



ONTARIO POWER AUTHORITY

March 2, 2010



Ontario's Green Energy Act and Feed-in Tariff Program

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Ontario Power Authority

- Created in legislation (2004) and operational in 2005
- Governed by independent Board of Directors
- Reports to Ontario Legislative Assembly through Minister of Energy and Infrastructure
- Licensed and regulated by Ontario Energy Board
- Not-for-profit corporation without share capital
- OPA's credit rating AA- or AA low

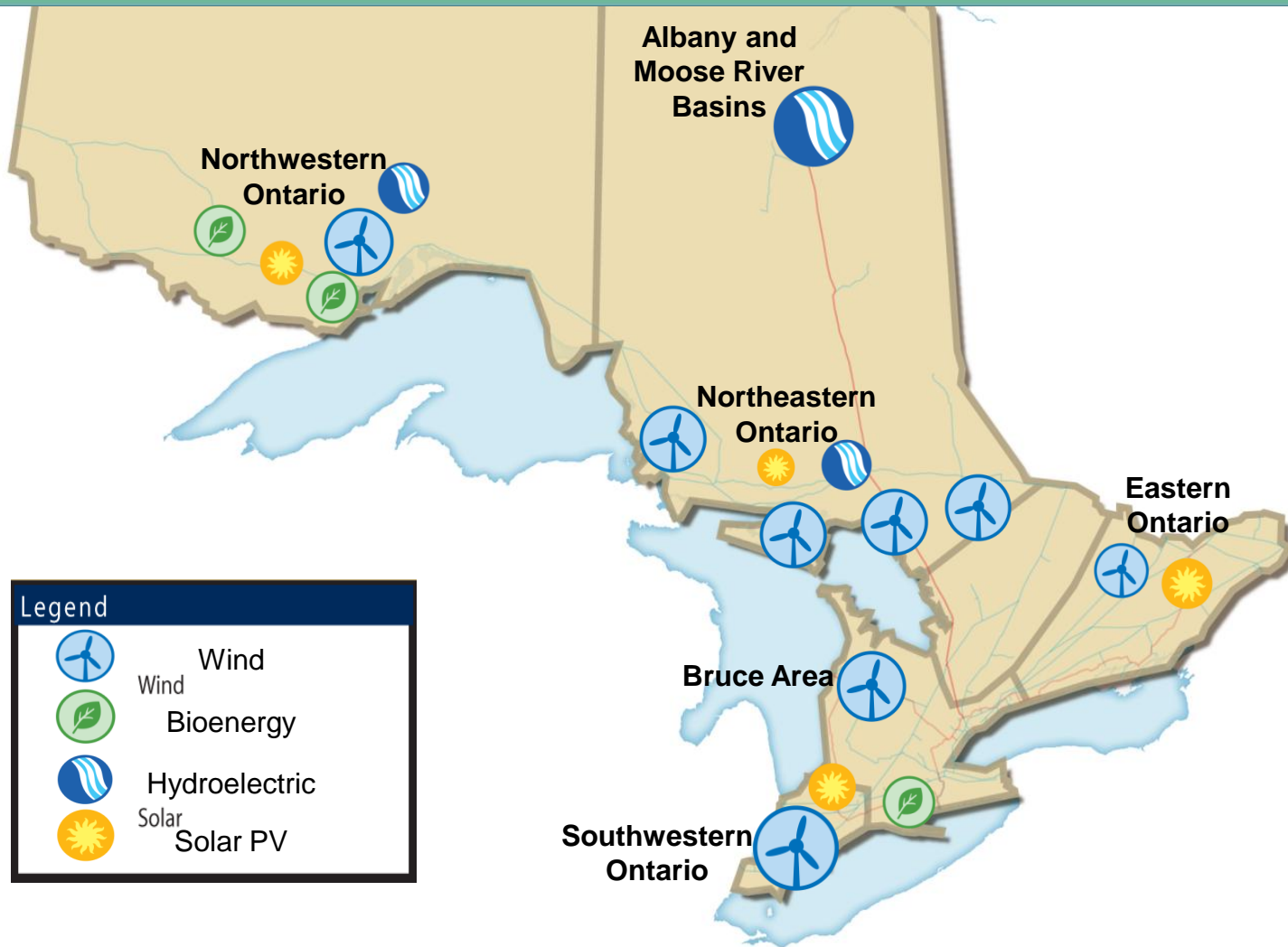
Key Functions of Ontario Power Authority

