



Renewable and Electrical Energy Division

On-Site Generation at Government Facilities

Renewable Energy Deployment Initiative (REDI)

A CLIMATE CHANGE MEASURE

As part of its strategy for the electricity sector, *Government of Canada Action Plan 2000 for Climate Change* announced a series of measures to promote the use of electricity from emerging renewable energy sources. To implement this, it expanded the scope of the *REDI for Federal Facilities* to include on-site electricity generation using emerging renewable energy systems, such as **solar photovoltaics** and **wind**.

DELIVERY PLATFORM

The program will be delivered as an extension of existing activities under the *Renewable Energy Deployment Initiative (REDI)* aimed at federal buildings. Activities will include:

- Creating awareness of on-site generation alternatives such as solar photovoltaics (PV) and wind power with federal building managers and their service providers such as architects, engineers and energy service companies.
- Providing ad-hoc technical and financial support for feasibility and design studies aimed at actual projects on federal buildings.
- Providing financial incentives towards the cost of purchasing and installing a qualifying system (25% up to a maximum of \$80,000 per project).

GOALS

- Create awareness of emerging renewable energy technologies with Canadians through installations in high-visibility federal buildings in **on-grid** locations.
- Develop a sustainable market in **off-grid** federal facilities for reliable and cost-effective renewable energy applications.

POTENTIAL PARTNERS

NRCAN will work with federal departments such as DND, PWGSC, CH (Parks Canada), EC, DFO and others, given their significant facilities holdings in off-grid and grid-connected high-visibility locations.

TIMEFRAME

April 01, 2001 to March 31, 2004

ANTICIPATED OUTCOMES

- Installed total generating capacity of about 125 kilowatt capable of producing about 0.15 gigawatt-hour of electricity annually.
- Greenhouse gas emission reductions that will be credited to federal facilities amounting to 100 tonnes of CO₂ equivalent annually (about 3,000 tonnes of CO₂ equivalent over the expected life time of the systems).
- Photovoltaic technologies will be showcased on approximately 15 federal buildings in grid-connected high visibility locations (preference will be given to projects involving building-integrated PV applications).
- Small photovoltaic and wind energy technologies will be installed in approximately 15 federal facilities in off-grid locations (preferences will be given to sites that attract high volume visitors and/or have a public outreach component).

IMPORTANT LINKS

REED (www.nrcan.gc.ca/es/erb/reed)

CEDRL (cedrl.mets.nrcan.gc.ca)

CanREN (www.canren.gc.ca)

RETScreen® (retscreen.gc.ca)

Canadian Solar Industries Association (www.cansia.ca)

Canadian Wind Energy Association (www.canwea.ca)

INFORMATION

Josef Ayoub / Sylvain Martel

CANMET Energy Diversification

Research Laboratory

1615 Lionel-Boulet Blvd., Box 4800

Varenes, Québec J3X 1S6

Telephone: (450) 652-1981 (JA) / (450) 652-6747 (SM)

Fax: (450) 652-5177

Email: jayoub@nrcan.gc.ca / smartel@nrcan.gc.ca