

A Green Energy Act for Ontario: Executive Summary

December 2008

Vision

To make Ontario a global leader in the development of renewable energy, clean distributed energy and conservation, creating thousands of jobs, economic prosperity, energy security, and climate protection.

Purpose

The purpose of this Act is to facilitate the development of a sustainable energy economy that protects the environment while streamlining the approvals process, mitigates climate change, engages communities and builds a world-class green industrial sector. It will enable all Ontarians to participate and benefit from green energy as conservers and generators, at the lowest cost to consumers.

Results

The Green Energy Act can deliver on Ontario's Climate Change Strategy while creating a world-leading clean-tech industry and enabling Ontario to achieve aggressive targets:

- 6000 MW of conservation by 2015 with an additional 2.5% annual (compounding) reduction in energy resource needs from conservation from 2015 onwards;
- 10,000 MW of new installed renewable energy by 2015, over and above 2003 levels;
- 25,000 MW of new installed new renewable energy by 2025, over and above 2003 levels;
- 1,500 MW of new installed clean distributed energy by 2015, and 3,000 MW by 2025, as of the introduction of this Act.
- Achievement of the approximately 30% reduction in natural gas consumption that has been identified as economic by 2017 in studies for the gas utilities.

Cost/Price

Our Green Energy Act would provide a lower cost option to Ontarians. Evidence submitted to the Ontario Energy Board hearings shows that a renewably-powered electricity system with a greater emphasis on conservation and efficiency would be at least 11 per cent less expensive, and potentially as high as 32 per cent less expensive, than the Ontario Power Authority's proposed Integrated Power System Plan. Moreover, as Moody's Investment Services noted in May 2008, traditional generating technologies have fixed designs whose costs are rising rapidly while renewable technologies are still experiencing significant advancements in terms of energy conversion efficiency and cost reductions.



www.GreenEnergyAct.ca
A Message from the Ontario Green Energy Act Alliance

Core Components of the Green Energy Act

To achieve the goals defined here, Ontario's Green Energy Act must include:

1. An obligation for the responsible power purchase authority to grant priority and obligatory purchase of green energy projects.
2. A system of Advanced Renewable Energy Tariffs as the primary procurement mechanism for renewable and clean distributed energy to ensure the equal participation of community energy in the sustainable energy sector. The tariffs per kilowatt-hour of generation are based on key components of the German and French models:
 - Tariffs are differentiated on the basis of: technology, resource intensity, project scale and location to ensure projects are economically viable in communities across the province;
 - Prices are set on the basis of cost and a reasonable return on investment;
 - A minimum profitability index of 0.1 for lowest yield and 0.3 for highest yield green energy projects;
 - No cap on project size or program size;
 - No cap on voltage: the tariff includes all behind the meter, all distribution and all transmission connected projects;
 - 100% inflation protection at 2 levels: within the power purchase contracts, within the tariff program.
3. An obligation for all utilities to grant priority grid access to green energy projects and an obligation for all utilities to connect green energy projects to the grid (within a reasonable limit to be determined by relative costs and goals related to the successful implementation of the Act). Utilities are entitled and empowered to recover all related costs. Related costs are to be spread equally across the entire rate base.
4. The explicit and direct participation of First Nations and Métis as developers and owners in energy projects (generation, transmission, conservation) so they benefit directly from the resulting economic development in recognition of the additional and unique barriers they face.
5. The establishment of a Green Energy Debt Finance Program and a Community Power Corporation.
 - The Green Energy Debt Finance Program would be mandated to raise the financial capital required to meet the financial market short falls in the development of eligible and viable projects (individual, community and commercial) to meet the GEA targets. The intent is that over time the market and community will meet all financial requirements for these projects. Vehicles such as Green Bonds could be implemented under this program to raise a portion of the required capital.
 - A Community Power Corporation is necessary to ensure the equal opportunity for participation of the community power sector in recognition of the additional social and economic benefits of these projects to Ontario communities and the people of Ontario as a whole. The mandate of the Corporation would be to build the capacity of local communities to develop eligible and viable projects, provide early stage project funding, and to facilitate the development of financing mechanisms. This corporation will require an initial investment of \$25 million.
6. The adoption of smart grid technologies, including energy storage, in order to transform Ontario's energy system from highly centralized to more distributed.
7. A mandated commitment to a continuous improvement approach to conservation with a minimum 2.5% annual (compounding) reduction in energy resource needs from 2011 until 2027.
8. Electricity pricing that reflects its true cost and provides signals to consumers to manage their energy demand.
9. Priority for vulnerable consumers (including relevant industrial users) to reduce their energy burden through conservation, bill assistance, innovative utility policies and stronger consumer protection.
10. Streamlined regulatory and approvals processes that enable the rapid but prudent development of green energy projects across the province, reducing uncertainty and transaction costs to all involved. This would include a comprehensive one-window approach to consultation with First Nations and Métis that will lead to their meaningful engagement in the energy sector and create certainty for the province.

For more information about the Green Energy Act and to lend your support, please visit the website www.greenenergyact.ca and join our circulation list.

Definitions

Green energy: The term green energy includes renewable sources, conservation and clean distributed energy supported by micro grids and distributed energy systems. Renewable sources include: on-shore wind, off-shore wind, bioenergy, hydro power, solar photovoltaic, solar thermal, and geothermal. Green distributed energy sources include: district heating and cooling, Combined Heat and Power (CHP), recycled exhaust heat from gas pipeline compressor stations, and energy produced on site at low pressure sources of natural gas.

Community energy: Community energy refers to energy projects that are locally planned and sited with majority ownership by First Nations, farmers, public sector institutions (e.g. schools), community organizations, co-operatives, remote diesel dependent communities, renters and homeowners, condominiums, municipalities and/or local utilities.

Profitability Index: The net present value of a project divided by the initial investment. It is a pricing system developed by the oil and gas industries that has been adopted by the Government of France in setting their renewable energy tariffs. The oil and gas industries typically achieve a profitability index of 0.7 or 0.8. A core principle of the Green Energy Act is that green energy projects make a reasonable profit at a reasonable cost to electricity consumers. The Green Energy Act Alliance is proposing a minimum profitability index of 0.1 for lowest yield and 0.3 for highest yield green energy projects in Ontario, the minimum necessary to spur significant green industrial development.