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PARNASIMAUTIK

Our Region
ENERGY
Information Sheet 15

Context

Three of the most important elements of economic development are raw materials, a reliable source of energy and access to markets. Despite proximity to the huge hydroelectric power-generating complexes that have fuelled the province's economic growth for decades, Nunavik communities are not connected to the Québec electrical power grid. Development of mining and community potentials will require changes in the energy sector.

A Few of the Challenges

Hydro-Québec supplies electricity in the communities through 14 off-grid networks that run on diesel generators. Homes and buildings in the communities are all heated by oil furnaces. Over 50 million L of hydrocarbons are consumed annually for these purposes, generating greenhouse gases.

Given population growth trends, annual peak electrical consumption will be 110 MW by 2025. Current installed capacity is 25 MW.

The cost of constructing power transmission lines to all the communities has been estimated at $1.6 billion, based on existing hydroelectric power-generating facilities. Assuming the construction of new hydroelectric power-generating facilities in the region, power transmission line construction costs could nonetheless be as high as $890 million.

The rate paid by Nunavik residents for up to 30 kWh of electricity per day is comparable to the rate paid in southern Québec. However, if Nunavik residents use electricity to heat their homes or domestic water, the rate they must pay for their electricity in excess of the 30 kWh is eight times greater than the basic cost. This stepped rate prevents consumers from using electricity for purposes other than lighting and strict domestic needs, and contributes to high living costs for homeowners and high operating costs for businesses.

Solutions and Priorities

The Sanarrutik *Partnership Agreement on Economic and Community Development in Nunavik* (2002) recognizes the need for a reliable source of energy.

Connecting the region to the Québec hydroelectric grid would ensure a reliable and affordable source of energy for communities and for the development of economic potentials.

Power transmission lines would open the door to fibre-optic links and other cutting-edge broadband telecommunications infrastructure.

Connect Kuujjuaq and Kuujjuarapik to the Québec electrical power grid.

Source: *Plan Nunavik*, Sector by Sector Concerns and Priorities for Nunavik – Energy, p. 399-405.

Evaluate the feasibility of alternative energy sources including a small-scale hydroelectric power-generating project, wind power-generating facilities and hydrokinetic (fast-moving river) potential.

Ensure balance between development of the energy sector with protection for the ecological systems that are vital to continued traditional subsistence harvesting and the Inuit way of life.

Discussion

Connection to the Québec electrical power grid could contribute to lowering the cost of living. Specifically, communities would pay less for their electricity and might choose to heat and cool homes and buildings with electricity instead of furnace oil. Connection to the Québec electrical power grid is also a strategic issue for regional industrial development. Energy sector and industrial development could threaten the environment and wildlife, along with the way of life in the communities. How will we power our region through the 21st century?