innovate

We will develop and deploy new technologies to speed up Ontario's energy transformation.

By 2025

By the end of 2021, identify the SMR technology we wish to deploy in Ontario, which will be the first of its kind for SMR pan-Canadian deployment.

Aim to have the Ontario SMR project construction at the Darlington site well-underway (given all required licences and approvals are granted), leveraging our world-class workforce and innovative project management and construction processes and technologies to deliver the project on time and on budget.

Establish the Centre for Canadian Nuclear Sustainabilty, and innovation hub focused on developing and using innovative technologies and processes for the sustainable decommissioning of nuclear facilities (2020).

Aggregate thousands of EVs and chargers into a resource pool which provides 10 MW demand response and operating reserve for Ontario to meet changing electricity demand.

Develop and deploy nature-based solutions that can reduce the environmental footprint of our office buildings.

Begin feasibility assessments of nature-based solutions as an innovative means for increasing hydro generation.

Deploy equipment monitoring, reliability and software tools to report on and understand condition of assets to reduce maintenance and better predict remaining life of assets.

Continue to support the issuance of innovative financial instruments in line with climate change goals, such as Green Bonds.

Continue to support innovative projects that reimagine the applications of transportation electrification, such as vehicle-to-grid initiatives using EVs and electric school buses.

Continue to build a portfolio of energy storage facilities at customer sites to reduce the grid need for gas-fired generation at peak times.

Deploy energy storage to meet future grid capacity and reliability needs.

By 2040

OPG is net-zero carbon

Deploy new renewable generation to meet future energy needs.

Increase our aggregate resource pool (DERs, EVs and chargers) to provide 100 MW of demand response and operating reserve.

Optimize maintenance through the transition to condition-based maintenance, helping to reduce our carbon footprint by minimizing work.

Use artificial intelligence to operate a fleet of distributed energy resources (e.g. electric vehicles, solar, energy storage, flexible load), creating a Virtual Power Plant.

Develop and deploy a 100 MW clean hydrogen facility.

By 2050

The economy is net-zero carbon

Increase our aggregate resource pool (DERs, EVs and chargers) to provide 1,000 MW of demand response and operating reserve.