Canadian Renewable Energy Alliance

promoting a transition to renewable energy

Energy Efficiency – The Cornerstone of a Sustainable Energy Future

Using energy as efficiently and effectively as possible will be essential if we are to meet future energy needs and see a global transition to sustainable energy sources. Without major changes in the way we use energy to meet our needs (energy conservation), and use the most efficient equipment and measures (energy efficiency), there is little hope of reducing the impact of energy production and use to reasonable levels. This is even more important for Canada which has one of the highest energy consumptions per capita in the world.

Fortunately energy efficiency and conservation are also the lowest cost options for meeting energy needs and provide many other environmental, economic and social benefits, including cost savings, lower environmental load by avoiding GHG and local air, water and land emissions associated with energy production and consumption, local economic development opportunities and associated new jobs, enhanced reliability of energy system and reduce price volatility, and improved energy supply security.

While it is in consumer and the public interest to use energy more efficiently, there are several reasons why energy users and providers of energy, such as utilities, do not always make rational investments in efficient technologies and practices. Consumers often lack the information necessary to make good choices; also the equipment, services and financing they need are often not available. It is left to governments, therefore, to put policies and programs in place that encourage investments in energy efficiency and conservation and transform markets towards energy efficient products and practices.

Canada has a reasonable track record on energy efficiency but has the potential to make significant gains over the next decade. Energy efficiency and conservation policies should become the cornerstone of future energy policy because of their multiple benefits.

Canada needs a national energy efficiency strategy and action plan developed by provincial and federal governments which expands the support for energy efficiency - learning from best practices used elsewhere and building a strong energy efficiency industry that can deliver cost saving products and services to all consumers and businesses. There are also important roles for municipalities, NGOs, energy utilities, First Nations, and international agencies and partnership.

Recommendations for Provincial Strategies

1. Set a **goal of meeting all new growth in energy demand** over the next two decades through energy efficiency and conservation. Set energy efficiency targets for each sector along with appropriate intermediate milestones for energy utilities and industries. Make these milestones into legal requirements by using Energy Efficiency Portfolio Standards and tradable permit (white certificates) programs.
2. Treat **energy efficiency as a resource** and given priority over supply resources. All resources should be assessed using social, environmental and economic cost criteria.
3. Mandate an **independent dedicated agency** to coordinate and deliver energy efficiency and conservation programs, and recommend policy changes.
4. Establish **permanent funding sources** through the budget process to support a building code and equipment standard review cycle.
5. Provide a **shared savings DSM incentive mechanism** for energy utilities, technical support provided for smaller utilities, and **coordinate DSM programs** across the Province.
6. Establish **regular review cycles** of energy efficiency requirements in building codes and minimum efficiency requirements for equipment. Changes in codes and standards should be negotiated

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with all stakeholders and supportive incentives provided to builders and suppliers in the lead up to changes.

7 Provide **comprehensive energy efficiency programming** covering all sectors and geographic areas in the Province. Market transformation programs should target the whole supply chain – manufacturers/builders, suppliers, contractors, users/consumers.

8 Provide **targeted financial incentives** to kick start market transformation and raise efficiency levels between code and standards cycles, providing effective support to suppliers, users, or contractors as appropriate.

9 Build an **infrastructure to deliver energy efficiency products and services** through training/certification of DSM program managers, contractors, circuit riders, building operators.

10 Partner with **municipalities and First Nations** to deliver community energy plans and community based energy efficiency programs.

Recommendations for Federal Enabling Policies and Support

1 Develop and implement a **national energy efficiency strategy and action plan** with targets and timelines, based on best practices, individual and joint initiatives across Provinces, and participation in international initiatives on energy efficiency.

2 Establish a **permanent review cycle** of the national model energy code for buildings, EnerGuide for Houses, and vehicle efficiency requirements, in cooperation with the Provinces.

3 Use the **Energy Efficiency Act** to raise minimum efficiency standards for all energy using equipment to the highest levels in North America in cooperation with Provinces and harmonized with the most progressive US States.

4 Provide **enabling legislation and protocol support** for energy performance and best in class labeling programs.

5 Promote and support the use of measures that **provide value to energy efficiency labels** so that they reflect the full environmental and social benefits of high efficiency. These should include tradable energy efficiency permits or "white" certificates, green mortgage concessions, preferential tax treatment, and targeted incentives.

6 Make **market transformation** the primary objective of federal energy efficiency programming, working with Provinces, Territories, Municipalities and all stakeholders to transform new and retrofit building, appliance, lighting, electronic equipment, and industrial equipment and process markets.

7 Provide national support for **training/certification** of DSM program managers, contractors, circuit riders, building operators.

8 Show **leadership and support for market transformation** by expanding the Federal Buildings Initiative into a full green procurement strategy where all federal facilities are built, leased, upgraded, equipped and operated to the highest levels of efficiency on a life cycle cost basis.

9 Establish a **national energy efficiency finance fund** in cooperation with the finance industry, private sector investors, and municipalities. Reduce financial incentives and tax concessions for fossil fuels and nuclear and divert them toward **new incentives for energy efficiency** (and renewable energy).

10 Put special programs in place to reduce "energy poverty" and raise building standards for **First Nations communities and low income families.**

11 Expand Canadian participation in **international partnerships** such as REEEP, NAFTA, and the IEA, providing support for energy efficiency in developing countries as well as North American and international discussions.

To review a more detailed version of this policy brief or for more information on the Canadian Renewable Energy Alliance (CanREA), please visit www.canrea.ca or contact:

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