- Power System Planning: creating long-term plans
 - Integrated Power System Plan
- Generation: procuring existing and new generation, including managing and financially settling contracts
 - Since 2005, over 8,000 MW procured and over 13,000 MW under contracts
 - Over \$15 billion investment
- Conservation: procuring and developing conservation programs, including managing and financially settling contracts

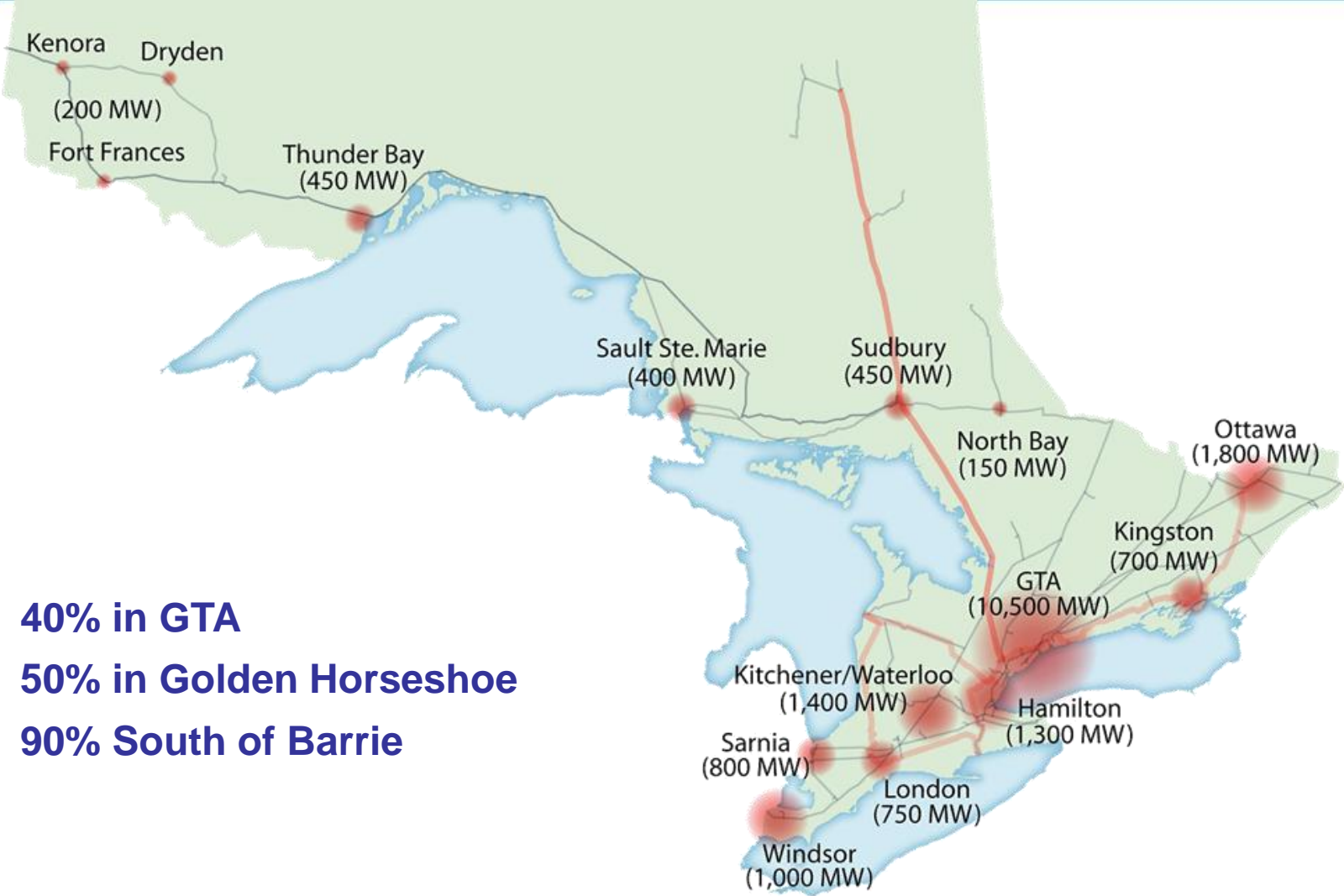
Green Energy Act Framework

- Ontario Government introduced and approved Green Energy Act (GEA) in 2009
- GEA is broad and reaches beyond electricity policy
 - Facilitating renewable energy supply development
 - Enabling Aboriginal partnerships and participation
 - Increasing conservation and its culture
 - Developing smart grid
 - Creating green jobs

