

Global Opportunities
Powering the Clean Economy

A presentation by

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to

The 7th Annual IPPBC Conference

Vancouver

November 2, 2009

CHECK AGAINST DELIVERY



ONTARIO POWER AUTHORITY

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SLIDE ONE

Thank you for this invitation.

It's great to be here today and see so many familiar faces – people who were so generous with their time when I was last here, meeting with folks in the electricity sector back in July. That was the week before the British Columbia Utilities Commission decision. Things can change a lot in a short time.

I always enjoy coming here since Vancouver brings back so many great childhood memories.

I grew up in Calgary. My grandparents lived here in Vancouver. Being the 60s, my parents would pack us up in the backseat of the car, ply us with Gravol, and we would do the non-stop drive. It was always a relief, for all concerned, to finally get here.

We did all the touristy stuff – the aquarium, the killer whales, the beach and Stanley Park.

What sticks out very clearly in my memory, though, was my first glimpse of a totem pole at Stanley Park. It wasn't just its sheer scale that captivated me.

I was fascinated by the fact that totem poles also told a story. Not just about a people but often about their relationship with the Earth.

Thinking about it yesterday, I couldn't help but to be reminded of a strikingly similar experience – the first time I saw a wind turbine. It was the early 90s – a long time before I came to work in the electricity sector.

I was in California driving from L.A. to San Francisco. I turned the corner and there they were. A graceful array of them on the top of the hills spinning lazily. I was actually quite smitten by them.

Like the totem poles, it wasn't just their aesthetic quality that stayed with me but what they symbolized. And what they said about our relationship with the environment.

I don't think then I fully appreciated what I do today.

Those wind turbines were truly the beacons to our future.

And it's the future that I'd like to talk to you about today.

Many of us here today have common goals. We want to reduce our environmental footprint while building a reliable and sustainable electricity source for the future.

But how we choose to address our needs – our regulatory structures and contracting processes – are often remarkably different.

Ontario's Got a Good Story to Tell

- Ambitious 6,300 MW target
 - Equivalent to removing 1 in 5 households from the grid
- North America's first comprehensive Feed-in Tariff
- Eliminating coal from the supply mix by 2014
- Electricity system will reduce its carbon footprint by 75 percent by 2025
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- 3 million Smart Meters installed
- Groundbreaking *Green Energy and Green Economy Act, 2009*
 - 50,000 jobs expected in three years

SLIDE TWO

I'd like to tell you Ontario's story.

Because Ontario has a very good story to tell.

Here's the highlights. I'll delve more into them in a moment.

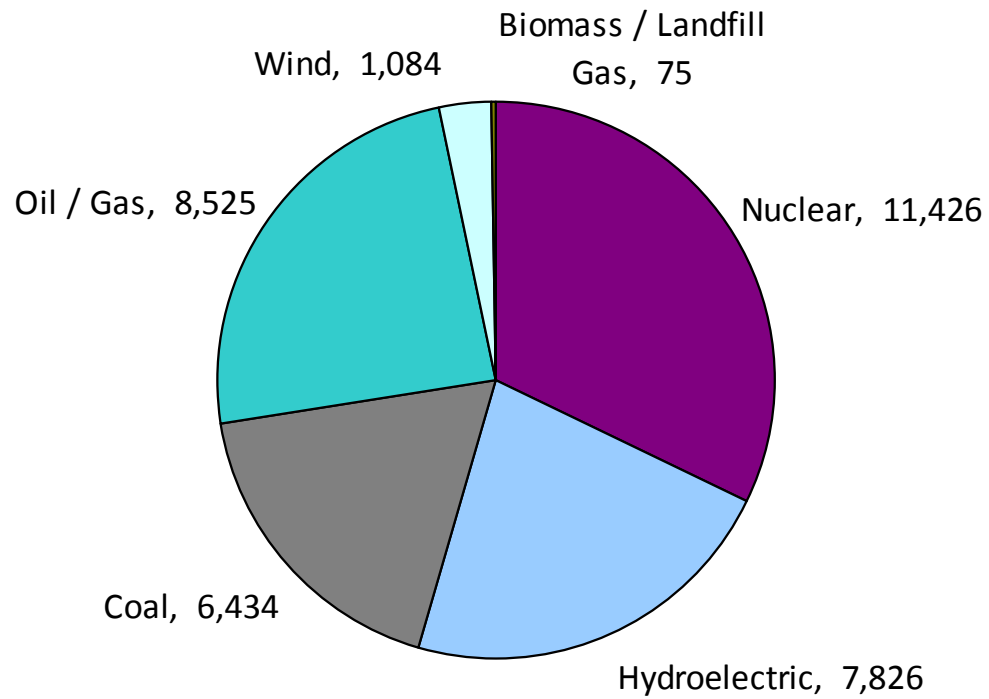
As some of you may already know, the province has recently implemented ground-breaking legislation that will chart a very different course for Ontario's energy future – the Green Energy and Green Economy Act.

