

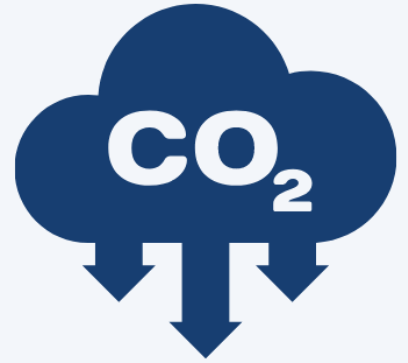


100% Energy Self-Sufficient

Hydroelectric Power

The Welland Canal is completely energy self-sufficient, contributing to a significant reduction in the St. Lawrence Seaway Management Corporation's (SLSMC) carbon footprint.

By harnessing the power of water in motion in the Welland Canal, the SLSMC generates its own electricity. Generators, driven by turbines, convert the potential energy of the water into mechanical energy. The structure that houses the turbines and generators is called the powerhouse.



The Powerhouse:

- is located at the base of Lock 4
- features a 22 000 volt distribution system that runs from Lake Erie to Lake Ontario
- houses two 5MW hydroelectric generators
- produces a maximum of 6MW at any given time
- operates 24/7/365



Glendale Powerhouse

Supplies Power to:

- 8 bridges
- 11 locks, including water control gates and valves
- navigation lights
- multiple buildings and structures



1 of 2 hydroelectric generators
located in the Powerhouse

Quick Facts:

- The Welland Canal portion of the SLSMC has been producing its own hydroelectric power since 1932.
- Power is transmitted at 22, 000 volts, which is unique in the province of Ontario (utilities distribute at 13,800V or 27,600V).
- Hydroelectric power transmitted from the powerhouse could supply electricity to the equivalent of 5000 homes for one year!
- Hydroelectric power is stable, clean and renewable. It emits ZERO pollutants and ZERO green house gas emissions.
- The Welland Canal is 100% energy self-sufficient and relies only on local utilities for back-up power.