OSEA

Ontario Sustainable Energy Association
@Goway Travel Ltd., 3284 Yonge Street, Suite 400
Toronto, ON M4N 3M7
tel: 416.977.4441
www.ontario-sea.org

**Ministry of Energy**
Office of the Minister
4th Floor, Hearst Block
900 Bay Street
Toronto ON M7A 2E1

Date: November 30, 2016

Dear Minister Thibeault:

The Ontario Sustainable Energy Association (OSEA) welcomes the opportunity to submit its recommendations to the Long Term Energy Plan on behalf of its members. The following is a summary of a more detailed submission that will be submitted via the Environmental Registry by December 16, 2016.

As part of our pre-consultation, the OSEA conducted a survey of its membership to identify the key areas of consideration for the next long-term energy plan (LTEP). These have already been submitted as part of our pre-consultation submission in June 2016. The following key messages have been identified by our membership:

1. **Any future Long-term Energy Plan should be based on a publicly available, transparent, and full lifetime feasibility and cost analysis of the most sustainable technology and policy options.**
2. **Define clear, ambitious energy conservation and GHG emission reduction targets in the LTEP for all economic sectors and government agencies in line with Canada's commitment to the Paris Agreement.**
3. **Improve stability and predictability of renewable energy procurement programs for all participants.**
4. **Design the regulatory process to support and simplify the economic participation of the communities hosting the projects.**
5. **Change building code to include mandatory and ambitious energy efficiency standards for new buildings.**

## OSEA's Vision

OSEA's vision is of a prosperous Ontario with a thriving sustainable energy sector, good jobs, resilient communities and healthy environments powered, heated, cooled and moved by portfolios of sustainable energy. We are championing the transition to a low-carbon, decentralized, integrated, and inclusive energy system that is built on portfolios of sustainable technologies to meet our heating, cooling, electricity, and transportation needs.

## OSEA's main concerns with the current planning approach taken

### 1. Current approach: Assume continued centralized energy delivery model

**Recommendation:** Communities are the key element to the solution.
Our communities hold the keys to the development of a low-carbon energy system that also supports local economic development. Communities should be mandated and supported to develop sustainable community energy plans. The goal should be to move towards regional and community energy self-sufficiency. This can be achieved through microgrids, based on integrated district energy systems, residential solar PV, cogeneration, community-owned bioenergy, geothermal, and water power as well as community wind farms where economically feasible and socially acceptable.

### 2. Current approach: Top-down, centralized planning process

**Recommendation:** Taking a bottom-up and integrated approach to energy planning.
The ministry's approach seems to be built on the assumption that Ontario will continue to only fill temporary gaps in its supply with distributed generation and that the bulk electricity system will continue to provide baseload electricity to the system. It therefore takes on a top-down planning approach. This justifies the omission of a comprehensive analysis of the actual potential for distributed electrical and thermal renewable energy generation but is contrary to observable trends, globally and also within the province itself.

Only a comprehensive analysis of the potential for a distributed system (or a bottom-up approach) will allow energy system planners to fully understand the aggregated effects that increasing privately-owned, distributed generation, energy conservation, storage, and community energy self-sufficiency will have on the future distribution and transmission systems.

3. **Current approach: Alternative energy sources de-emphasized**

**Recommendation: Bioenergy – the untapped asset**

Bioenergy is largely ignored in all planning documents, yet there is great potential for it across Ontario. Many Bioenergy technologies are very mature and range from landfill- and sewer-gas to anaerobic digestion of agricultural and food waste, to biomass combustion, all of which can be operated as Combined Heat and Power (CHP) plants, thereby providing maximum efficiency and flexibility to meet local peak demands for heat and electricity. Renewable natural gas is the important linkage between the currently separately owned, controlled and operated electrical, thermal, and transportation systems. Bioenergy technologies and process are also crucial to the future of commercial transportation and heavy trucking, one of the greatest sources of Ontario's GHG emissions.

4. **Current approach: communities develop local energy plans in isolation from central planning**

**Recommendation: Encourage integrated community energy planning and avoid the risk of stranded assets and resulting high electricity rates**

Many communities are concerned about the high cost of energy, being able to provide their communities with reliable supply of energy, even when faced with extreme weather events, and with providing their citizens with a vital economy, in which to live and to conduct business. And many communities are starting to understand the potential of using the development of local energy assets to meet local demands as an opportunity to meet these concerns head-on. We see more and more communities considering or already developing their own Community Energy Plans, with a growing desire to become energy-independent and the transmission grid becoming a source of back-up support to the local system. If this trend results in the development of energy islands and micro-girds, the need for centralized electricity supply will decrease to a point where extensive, unchecked investments into the continuation with the bulk electricity system will result in stranded assets and high electricity rates.

**OSEA further recommends:**

5. **International trends and technological breakthroughs are showing us the way.**
   Progressive jurisdictions around the world are transitioning to more resilient, efficient, and diversified renewable energy-based systems. These systems are built on distributed generation and are moving away from baseload and bulk supply designs to smart, digitalized, and highly adaptable distributed generation infrastructure.

6. **We need to understand the alternative.**
   Much research and planning has gone into the whether and how to continue with existing assets of the bulk electricity system. While the alternative of a decentralized, modular built-out based on locally-sourced, -owned, and –operated resources has not been studied in-depth and the benefits are not fully understood or appreciated.
   It is important that the future of our energy system is based on evidence. Any analysis of options should take into account the full cost and benefits to **all** people of Ontario

In conclusion, we thank the Ministry for allowing us to provide input into the long-term energy planning process. As this process evolves, we would like to support the Ministry's efforts to study the potential for a low-carbon, decentralized, integrated, and inclusive energy system. In this regards, OSEA has started to work on this through our Combined Energy Options Ontario project, an early presentation and executive summary have already been submitted to the Ministry. Our consortium of academic partners, community, and industry leaders would welcome the opportunity to work closely with you on this project to help future long-term energy system development efforts.

Sincerely,

Nicole Risse
Executive Director