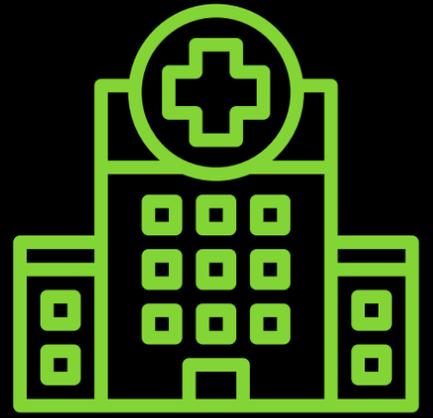


# BUILDINGS & ENERGY



Aging infrastructure that is up for replacements can pave the way for more energy efficient and economical solutions. That is exactly what happened in the small but busy rural hospital in Haliburton, Ontario.

In 2010, the hospital decided to tap into geothermal energy: a renewable source of energy taken from the earth's core. Over the past decade, it has led to approximately 100 000-150 000 L of fuel oil/year/site in savings. Although this value fluctuates depending on how cold the winters are, this is "quite a substantial amount of savings," says Lionel Domerchie, PEng, Director of Facilities and Projects for Haliburton Highlands Health Services.

And by collaborating with engineering firms aiming to bring energy management solutions to healthcare settings, the hospital has seen additional financial and environmental benefits from solar panels, upgrading boilers, LED lighting, and optimizing building automation controls.

## SUCCESSSES

Being able to justify the project for financial feasibility is a key component of getting new engineering initiatives off the ground. "It wouldn't have happened if we didn't think creatively on how to bundle energy management initiatives into one project. For example, our boiler upgrade would not have stood on it's own without the LED lighting or some of the other optimizations we have done around reclaiming waste heat" -LD



- Large-scale and small-scale energy management projects that save costs and energy

- Working closely with engineering firms and the financial community to think creatively and justify/secure the expenditure of capital for these upgrades (including acquiring government funding for about 60% of the project via the Health Infrastructure Renewal Fund (HIRF) & Exceptional Circumstance Project Grants)

## PRACTICAL ADVICE

- Planning, planning, planning!

- Networking, networking, networking!



- Work closely with a knowledgeable energy management engineer to sort through the complexities of options to address:
  - 1) Living in a northern climate
  - 2) Infrastructure limitations of rural communities

- Learn about supply chain challenges as there is a general reliance on offshore companies and equipment (this became overwhelmingly clear during the COVID-19 pandemic)

## FUTURE GOALS



- Continue to network with engineering firms, the Canadian Healthcare Engineering Society (CHES), and local hospitals to share stories and lessons

**Interviewee:**

Lionel Domerchie (LD), Director of Facilities & Projects, Haliburton Highlands Health Services

