



CANADIAN ENVIRONMENTAL LAW ASSOCIATION
L'ASSOCIATION CANADIENNE DU DROIT DE L'ENVIRONNEMENT

March 25, 2009

Mike Parkes
Cabinet Liaison and Strategic Policy Coordinator
Ministry of Energy
Regulatory Affairs and Strategic Policy
Strategic Policy and Research Branch
880 Bay Street, 6th floor
Toronto, Ontario M7A 2C1

Dear Mr. Parkes,

RE: EBR Registry number 010-6017
Comment on Bill 150, as proposed, *An Act to enact the Green Energy Act, 2009 and to build a green economy, to repeal the Energy Conservation Leadership Act, 2006 and the Energy Efficiency Act and to amend other statutes*

The comments and recommendations in this submission relate to opportunities for promoting integrated urban energy systems (an approach to urban design that is gaining momentum across Canada) via the Green Energy Act. These comments are submitted by **Canadian Environmental Law Association** and **Pollution Probe**.

The capacity of the Green Energy Act (GEA) to achieve two of its main purposes (that is, “fostering a culture of conservation by assisting homeowners, government, schools and industrial employers to **transition to lower and more efficient energy use**” and supporting renewable energy) can be significantly enhanced if the Act is adjusted to provide for comprehensive *integrated urban energy system* planning. Therefore, the Canadian Environmental Law Association and Pollution Probe recommend that the scope of energy planning activities encompassed by the Act be expanded to incorporate the following:

1. A new instrument: Community Integrated Energy Plan;
2. Provisions to ensure the energy and transportation planning are linked; and
3. Combined heat and power generation.

Incorporating provisions for these elements will help to ensure that the government’s goals are realized.

Recommendations

In general, we seek to draw the attention of the Ministry of Energy to the importance of integrated urban energy systems, and recommend that its principles be considered for inclusion in the GEA and other government initiatives related to energy, infrastructure and urban planning (descriptions of proposed principles are included on the next page). Specifically, we offer the following recommendations to ensure that integrated urban energy systems are supported, and not constrained, by the GEA (indeed, both should contribute to their mutual success).

1. A New Instrument: *Community Integrated Energy Plan*

Several opportunities exist to introduce a new instrument to the GEA that provides for consideration of a *community integrated energy plan* in certain decisions authorized by the Act. For example, Schedule A, sections 5 and 6 provide the Lieutenant Governor in Council power to direct public agencies and consumers to prepare energy conservation and demand management plans. If an integrated energy plan has been developed by a community and has been approved by municipal council, its provisions should be considered in the preparation of a public agency's or consumer's conservation plans, or otherwise consistent with such plans. Similarly, a council-approved community integrated energy plan could be considered by the Director (Schedule G, section 47.5, "Director's Powers") in the decision to issue a Renewable Energy Approval; that is, the applicant's proposal should be consistent with the community integrated energy plan.

2. Link to Transportation Planning

The QUEST Approach seeks integrated solutions to reducing energy use, duly recognizing the impact that land-use patterns and transportation activity has on overall energy demand. Moreover, use of electrically-powered mobility options, including light rail transit and private "plug-in" electric vehicles (power-assist bicycles, scooters and possibly in the near future, personal automobiles), is an electricity end-use issue not addressed in the GEA. The proposed Act presents an opportunity to incorporate the Ministry of Transportation as an important partner in the energy conservation and demand management planning process. Schedule C sets forth amendments to the *Ministry of Energy Act* to align its objectives with the Act. It is recommended that similar amendments be considered, where applicable, to the *Ministry of Transportation Act*, such that transportation planning is appropriately represented. This could also link to existing provisions for the *Greater Toronto Transportation Authority Act*.

3. Combined Heat and Power

It is recommended that *High Efficiency Combined Heat and Power* be considered for addition to the definition section in the GEA (section 1(1)). Language in Schedule D, section 11 can likewise be added that articulates the minimum required efficiency factor. This is consistent with recommendation 3 in the submission of the *Green Energy Act Alliance* (first draft).

What is QUEST? Why is it important to the GEA?

Meeting long-term climate change objectives that involve greenhouse gas emission reductions of 60 per cent or more by 2050 will need a fundamental transformation of how energy is produced, delivered and used. To date, most federal and provincial policies have tended to focus on supply-side solutions, such as capping emissions from large industrial emitters, and substituting energy and power generation from fossil fuels with renewable energy options. While this is important, it overlooks the opportunity to greatly reduce future energy demand through a community planning approach that creates integrated urban energy systems.

Recognizing this gap in our climate change mitigation and adaptation strategies, a network of citizens from the energy industry, environmental groups, governments, academia and consulting communities have gathered to articulate effective strategies and advance the movement we call **QUEST: Quality Urban Energy Systems of Tomorrow**. We believe an integrated, community-based approach is the best way to address energy end-use and reduce greenhouse gas emissions (www.questcanada.org).

The QUEST Mission: To foster integrated, community-based approaches which address energy end-use and reduce related greenhouse gas and air pollutant emissions.

The QUEST Vision: By 2050 every community in Canada is operating as an integrated energy system, and accordingly, all community development and redevelopment incorporates an integrated energy system.

The QUEST Approach consists of the following principles:

1. Improve efficiency – reduce the energy input required for a given level of service;
2. Optimize “exergy” – avoid using high-quality energy in low-quality applications;
3. Manage heat – capture all feasible thermal energy and use it, rather than exhaust it;
4. Reduce waste – use all available resources, such as landfill gas, gas pressure drops and municipal, agricultural, industrial and forestry wastes;
5. Use renewable resources – tap into local biomass, geothermal, solar and wind energy; and
6. Use grids strategically – optimize use of grid energy as a resource to optimize the overall system and ensure reliability.

The Building Blocks of this Approach include:

- ✓ **Integration of land-use, transportation, energy, water and waste systems planning.**
- ✓ An enabling platform of higher density, mixed use developments of energy efficient building.
- ✓ A backbone of smart district energy and/or utility grids, allowing best management of available energy.
- ✓ Distributed smaller scale, local energy systems.
- ✓ Using local renewable energy sources – solar, geothermal, wind and biomass.

There is significant alignment of the objectives of QUEST and the GEA (as well other Government of Ontario initiatives, such as the *Places to Grow Act* and the *Climate Change Action Plan*). However, there are parts of the proposed Act for which changes should be considered, such that the above-listed QUEST Building Blocks are given appropriate provision in legislation. We believe the recommendations proposed in this letter help address these gaps.

Thank you for the opportunity to submit these recommendations for your consideration. Please contact us with further questions or requests for clarification.

Sincerely,



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