

# Empowering staff pays very big dividends for remote northern First Nations' health care



Investing in staff can lead to empowered workers. Investing in facility management staff can lead to enhanced facility operational efficiencies, improved infrastructure, reduced ecological footprint, and decreased energy consumption and related energy costs. And nowhere is this more evident than along the western coast of James Bay in Ontario's far north at the Weeneebayko Area Health Authority (WAHA).

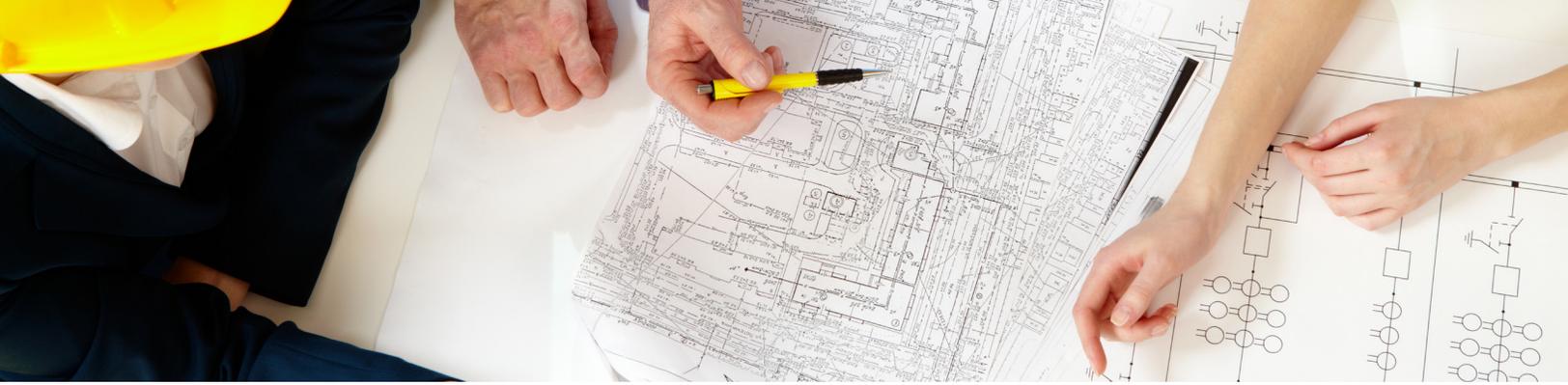
Thanks to a unique collaboration between the Canadian Coalition for Green Health Care's HealthCare Energy Leaders Canada (HELC) initiative, WAHA, and the Ontario's Independent Electricity System Operator (IESO), Plant Operations and Maintenance staff from WAHA have been supercharged with new building operator skills, enthusiasm, and passion which has resulted in a growing list of energy retrofit projects being developed and implemented to improve working and healing environments for the people in

the region. The end result is less money spent on utilities and more money available for diagnosis, treatment and care delivery.

With increased local technical capacity leading the way, staff have tackled multiple projects that previously would have been contracted out to companies in Timmins, Thunder Bay and elsewhere.

Capacity building is about enabling and embedding technical knowledge within an organisation in support of energy-conserving behaviour which in turn helps to ensure energy retrofit and management projects achieve maximum payback and steady savings over time. Training facility staff to be energy champions creates role models within the organisation who then influence others to become involved in improving the environmental stewardship and climate change resiliency of their health care infrastructure.

As a result of WAHA leadership's support for enhanced building operator training, energy conservation initiatives are significantly reducing WAHA's facility operating expenses and is making the organisation far more self-sufficient. Staff-initiated projects include the replacement of aged and drafty single-glazed aluminum- and vinyl-framed windows and doors at the Weeneebayko General Hospital with modern energy-efficient units. The \$1.4M project is showing annual savings of approximately \$126K with an ROI of 9.01% without incentives factored in. Projected fuel oil savings are 75,557 litres with avoided CO2 emissions of 206,650 kg.



Replacing outdated and energy-inefficient lighting with modern, energy-efficient ENERGY STAR® certified LED products has similarly provided very significant savings. Upgrades to interior and exterior lighting fixtures at WAHA facilities in Moose Factory, Attawapiskat, Fort Albany and Moosonee will result in total lifetime savings of approximately one million dollars.

A recent radiator control valve initiative that revealed multiple internal component failures because valves specifically designed for hot water application had been installed in a steam system resulted in yet another staff-led project that lowered steam demand, decreased boiler/steam system fuel oil consumption and more comfortable working and patient care environments.

Similarly, an in-house initiative to curtail steam condensate loss with its resultant higher energy use, water consumption and water treatment costs was resolved by repairing the condensate return lines, steam tracing it to improve efficiency during the cold winter months, and installing a new layer of heavy insulation. Since completion, ruptures and leaks have been eliminated, and the system provides reliable heat when needed. A three-year payback is anticipated.

## Energy Management Resources

HealthCare Energy Leaders Canada - [www.greenhealthcare.ca/HELC](http://www.greenhealthcare.ca/HELC)

ENERGY STAR® - [www.greenhealthcare.ca/energystar-copy](http://www.greenhealthcare.ca/energystar-copy)

RETScreen Clean Energy Management Software - [www.greenhealthcare.ca/retscreen](http://www.greenhealthcare.ca/retscreen)

*The Canadian Coalition for Green Health Care is Canada's premier green health care resource network and is leading the evolution of green in Canada's health sector as a national voice and catalyst for environmental change. Collaboratively, we strive to reduce health care's ecological impact from compassionate care delivery while providing a nurturing platform upon which to discuss and promote best practices, innovation, environmental responsibility and climate change resiliency. [www.greenhealthcare.ca](http://www.greenhealthcare.ca)*

*This initiative was made possible in part through the financial support of the Independent Electricity System Operator's (IESO) Education and Capacity Building Fund. The Canadian Coalition for Green Health Care is solely responsible for implementation of, and the content of any materials produced by, this initiative, and the IESO has no responsibility or liability whatsoever in the event that any person suffers any losses or damage of any kind as a result of the initiative."*

## Capacity building is all about enabling and embedding technical knowledge within an organisation and making it more self-sufficient.

Staff is extremely proud of all their accomplishments and continue to seek out new projects which will challenge their new skill set while improving the quality and climate change preparedness of WAHA's building stock.

WAHA's Manager of Engineering Services, Jean Arsenault, says of his team, *"This has made the guys feel like they are part of the solution, rather than have them stand back and watch outside contractors complete the upgrades at a much higher price."*

Evidence shows proper energy management training, coupled with the benefit of ENERGY STAR® high-efficiency product knowledge and a motivated in-house team supported by senior management, can lead to the saving of energy dollars which in turn can be put back into the delivery of health care for the communities WAHA serves, and a reduction of the organisation's environmental footprint for a healthier planet.