate in this context.
- Above all else, what it means is that there are opportunities for businesses—big and small—to participate in new conservation programs
- Yes, electricity prices are on the rise. It goes along with the significant updating of the system we have underway. We are sensitive to that and that’s one reason we and your local distribution company have developed

conservation programs that are designed to help you increase your productivity, reduce your operating costs and increase your competitiveness.

- For commercial, industrial and institutional customers, we have our Electricity Retrofit Incentive Program (ERIP), a great opportunity to conserve energy by investing in more energy efficient technologies—whether it's lighting, heating or more efficient motor systems.
- Another example, is our recently launched Industrial Energy Efficiency Program. The program helps companies to fast-track capital investment in major energy efficiency projects. It is designed to deliver bottom-line results through process changes and equipment retrofits.
- We've also got a High Performance New Construction Program, there are incentives for commercial scale data centres, and other programs to incent energy efficiency. I encourage you to explore our website as well as talk to your LDC.
- There are also new ways to earn revenues for your business – through demand response programs and through the FIT Program.
- The OPA has three demand response programs. These demand response programs compensate businesses who voluntarily or contractually cut back on their electricity usage during peak periods.

- The Green Energy Act also allows you, as business owners, to benefit from a new source of revenue—by participating in renewable energy in a new way—not just as energy consumers but as electricity generators. For example, you can outfit your company’s rooftops with solar panels to generate your own electricity. Under our microFIT program, designed for projects of 10 kilowatts or less, you can do the same at home. You will be paid a guaranteed price for all of the electricity your project produces for at least 20 years
- And those aren’t the only opportunities. There are also extraordinary opportunities for businesses in Ontario and beyond to participate in and fund large-scale renewable energy projects under the FIT Program. Consider that we offer guaranteed prices, and 20 year contracts—based on an 11-per-cent rate of return. That means a payback in 11 years or so. It gives you the kind of stability you need to participate in the green economy.
- And we’re putting programs and incentives in place for communities, First Nations and Métis peoples so that they can participate more than ever in Ontario’s electricity sector as well.
- So far, three months into our program there is tremendous interest. Let me share some figures with you. Last month we reported that since launching the program Oct. 1, we received nearly 2,200 applications.
 - Of those, roughly 1,200 were for our microFIT program.
 - 700 of those applications were approved last month

- And the applications keep rolling in. Since last month, we've received another 2,000 applications representing another 200 megawatts.
- In total, the applications represent about 8,000 MW in new renewable capacity. If we break those numbers down further, that amounts to about 80 per cent wind-energy capacity and 16 per cent in solar projects. The remainder of the applications are for our bio-energy projects.
- But we believe there are still untapped opportunities for you.
- According to World Wildlife Fund International, by 2020, the cleantech industry will be worth \$2.45 trillion—ranking as the third-largest global industry behind the car and electronics industries. Canada is currently lagging according to the study—Canada ranked 21st in cleantech investment, well behind the top three countries, Denmark, Brazil and Germany, while the US ranked 19th
- We've seen a lot of foreign interest in our Feed-in Tariff program. The Deutsche Bank, for example, has had great things to say. Companies are coming to Ontario. I am hopeful Canadian banks, lenders, and pension funds will see opportunities for themselves as well as they get more familiar with the program and the projects under development.
- So – to recap – Ontario has a very good story to tell and I hope now you can see why. Count up the number of times I said we were leading North

America or the world—be it Conservation, coal elimination, or the first comprehensive Feed-in tariff program on this continent. Then consider that we're also leading in smart meter installation and doing a significant grid build—all at the same time.

- Our doors are now wide open. So, if you haven't already thought about grabbing opportunity here in Ontario, now is right time to do so.