



# Gatineau Energy Centre Backgrounder

## Background

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 building the Gatineau Energy Centre (GEC), one of the most sustainable cutting-edge energy centres in North America.



*Rendering of the main entrance to the GEC*

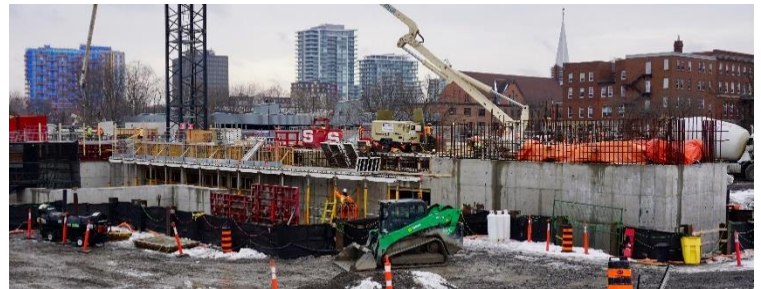
An initiative that's part of the Energy Services Acquisition Program (ESAP), the new GEC is one of four facilities that are being built or retrofitted to provide clean heating and cooling services through the federal government's National Capital Region District Energy System (NCR DES).

Connected to Hydro Québec's clean electrical grid, the GEC will provide carbon-neutral heating and cooling for buildings located along the district energy system's network of underground pipes, in the cores of Gatineau and Ottawa. The distribution piping from GEC will pass under the MacDonald Cartier bridge to downtown Ottawa and will connect to the new energy centres being built near the Supreme Court of Canada (Cliff) and at Tunney's Pasture. In the future, it will pass through downtown Gatineau, cross the Portage Bridge, closing the loop.

## From Grey to Green - An Architectural Gem in the Heart of Gatineau

GEC is more than a conventional energy centre; it has been designed to represent the innovation, sustainability, and achievements of ESAP.

Located on a former surface parking lot in Hull, Gatineau, next to the National Print Bureau on Sacré-Coeur Boulevard, the facility will be built mostly underground, allowing for the space overtop to be used as an expansive urban park, with lush gardens and courtyards.



*Gatineau Energy Centre's Construction 2024*

A network of paths will be accessible from GEC's "Energy Pavilion" – the main entrance and one of the few elements of the facility that appear above ground. From there, the pedestrian pathways will meander out across the building's green roof and into the rest of the site.

The new GEC Pumphouse is also being constructed along the Ottawa River's north shore to provide the GEC with a green and renewable source of cold water for the energy centre's cooling services. Similarly to GEC, the



*Rendering of the GEC Pumphouse*



facility will mostly be built underground, with a green roof and native trees and plants to beautify the landscape.

### **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.

In keeping with Canada's role as a global leader in clean technology and renewable energy use, the GEC will be one of the most progressive energy facilities of its kind and serve as a future case study for how other jurisdictions globally can decarbonize their building operations.

The GEC will leverage Hydro-Québec's carbon-neutral electricity to replace natural gas as the district energy's primary heating source. Once the GEC connects to the larger distribution network, the overall NCR DES operations will achieve a 92 per cent reduction in greenhouse gas (GHG) emissions compared to the 2005 baseline operations.

The GEC will be sustainably built (LEED Gold), featuring a green roof, Canadian mass timber, modern and durable ceramic panel cladding, a cistern for storing stormwater, and an expansive skylight and windows that provide natural light and views into the site's beautiful and lush gardens. In addition, during construction, most of the non-hazardous construction waste will be reused or recycled, and therefore diverted from the landfill.

### **Indigenous Commemorative Installations**

In collaboration with Kitigan Zibi Anishinabeg (KZA), Kebaowek First Nation (KFN), and Algonquins of Barriere Lake (ABL), the new urban park will honour Algonquin culture and history through four (4) variable installations of artwork and cultural features. The three communities will work collaboratively to design a welcome installation and provide feedback on the integration of sacred plants at the site and more. Additionally, they will each have the opportunity to create an original work of Algonquin art representative of their respective community.

### **Current Status and Next Steps**

Design of the GEC is well underway, with construction having started in February 2023. The GEC is expected to be in operation in 2026.

To learn more about ESAP and the NCR DES, visit <https://nationalcapitaldistrictenergy.ca>.



*Gatineau Energy Centre's Construction 2024*