Renewable Energy Supply Potential



Electricity Demand in Southern Ontario



40% in GTA

50% in Golden Horseshoe

90% South of Barrie

Key Legislative Change – System Connection

- Transmitters and Local Distribution Companies (LDCs) to provide priority connection for renewable energy supply
 - Must meet technical and economic requirements
- Minister may direct Ontario Energy Board (OEB) to enable connection of renewable energy supply
 - License conditions may require Transmitters and LDCs to connect renewable energy supply through grid upgrades/expansion

Transmission Expansion Letter to Hydro One

Transmission Expansion Plan



FIT Ministerial Directive (September 24, 2009)

- Directs OPA to develop and implement a FIT Program
- Domestic Content
 - Wind projects
 - 25% on or before Dec 31, 2011 and 50% after
 - Solar PV projects (> 10 kW)
 - 50% on or before Dec 31, 2010 and 60% after
 - Solar PV microFIT (< 10 kW)
 - 40% on or before Dec 31, 2010 and 60% after





Transition Option: Projects \leq 500 kW that were purchased or in-service by 11:59 pm on Oct. 1, 2009 are eligible to transition to FIT/microFIT – they will be deemed to have met domestic content requirements

FIT Ministerial Directive

- Encourage participation of Aboriginal and Community projects
 - Lower security (\$5k/MW)
 - Price adders (1.5 ¢/kW/h maximum)
- Restrictions on Prime Agricultural Land
 - OPA not to enter FIT contracts for ground-mounted solar PV projects > 100 kW located on
 - Class 1 and 2 soils
 - Specialty Crop Areas defined in the 2005 Provincial Policy Statement
 - OPA may enter FIT contracts for ground-mounted solar PV projects > 100 kW located on Class 3 soils up to 500 MW

Exemption: Restrictions for Classes 1, 2 and 3 soils do not apply to lands zoned for non-agricultural purposes as of October 1, 2009

FIT Program Key Features

- Open to various renewable energy supply technologies
 - Bio-energy technologies 
 - Solar PV 
 - Waterpower 
 - Wind 
- Different prices for different technologies and project sizes
 - Prices cover development costs and provide a reasonable rate of return
- Long-term contracts (20-years, 40-years for waterpower)
- Opportunities for promoting Community and Aboriginal projects
- Provisions for Domestic Content

FIT Price Schedule

Renewable Fuel	Capacity Range	FIT Price (¢/kWh)
On Farm Biogas * ^	≤ 100 kW	19.5
On Farm Biogas * ^	> 100 kW ≤ 250 kW	18.5
Biogas * ^	≤ 500 kW	16.0
Biogas * ^	> 500kW ≤ 10 MW	14.7
Biogas * ^	> 10 MW	10.4
Biomass * ^	≤ 10 MW	13.8
Biomass * ^	> 10 MW	13.0
Landfill gas * ^	≤ 10 MW	11.1
Landfill gas * ^	> 10 MW	10.3
Rooftop or Ground Mounted Solar PV	≤ 10 kW	80.2
Rooftop Solar PV	> 10 kW ≤ 250 kW	71.3
Rooftop Solar PV	> 250 kW ≤ 500 kW	63.5
Rooftop Solar PV	> 500 kW	53.9
Ground Mounted Solar PV *	> 10 kW ≤ 10 MW	44.3
Waterpower * ^	≤ 10 MW	13.1**
Waterpower * ^	> 10 MW ≤ 50 MW	12.2**
Off-shore Wind *	Any size	19.0
On-shore Wind *	Any size	13.5

* Eligible for Aboriginal or Community Adder

^ Paid On/Off Peak Price: 135%/90% of FIT Price

** Contract term for water power 40 years

FIT and microFIT Programs

- FIT Program is divided into two streams – FIT and microFIT

FIT Program
Projects over 10 kilowatts
Information for renewable energy developers



[Click here to learn more](#)

microFIT Program
Projects 10 kilowatts or less
Information for homeowners, small businesses and others



[Click here to learn more](#)

- microFIT Program (< 10 kW) highly simplified
- FIT Program (> 10 kW) requires additional requirements

