

Report on the Generation Energy Workshop Québec – September 20, 2017



SUMMARY

On September 20, 2017, officials from Natural Resources Canada joined Écotech Québec in welcoming a group of participants representing clean technology companies, non-governmental organizations, as well as academic and financial institutions. President and Chief Executive Officer of Écotech Québec Denis Leclerc's greeting was followed by the opening remarks of Jacinthe Leclerc, General Director of the Laurentian Forestry Centre, one of the five research centres of the Canadian Forest Service of Natural Resources Canada. The workshop was led by Mr. Leclerc.

WORKSHOP OVERVIEW

The workshop provided an opportunity to address a number of questions:

1. What does Canada's long-term energy future look like?
2. What generational goals should we be trying to reach and what should be our guiding values?
3. What tools and what benchmarks will guide us along that path?

MAIN HIGHLIGHTS

Common among the various subjects addressed were the following general principles:

- The importance of **energy security** in a context of extreme climatic events. Local energy supply (ex.: for biomass use) presents a twofold advantage: economic development of the regions and the reduction of energy imports which vary in their availability – and therefore in price – as a result of climatic events.
- The importance of a “**transportation cocktail**” for commercial/industrial transportation This combination can sometimes be limited to existing infrastructures which are at times abandoned (railroad tracks converted into bicycle paths) or under-financed (maritime infrastructures to avoid duplication of upkeep and to encourage the use of the Saint-Lawrence River for transportation). Collaboration among industry (industrial ecology, circular economy) can help facilitate these initiatives.
- The importance of considering more than just transportation in discussions about Canada's energy needs – and the funding issues that go along with them. Prioritizing the reduction of greenhouse gases (GHG) to achieve an optimal GHG reduction vs. cost ratio, regardless of the source.
- The importance of **respecting the individual provinces' specific circumstances** in all steps taken by the federal government.

- **Generational changes**, while insufficient on their own, can facilitate changes in behaviour that will be necessary in order to meet the objectives of the Paris Agreement. The need to increase the speed of the transition, given that current projections indicate that temperatures in the Canadian north will increase by 5 to 10°C.



TAKEAWAYS

Subject 1. Regulatory framework, standards, and research and development

- The importance of having norms and standards to support the credibility of renewable energies and to structure the market, notably with respect the definition of goods and services. In developing standards within a consensus process, Canada could take the lead and contribute to the creation of international standards, thus promoting its exports.
- The importance of ensuring that research is transparent and collaborative, as well as promoting established expertise and research results that have been properly produced at both the university and college levels. By encouraging all the actors along the supply chain to work together, the government will ensure that companies experience optimal development.

Subject 2. Funding

- A clear vision: that funding options for energy products should be as straightforward as funding for projects in the other sectors of the economy by 2050.
- To this end, the government must act as a catalyst/accelerator, stimulating private sector funding for however long as it takes to realize this vision.
- Using funding as a means rather than an end, it must continue to make a priority of investing in energy efficiency, and then in renewable energies and infrastructures impacting greenhouse gas reduction.

Subject 3. The role of information, education and knowledge transfer in changing behaviour

- The funding granted for the development of new technologies should include financing to develop awareness of how to use these technologies, for instance through projects demonstrating their concrete benefits.
- The funding granted should also reflect costs arising from the protection of new ideas in order to facilitate their publication (and to address fears that one's ideas may be "stolen").

- The integrity, neutrality, and objectivity of the guidance offered for knowledge transfer and/or the adoption of new clean technologies are essential in changing behaviours.
- The measures selected for attaining these behavioural changes should be long-term. “Roller coaster” effects should be avoided in the granting of funding.



Subject 4. Integrated impact of energy chains

- All foreseeable positive and negative impacts, whether direct, indirect or down-the-line, must be considered as soon as energy options are selected and funded: the cost/competitiveness of industrial and commercial sectors, the consolidation of complementary sectors, the reduction of GHG emissions (product lifecycle analyses), the structuring of residential areas/communities in terms of job maintenance/creation, etc.
- Synergies must be promoted – whether in terms of energies (bi-energy), industrial waste (industrial ecology), or complementarity between sectors (for instance, between the forestry and energy sectors) – in order to promote “the right energy for the right place.”
- All sustainable development values must be considered in order to establish the best solution for users as well as for the community.



- This can be done by ensuring improved communications between the various levels of government (including among ministers within the same government), industry, and society. This communication is necessary to get an accurate and transparent picture of the different energy chains and their domino effect on economic, ecological, and social development.

TEAMWORK

Governments:

Three levels: enforcing regulations, leading by example (ex.: using biomass as an option in the Parliament Hill buildings), and funding initiatives that support their vision.

Federal: engaging/informing (transparency)

- Examples: infrastructure program for municipalities, transportation of energy
- Securing international representation
- Coordinating among the provinces
- Steering clear of solutions that are too detailed or too general, or of levelling down to the lowest common denominator

Provincial and municipal: direction/guidance

Private sector

Managing, implementing, and ensuring the quality of communications with shareholders, consumers, and employees.

For utilities companies: the need to align with government policies and address the risks posed by monopolies are of particular importance.

Researchers

Informing (energy portrait – most neutral information possible) and developing (research geared towards developing new technologies).

The Canadian public

Being proactive

- Buying power
- Voting, participating in public hearings
- Getting informed and involved
- Becoming part of the process