Case Study: Remote Tourism Facility & Research Station

The remote **Kangidluasuk Camp** is located in northern Labrador; at the most southern boundary of the **Torngat Mountains National Park** -- the entire park territory is only accessible by ocean going boat and helicopter.

In summer 2010 two EcoNomad™ utility modules, six pre-fabricated accommodation units plus two fuel farms have been transported to the remote site by ocean going barge from Goose Bay, Labrador.

The entire building assembly and utility appliance are designed for a 12 month operation; initially the facility will only operate from May to September but once ongoing funding is secured the research facility will be used during the winter months.

- The research facility building provides accommodation for a research staff of 6 to 12 person (laboratory and accommodation spaces).
- In addition, the building will be used as a tourism base camp for up to 50 day visitors (commercial kitchen, dining room and washroom facilities).

The two utility appliances provide all required infrastructure services for the research station & tourism facility building:

- **Power generated by a renewable energy system (solar PV)**
- **120 unit battery bank to support the RE system**
- **Back-up power supplied by 2 micro co-generation engines**
- **Power management and power distribution to an adjacent camp site, fuel farm and the research/tourism building**
- **Potable water treatment and management -- membrane filtration, UV disinfection, storage and distribution**

Factory-built Transportable

Infrastructure Appliance

PROVEN TECHNOLOGY:

The EcoNomad™ Utility appliances have been manufactured since 2003 and provide an environmentally friendly solution to temporary and permanent installations requiring a reduced environmental footprint.

Ideally suited for installations such as:

- **Temporary construction sites or winter road construction**
- **Fire fighting camps, tree planting or disaster relief camps**
- **Remote tourist establishments, lodges, outpost camps**
- **Remote exploration and mining camps**
- **Spill clean-up sites, environmental remediation sites**

CONVENIENCE:

- To facilitate easy transport by road, rail, water or air to any location in the world, the technology is housed in a standard 8' by 20' or 40' ISO shipping container. The unit can be insulated or climate controlled to allow for operation in the harshest climates.
- The technology is designed as a modular system; equipment and components can easily be exchanged, deleted or upgraded at any time without significantly affecting the overall operation of the core technology.
- The most innovative feature of the EcoNomad™ technology is the optimization and integration of each component to maximize operational efficiency, minimize interference and to take advantage of mutually beneficial interactions.
- To assure best operation, critical components and equipment are sourced from well known global suppliers such as: General Electric, Yanmar, Omron, Schneider Electrical / Xantrex, SJE Rhombus, Grundfoss & Trojan.

TECHNOLOGY:

The EcoNomad™ utility appliance technology was developed between 1999 and 2003 – partially supported by Canada Mortgage and Housing Corporation (Research Division), Industry Canada and the National Research Council.

- In 2000, the EcoNomad™ utility appliance technology was chosen for the Canada Mortgage and Housing Millennium Housing Award (Technology Category).
- In 2007 the technology was selected as the national winner (Canada) in the international "Energy Globe" sustainable technology competition, sponsored by the European Union in Brussels.

CONTACT:

ARCHITECTURAL & COMMUNITY PLANNING INC.

261 Albany Street
Winnipeg, Manitoba
R3J 2A9
Ph: 204 831-0216
E-mail: staschik@mts.net