



BACKGROUNDER

About WADE Canada

WADE Canada is a registered, national, non-profit industry association which supports growth and development of the DE industry.

It is the successor of the New Energy Resources Alliance (NewERA), which was established in April 2002 when two organizations, Climate Change Central and the Alberta Research Council, sponsored a collaborative effort to create an industry-led association dedicated to decentralized energy.

In 2007, after four years of service to the industry, NewERA transformed into WADE Canada, the country chapter of the World Alliance for Decentralized Energy (WADE). The World Alliance for Decentralized Energy works to accelerate the worldwide development of high efficiency cogeneration, onsite power and decentralized renewable energy systems that deliver substantial economic and environmental benefits. WADE Canada has retained the grass roots emphasis of NewERA and its members are benefiting from a direct link to global DE markets through other country chapters of WADE such as India, China, Peru, USA and Europe.

WADE Canada is the focal point for Canada's traditionally fragmented decentralized energy industry. It serves as a national coordinator for stakeholders from all municipalities, provinces and territories and from all aspects of the value chain.

Vision

A sustainable energy future where affordable, efficient, reliable and clean decentralized energy technologies are deployed in community driven markets and enabled by progressive policies and legislation.

Our energy future will be supported by a balanced-growth supply mix that maximizes the benefits of both centralized and decentralized energy systems. A future where buildings and communities are carbon neutral, our waste streams are harvested for thermal and power generation and our electric grid operates as a smart, self-healing ElectriNetSM.¹

Mission Statement

What brings WADE Canada's members together is our common interest in the production, management and storage of clean and green energy closer to the end user. What keeps us together are trusting relationships built on open and honest discussion and realistic expectations.

Hence, the WADE Canada Mission is to:

- A. establish ourselves as the national point of contact for the DE industry network,
- B. enable innovation in the DE industry by supporting the growth of small to medium sized business,
- C. lead the DE industry through a national policy reform process that engages and enables government, education and industry,

¹ The Electric Power Research Institute, Inc. (EPRI) refers to the ElectriNetSM concept as architecture that "can enable a highly interconnected, complex, and interactive network of power systems, telecommunications, the Internet, and electronic commerce applications. It could facilitate more competitive electricity markets by supporting myriad informational, financial, and physical transactions between traditional utilities, independent power producers, third-party providers of electric energy services, consumers, and new members of the electricity value chain. Most importantly, it integrates all of these market integration functions with the real time management of the grid itself to assure reliable and secure operation"

http://www.smartgridnews.com/artman/publish/Technologies_Communications_Resources/Strategic_Technology_Research_Backgrounder_ElectriNet-1103.html

- D. support stakeholders throughout the value chain to accelerate DE deployment in Canada and
- E. successfully manage a financially sustainable industry association.

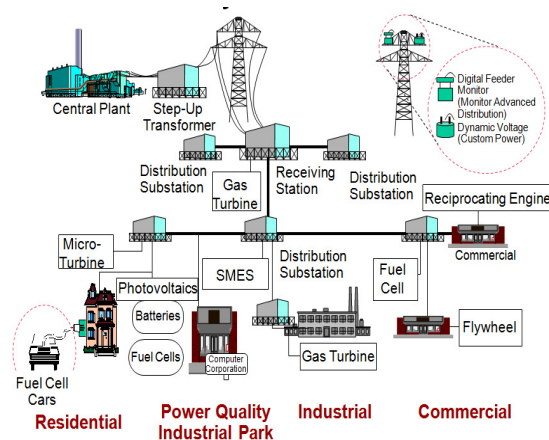
With this Mission, WADE Canada contributes to improving Canada's commitment to DE at a national level.

For more information please visit www.wadecanada.ca

About the Decentralized Energy (DE) Industry

The DE industry covers several segments including energy generation, storage, infrastructure and efficiency.

DE is generation at the point of consumption. It is locally produced, managed and stored forms of heating, cooling and/or electrical power. DE encompasses a broad spectrum of technologies and complements the traditional centralized energy generation model where large-scale generation systems transmit electricity to consumers over great distances.



Source EPRI 2002

The energy supply diagram above illustrates how DE is integrated into our existing infrastructure. The diagram begins with the traditional central power plant and step-up transformer model. The DE technologies enter the system at the distribution substations. At the point of residential, industrial and commercial end-use a selection of DE examples are illustrated including gas micro-turbines, photovoltaics, energy storage systems (batteries, fly wheels and Superconducting Magnetic Energy Storage Systems [SMES]) and fuel cells.

DE technologies such as residential combined heat and power and tri-generation systems that produce electrical power, heating and cooling simultaneously are designed to capture and use waste heat thereby increasing overall system efficiencies up to 80 percent to 90 percent.

The benefits of decentralized energy include:

- improved efficiency through reduced line losses and thermal efficiency gains,
- deferred capital investments in transmission and transformation upgrades,
- increased reliability of the transmission and distribution grids,
- reduced emissions and health impacts from traditional energy systems, and
- reduced energy delivery costs through integration of energy generation into buildings design and community planning.

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