

Lakeridge Health

Lakeridge Health Electrification and Decarbonization (LHEAD) Project



Description

Maximizing incentives to drive deep greenhouse gas reduction and utility savings

Lakeridge Health, Oshawa, Durham Region's largest hospital at 1.1 million ft² and home to the R.S. McLaughlin Durham Regional Cancer Centre, aims to decarbonize, enhance energy efficiency, and address aging infrastructure.

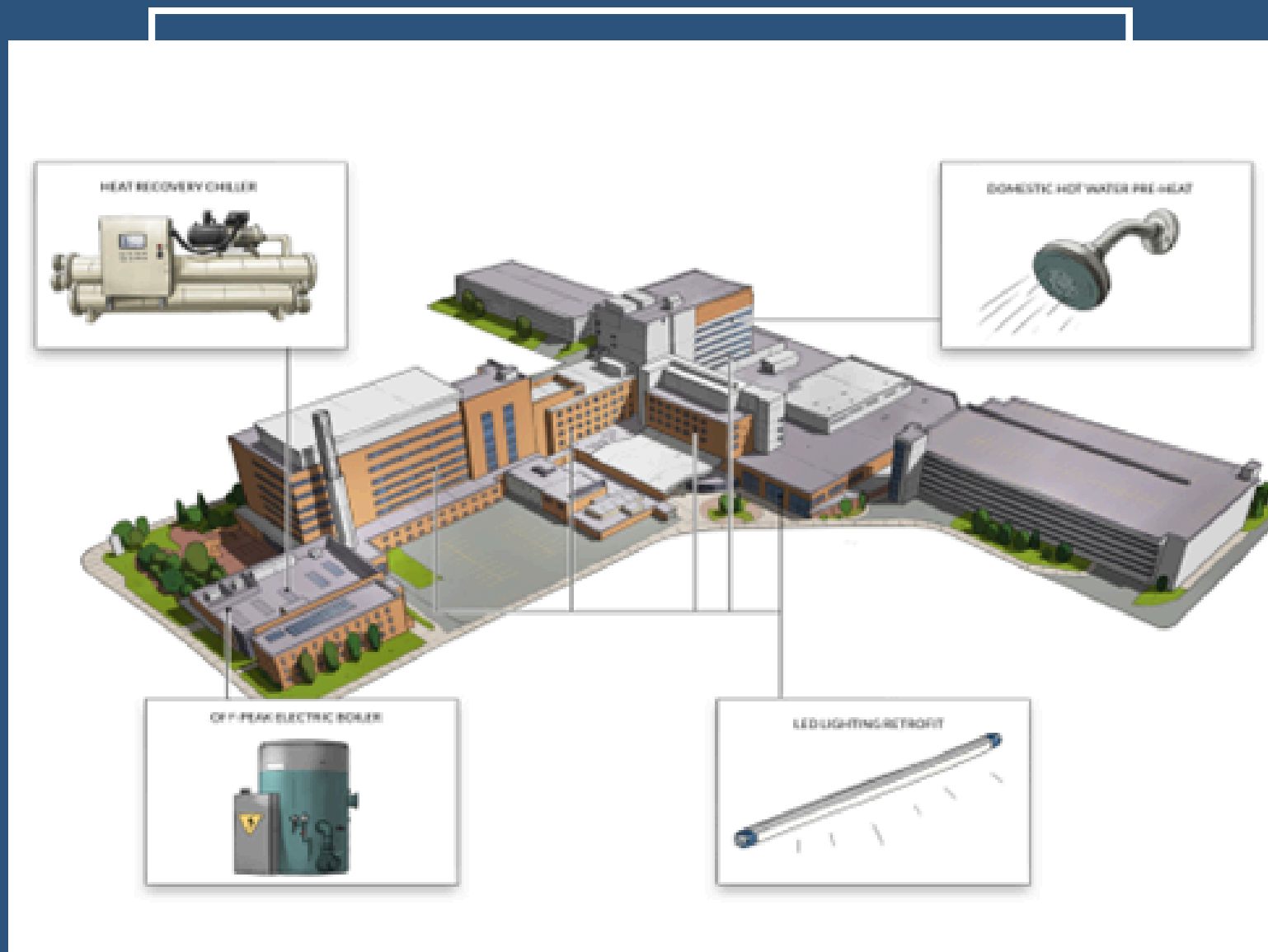
Awarded the Low Carbon Economy Challenge (LCEC) fund in 2022, the hospital targets a reduction of 3,530 tonnes CO₂e annually by March 31, 2025.

Project Measures

Project LHEAD focuses on integrated decarbonization measures that boost utility rate resilience and operational flexibility. Key initiatives include:

- ◆ Heat recovery chiller.
- ◆ Off-peak electric boiler.
- ◆ Conversion to Class A rate tariff.
- ◆ Peak shaving using existing cogeneration equipment.
- ◆ LED lighting retrofit.

Project LHEAD Visuals



Desired Outcomes

- ◆ By qualifying for \$2.15M in LCEC, Enbridge and Save on Energy incentives, Project LHEAD will pay for itself in 3.95 years.
- ◆ It will reduce GHG emissions by a remarkable 5,050 tonnes of CO₂e per year, which is a 35% overachievement of the LCEC goal.
- ◆ It will generate approximately \$1.08 million in savings per year through reduced carbon taxes and natural gas expenses, resulting in net utility savings of over \$509,000 annually.

Long-term Vision and Sustainability Commitment

At Lakeridge Health we recognize the unique opportunity to address deferred maintenance and infrastructure renewal projects by leveraging environmental sustainability and energy savings initiatives. Our vision is to be a pioneer in sustainable healthcare practices, aligning our energy management strategies with the broader goals of environmental stewardship and community well-being. We believe that sustainability is not just a responsibility but an opportunity to lead by example, demonstrating how healthcare can thrive in harmony with the environment.

Progress to Date

As of October 2024, the detailed engineering of Project LHEAD has been completed. The hospital's engineering and construction partner is in the process of obtaining building permits, sourcing various equipment, and inviting bids from subcontractors ahead of construction. The anticipated project completion date is March 31, 2025.