It positions Ontario as a global leader in both conservation and renewable energy underpinning many of the items on this slide.

The Green Energy Act is 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.

Ontario Supply Mix

Existing Installed Generation Resources (MW)



SLIDE THREE

Right now, we have we have 33,000 megawatts of installed capacity serving 13 million people in Ontario. Right now, our supply mix breaks down into roughly 50 percent nuclear, 25 percent hydro and a growing portion that is green – a starting point that’s already enviable.

The OPA has about one-third of that under contract – about \$14 billion in activity. Over the next few years, we’re looking to double that amount – and even triple the value of the supply under our purview through significant expansion and replacement.

In other words, Ontario is open for business – green and clean business.

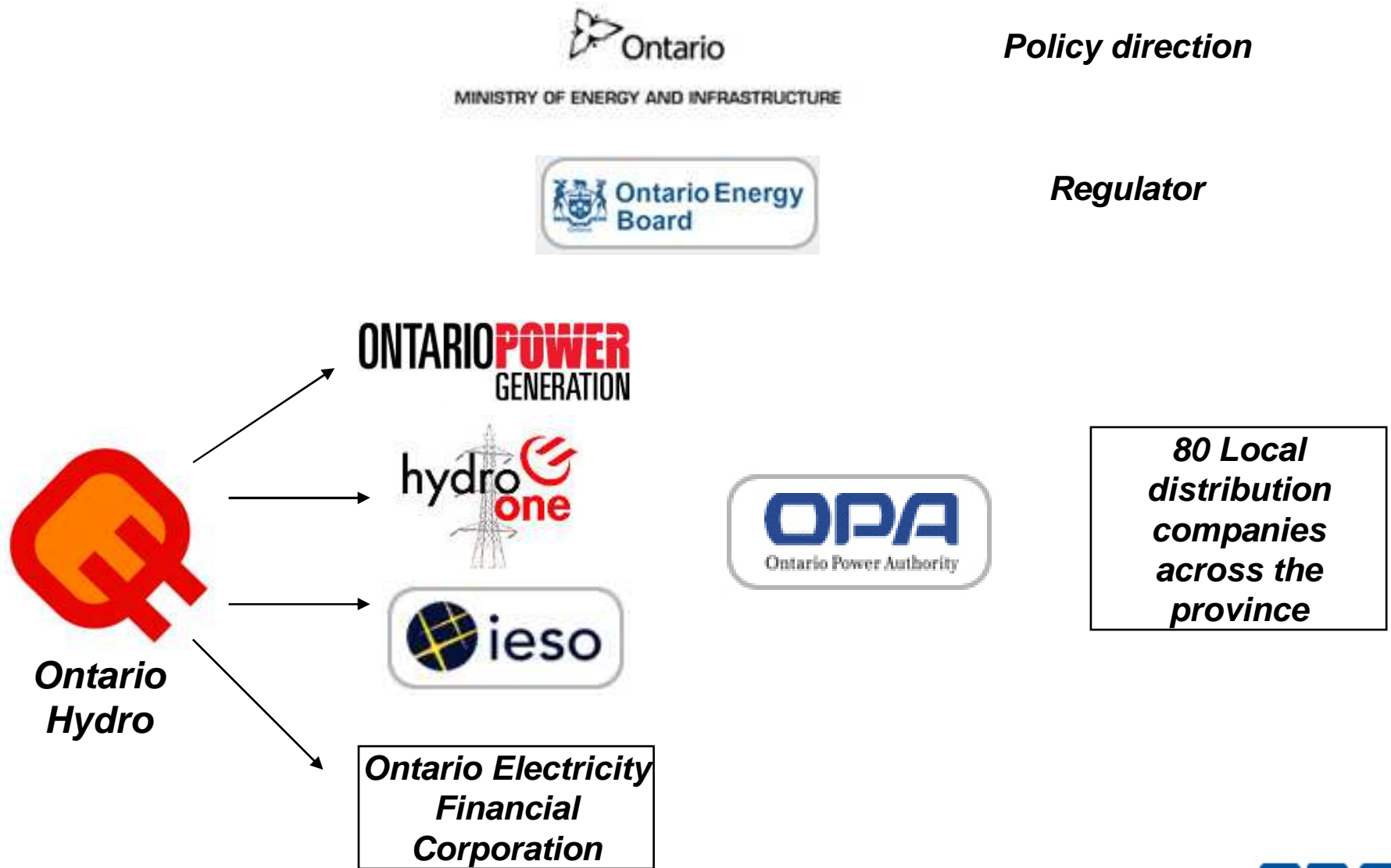
I’d like to tell you more about what the new legislation will mean for Ontario.

