



Confederation Heights Energy Centre Backgrounder

Leading by example in the fight against climate change, the Government of Canada is fundamentally changing how it heats and cools federal buildings in the National Capital Region (NCR). As part of this bold climate action, Public Services and Procurement Canada (PSPC), in partnership with Innovate Energy, is retrofitting the Confederation Heights Energy Centre to become a modernized energy centre.

An initiative that's part of the Energy Services Acquisition Program (ESAP), the Confederation Heights Energy Centre is the only one of the four ESAP energy centres that is being retrofitted to provide modern heating and cooling services through the federal government's National Capital Region District Energy System (NCR DES).



View of Confederation Heights Energy Centre showcasing the new roof and structural steel upgrades.

Located adjacent to the Mooney's Bay O-Train light rail station on the east side of the Confederation Heights federal employment campus, the facility is being retrofitted to provide low temperature hot water heating and electric cooling services to a number of federal buildings located on the site.

A Modern Energy Centre for a Revitalized Confederation Heights

A [master planning exercise](#) is currently underway to redevelop Confederation Heights from a car-centric employment centre into a vibrant, transit-oriented, urban community that will also serve as a federal employment hub.

The Confederation Heights Energy Centre will play a key role in the redevelopment's vision of creating a sustainable mixed-use community.



Map of Confederation Heights and surrounding landmarks in Ottawa

The energy centre's modernization began in May 2020 and includes the conversion of the energy distribution from steam to low-temperature hot water for heating and electric chillers for cooling. This involves the replacement of older equipment with new, more efficient boilers and chillers. Work also includes the installation of a new roof and seismic structural upgrades, and new underground pipes to connect the energy centre to other buildings within the Confederation Heights complex. The result will be more efficient, reliable, and safer operations.



As the site gets developed, opportunities exist to connect other buildings to the Confederation Heights Energy Centre, thereby extending the environmental benefits of ESAP and the NCR DES.

Bold Climate Action

ESAP represents one of the Government of Canada's most impactful initiatives to reduce greenhouse gas (GHG) emissions from its operations. As one of North America's first conversion of a large public district energy network from steam to a low-temperature hot water system for heating and electric chillers for cooling, ESAP is fundamentally redefining how heating and cooling is delivered in large-scale networks.

Once ESAP's four energy centres are in operation in 2026, the NCR DES will see a 92 per cent reduction in its GHG emissions compared to 2005 baseline operations. Plans are underway to position the entire DES to be carbon-neutral by 2030.

History

Confederation Heights is a federal employment campus located approximately five kilometers south of Ottawa's downtown core, totaling approximately 188 hectares (464 acres) of land.

Originally a combination of woods, farmland, quarry, and brickyard, the lands were sold to the Government of Canada in the 1950s to be developed into a park-like campus for the public service. Included as part of the Gréber Plan for the National Capital Region (NCR), the objective was to decentralize federal employment from Ottawa's downtown.

In 1959, the Confederation Heights plant began providing heat to the other buildings on the campus. The first chiller was installed in 1984, at which point the facility became known as the Confederation Heights Heating and Cooling Plant. It currently serves eight buildings.

Next Steps

Construction work to modernize the Confederation Height's Energy Centre started in 2020 and is scheduled to be completed by 2025.

To learn more about ESAP and the National Capital Region's District Energy System, visit <https://nationalcapitaldistrictenergy.ca>.