

Project Highlight

Environment and Climate Change Canada (ECCC)

AMERESCO 🖓

Improving Quality of Life Through Greenhouse Gas Emissions Reduction

Technology Type:

Energy Efficiency | Central Plant Upgrades

LED Lighting | Energy Savings Performance Contract

Facility Size

 $20,731_{\text{square meters}}$

Annual Carbon Reduction

56+%

Estimated Annual Water Savings

5,350 cubic meters

Annual Energy Savings

\$509,621 CAD





Summary

Ensuring a clean, safe, and sustainable environment for present and future generations of Canadians, Environment and Climate Change Canada (ECCC) partnered with Ameresco to conceptualize, plan, design, and oversee installation of energy infrastructure upgrades serving the organization's laboratories at 335 River Road in Ottawa. The Energy Savings Performance Contract (ESPC) focuses on several laboratory and HVAC efficiency measures with comprehensive LED lighting retrofits.



Ameresco provided energy efficiency and reliability upgrades to nine buildings under the ESPC. Several laboratory and HVAC efficiency measures were implemented to feature Energy Efficiency & Facility Renewal which includes design support for HVAC and interior and exterior LED lighting retrofits. The project's implemented technologies included:

- Comprehensive LED lighting retrofit
- High efficiency air-cooled chillers
- Lab Airflow System Recommissioning
- **HVAC** management control systems
- Renewed Cold Storage room for -15 C and +25 C Lab Airflow System



Through the partnership with ECCC facility engineers and operators, PSPC project managers, the PSPC FBI team, and Ameresco Canada, the Climate Action team's project to retrofit the HVAC at the ECCC laboratories exceeded the initial requirements in terms of GHG reductions and cost savings. I believe one of the most important benefits of this project, besides energy savings and the recapitalization of the mechanical infrastructure, is the enabling of scientific activities through accurate temperature and humidity control of the laboratories. The project also demonstrated the effectiveness of combining PSPC resources with client departments and private sector leaders in energy efficiency to deliver clear results. Adam Kurz

Benefits

Over 220k square feet of buildings will receive energy and HVAC upgrades designed to reduce GHG emissions by 990 tonnes or 56.3%. Other benefits include:

- Enhanced building comfort
- Reduced energy consumption
- Projected annual energy savings (electricity and natural gas) of \$509,621 (CAD)
- Estimated annual water efficiency savings of \$21,000 (CAD) when City of Ottawa Water & Sewer rates are applied



Senior Engineer, ECCC

Ameresco's team of energy experts can assist you in identifying the solution that fits your needs.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please call 1-866-AMERESCO or visit ameresco.com.