And more specifically, how we are providing incentives to developers to supply green energy to our grid.

You’re going to hear a lot about our Feed-in Tariff Program, the first and most comprehensive of its kind in North America.

But first, I’m going to back up and talk a little bit about how we got here.

Ontario's Electricity Sector



SLIDE FOUR

For more than 90 years, Ontario's electricity system was a vertically integrated monopoly. The provincially owned utility, called Ontario Hydro, was carrying about \$30 billion in debt.

In the mid-90s, the government of the day decided to restructure it and began breaking Ontario Hydro into pieces. It opened up the market to competition in 2002.

There was an interesting confluence of events that resulted in the government shutting down the market. One contributing factor was certainly a price spike that consumers weren't happy about. When the government closed the market, it also imposed a price freeze.

Consumers may have been happy but investors clearly weren't. Projects ground to a halt. Investor confidence in the energy market evaporated.

Not only were we not getting enough investment in new generation, our electricity supply was also hampered by the fact that there was no longer an organization responsible for long-term planning. That's why the Ontario Power Authority was created by the current government in 2004, along with a new, hybrid system.

The hybrid system was designed to keep the overall structures and provisions of the competitive system in place. It supplemented the competitive model with the ability to support investment in conservation and supply. It also erected a parallel commercial structure to the competitive marketplace that involves price regulation for residential and small business consumers.

The Ontario Power Authority



- Mandate is to ensure reliable, sustainable electricity supply for Ontario
- Functional areas:
 - conservation
 - planning
 - supply development

SLIDE FIVE

Let me explain a little more about our mandate at the OPA. We plan resources for the long-term while coordinating conservation initiatives and contracting new energy resources.

We don't own generation stations or transmit electricity. We're also not involved in local distribution – that's up to about 80 local utility companies.

One of our first initiatives at the OPA was to try to find a way to bring new, renewable electricity supplies on stream. We came up with a plan to launch one of the first standard offer programs in North America – the Renewable Energy Standard Offer Program, or RESOP.

RESOP was a success – in fact, you might say it was too successful.

RESOP was designed to be pretty low-barrier or barrier-free. It was a program designed to encourage as many projects to get into the program as possible. It was laid out as a 10-year program to get 1,000 megawatts of new, clean energy. We actually ended up with 1,400 of that with in 18 months, so we decided to close the program to new entrants.

We learned a few things from that experience. While it was barrier-free, it also meant that not as many projects made it to completion as might have otherwise been completed if there had been milestones that those people had to meet. So, we found that projects were taking up space on the transmission system without moving forward.

Being barrier-free was meant to encourage community participation but developers also learned very quickly how to take full advantage of the system design – breaking up larger projects into smaller ones for example.

We also knew that we were limited in our transmission capacity – and sometimes on our distribution system.

We took what we'd learned, and we went back to the drawing board. We then looked to the European experience with feed-in tariffs for a new solution. We took those lessons and came up with our own made-in-Ontario model.

Ontario's Green Energy and Green Economy Act, 2009

- Recent legislation creates a new electricity paradigm for renewable energy:
 - Streamlined permitting and approvals process
 - Priority connection – “Right to Connect”
 - Fixed price contracts for power production
 - Ownership opportunities for private sector, municipalities, utilities, aboriginal and community groups



SLIDE SIX

As I said at the outset, we've just launched a new contracting program aimed at bringing new sources of green energy on to the grid. Our Feed-in Tariff Program is a cornerstone in Ontario's renewable energy plans.

I think it's important to note that the Green Energy Act positions Ontario as a global leader in conservation as well as renewable energy.

Conservation and energy efficiency will always be first on our list as a supply resource.

After all, the cheapest megawatt of electricity is the one you don't use in the first place.

We're already well on our way to meeting our target of reducing peak demand by 6,300 megawatts by 2025. In fact, we're already one-quarter of the way there. Those are savings in the bank. And we'll be looking at ways to accelerate that target.

For Ontario, that 6,300 MW target is the equivalent of removing one in five electricity users from the grid.

It's the largest conservation effort in the province's history and the most ambitious in North America. We're working with communities and individual consumers on every front to see how far we can go.

We offer programs, incentives and now LDCs will have a share of that target as a condition of their license.

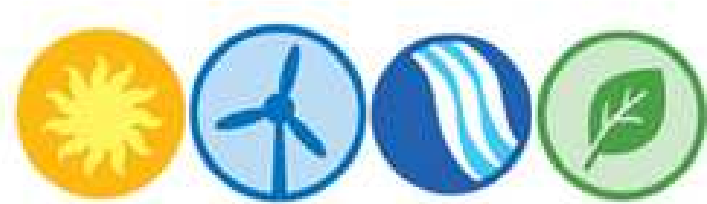
We're also leading on another front. Ontario made a decision to get completely off coal – which has traditionally accounted for about 20 percent of our electricity supply. This is the single largest climate-change initiative in North America. Coal-fired electricity will be gone by the end of 2014.