Uptake of microFIT Applications

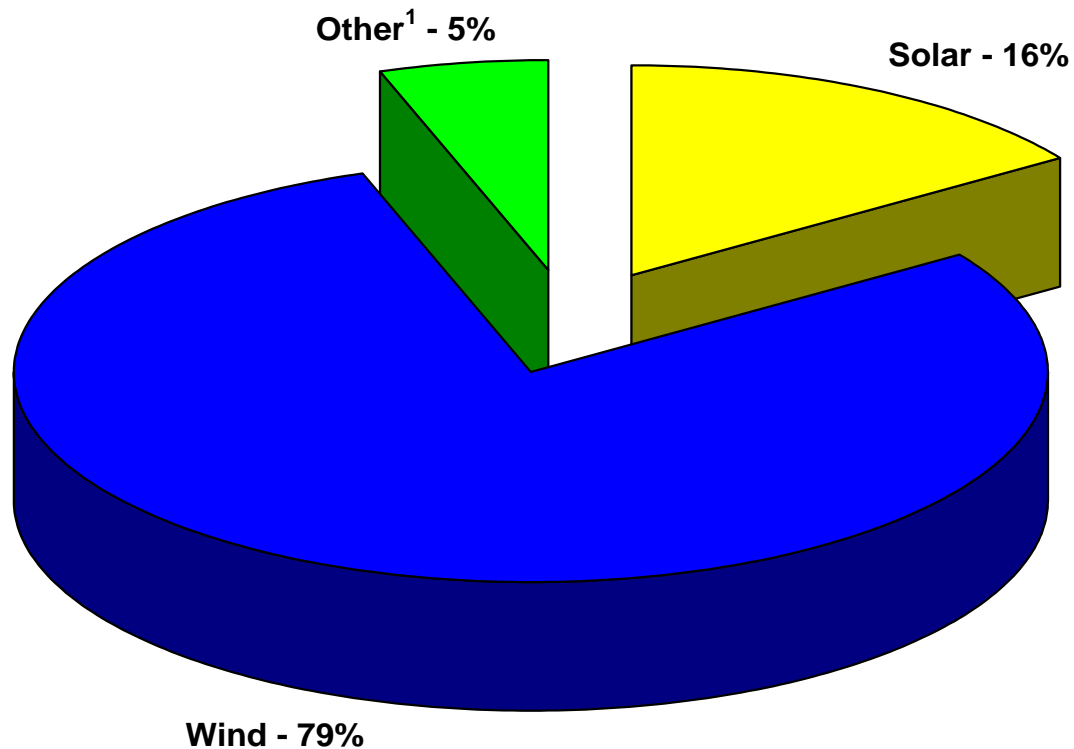
Capacity (kW) of Applications Received to December 1, 2009

ENERGY SOURCE	# OF APPLICATIONS	TOTAL CAPACITY	
BIOMASS	4	40	
WATER	1	2	
SOLAR PV	1,166	8,382	
WIND	22	187	
TOTAL	1,193	8,611 (8.6 MW)	

Uptake of FIT Applications

- As of December 1, 2009, 1,022 FIT applications received totalling over 8,000 MW

FIT Launch Applications - Under Review



microFIT and FIT Contract Execution

- Only Applicant Projects from Launch Period (October 1 to December 1, 2009) will first be eligible for microFIT and FIT Contracts
 - Over 1,000 Conditional microFIT Offers have been sent to successful Applicants
 - Execution of FIT Contracts planned to begin in late February 2010
 - Smallest FIT Applicant projects (< 500 kW) will start to receive contracts first, followed by ‘shovel-ready’ larger projects (> 500 kW)
- All Applications submitted after Launch Period will be assessed based on time-stamp to determine which Applicants receive FIT contracts

Contacting the OPA

- Email
 - FIT fit@powerauthority.on.ca
 - microFIT microfit@powerauthority.on.ca
 - OPA Information Service info@powerauthority.on.ca
- Telephone
 - FIT Call Centre 1-888-387-3403; M-F 9am-5pm
 - Main OPA Reception Local: 416-967-7474;
Toll free: 1-800-797-9604 with prompts for keypad routing to Call Centre
- Fax
 - FIT and microFIT fax 1-866-833-7978
- Website
 - Online searchable Q&A facility
 - Submission of written questions