

Energy Services Acquisition Program

P3 – Energy Service Modernization (ESM) Project



Client	Public Services and Procurement Canada
Location	National Capital Region
Buildings Type	Thermal Plants
Duration	35-Year Contract Agreement (2020-2055)
Total floor space:	3.56M m ²

In June of 2019, Public Services and Procurement Canada awarded a 35-year public-private partnership contract to Innovate Energy, a consortium consisting of ENGIE Services Canada, PCL Constructors Canada, PCL Investments Canada and Black & McDonald. Innovate Energy is responsible for the modernization and operation and maintenance (“O&M”) of the National Capital District Energy System (“DES”) that heats 80 buildings (total floor space of 1.83M m² which houses more than 50,000 public servants) and cools 67 buildings (total floor space of 1.73M m²) in Canada’s capital region, including mission-critical sites within the Parliamentary Precinct.

This contract was awarded as part of Government of Canada’s Energy Services Acquisition Program (“ESAP”) that contributes to the Government’s goal in reducing its operating energy consumption and Green House Gas (“GHG”) emissions by 40% by 2030.

Project Description:

The existing National Capital DES comprises five Centralized Heating and Cooling Plants (“CHCPs”) – Cliff; National Research Council; Tunney’s Pasture; Confederation Heights; and National Printing Bureau – and their associated Distribution Systems. The five CHCPs are configured in four existing DES.

From 2020 to 2025, Innovate Energy will design, build and convert the National Capital DES existing high temperature steam system to a more energy-efficient Low Temperature Hot Water system. Innovate Energy’s O&M Team includes ENGIE Services Inc. as the O&M Provider responsible for operating the National Capital DES existing heating and cooling systems during the construction phase. Upon construction completion, ENGIE will operate and maintain the new modernized system through to 2055.

Services to be Provided:

- O&M services of the Existing DES during the Design and Construction phase;
- 30-year O&M and rehabilitation of the Modernized National Capital DES;
- Efficiency and reduction of GHG emissions of the Modernized National Capital DES;
- Preventive, predictive and corrective maintenance;
- O&M optimization with the use of ENGIE’s Smart Digital Solution (“SDS”) to enable real-time monitoring and alarms, connection to buildings, energy consumption optimization, asset lifecycle improvement, monitoring of Key Performance Indicators (“KPIs”) (efficiency, coefficient of performance) and decreasing carbon footprint;
- Fuel and Electricity Procurement Management;
- Asset management by leveraging technical building expertise (hard and soft services) to ensure lifecycle expectations and objectives satisfy the financial and technical requirements;
- Instilling a culture of health, safety, environment and security for ENGIE employees and Partners;
- Implementation of an Emergency Response Plan and Incident Logging Centre, including 24/7 Help desk and back-up support;
- Project Reporting.