So, clearly, we had to find something to replace it.

Which brings me to what we are doing to build our supply. How we are providing incentives to developers to bring clean energy on stream.

FIT Program Key Features

- Open to various renewable energy supply technologies
 - Solar PV
 - Wind
 - Waterpower
 - Bio-energy technologies



- Different prices for different technologies and project sizes
- Long-term contracts
- Prices that aim to cover total project costs and provide a reasonable rate of return over the contract term

<http://fit.powerauthority.on.ca/>

SLIDE SEVEN

In other words, I'd like to fill in some of the details about how our FIT program actually works. On each of the next three slides, I've noted the FIT website where you can follow up for more information.

We launched our Feed-in Tariff Program one month ago, and the response has been overwhelming. We've already had 50,000 unique website visits and more than 400 applications. All of this interest, a full month before we review applications.

You might be interested to know we've already gone from seven wind turbines to 670 representing 1,100 MW. And we expect we'll soon see a lot more – tripling perhaps – including offshore wind for the first time.

FIT essentially opens the door to those wanting to invest in renewable energy projects in Ontario in ways that simply weren't possible before. Whether it's wind, water, solar or bioenergy projects.

It also offers developers and entrepreneurs attractive incentives to invest in projects and streamlines the approvals process. We've just launched the Renewable Energy Approval process, replacing the myriad of approvals that were previously necessary.

You may be interested in knowing that standardized setback for onshore wind turbines has now been set, streamlining the municipal part of the project process.

More importantly, perhaps, is that our FIT Program offers stable, competitive prices under long-term contracts. The prices are designed to cover capital, operating, maintenance and connection costs and a reasonable rate of return – an 11-year payback with an 11-percent return. It would be remiss of me not to say – if you haven't considered setting up shop in Ontario, now's the time to do it.

And there are special incentives to encourage municipalities, Aboriginal and community groups to become involved in developing renewable energy projects.

Incentives for Participation

- Municipal Renewable Energy Partnership Program
 - Reimbursement for direct costs incurred to hosting renewable energy project
- Community Energy Partnership Program
 - Reimbursement for “soft” costs associated with development of renewable energy projects up to 10 MW
- Aboriginal Energy Partnership Program
 - Support for the development of community energy plans, soft costs of development of renewable energy projects, establish an Aboriginal Renewable Energy Network to share knowledge and best practices

<http://fit.powerauthority.on.ca/>

SLIDE EIGHT

The Green Energy Act provides the foundation for the creation of three funds – one specifically earmarked for municipalities, another for communities and a third for Aboriginal groups.

The Municipal Fund, for example, will reimburse municipalities for their direct costs related to the development of renewable projects.

The Community Fund is intended to help community groups by covering pre-development costs.

And the Aboriginal Fund will help First Nation and Métis groups develop projects by enabling equity partnerships. It will address project development needs and help build capacity within Aboriginal communities.

Recent Transmission Directive



SLIDE NINE

But there's little point in even talking about bringing new supply onto the grid without an acknowledgement that we desperately need to rejuvenate our transmission system.

In early October, the government announced the provincial transmission network will see a \$2.3-billion injection over the next three years.

This is primarily to unlock significant potential for greener, cleaner electricity all over the province.

So, as I said at the outset, Ontario has a good story to tell.

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SLIDE TEN

One final note. I'm sure you folks here can appreciate it when I say that it's important that the government needs to be clear in its direction so that regulators are clear on their mandate.

In Ontario, we had submitted a long-term plan that was working its way through the regulatory process when last fall the Minister of Energy and Infrastructure issued us a directive to take a fresh look at many pieces of it. As a result, we paused our regulatory process.

We're still reviewing our long-term plan in the context of the Minister's directive, the Green Energy Act and changes in the economy. That doesn't mean that we don't think it's important. In fact, just the opposite.

In the meantime, we have actually accomplished a lot that was already set out in that plan and now we're working our way forward.

So it's been a very interesting time to be in Ontario's energy sector. We've come a long way. And it's exciting to be working with new energy producers while carving out a new path for Ontario – and the country.

And speaking of carving, I'd like to come back to those totem poles in Stanley Park.

It was the size and the craftsmanship that went into their construction that made such an impression on me as a young boy.

Only later, did I start to appreciate the deeper meaning of the totem poles and their place in the culture of native Canadians.

And I hope that's how it will play out with our wind turbines – that young people will be impressed by their scale and their design at first.

But later they'll appreciate the turbines' important role in society. And they'll understand that our generation had the foresight to look to their future needs.

Thank you.