

# TC Energy is embarking on one of Canada's largest climate change initiatives.

**We are building Ontario's biggest battery to bring clean carbon-free electricity to nearly a million homes.**

The Pumped Storage Project proposed in Meaford is an environmental and economic solution to address deficiencies in Ontario's electricity system. The \$3.3 billion project enables electricity to be saved for a time when it is most needed.

**1,000 MW**  
of clean energy

**zero**  
emissions

**11 hours**  
run time



Climate change is at the forefront of all our minds.



**490,000 tonnes**  
per year reduction  
in greenhouse gas  
emissions



= **150,000 cars**  
taken off of  
the road



**Builds resilience**  
into the current  
system by providing  
backup power



The project turns economic losses into gains for all of Ontario.



**\$12 billion saved**  
by Ontario ratepayers  
over 40 years or \$250  
million savings/year.



**65% of total  
capital costs**  
captured locally, or  
close to \$2 billion



**800 jobs**  
during development  
and construction

## WHY?

### Ontario's electricity system produces too much power, resulting in wasted electricity and economic loss.

Surplus clean electricity is sold for less than the retail price of natural gas to residential and small commercial consumers. By exporting clean electricity at these low prices, Ontario consumers are effectively paying for electrical capacity that contributes to the clean-up of other jurisdictions' energy systems.

**In 2016, Ontario exported 14.6 terawatt hours of clean energy at a loss.**



powers

**14.6 terawatts**  
of electricity



costs

**1.5 million**  
homes



sold at

**\$1.4 billion**  
to produce



**\$384+ million**  
in financial loss



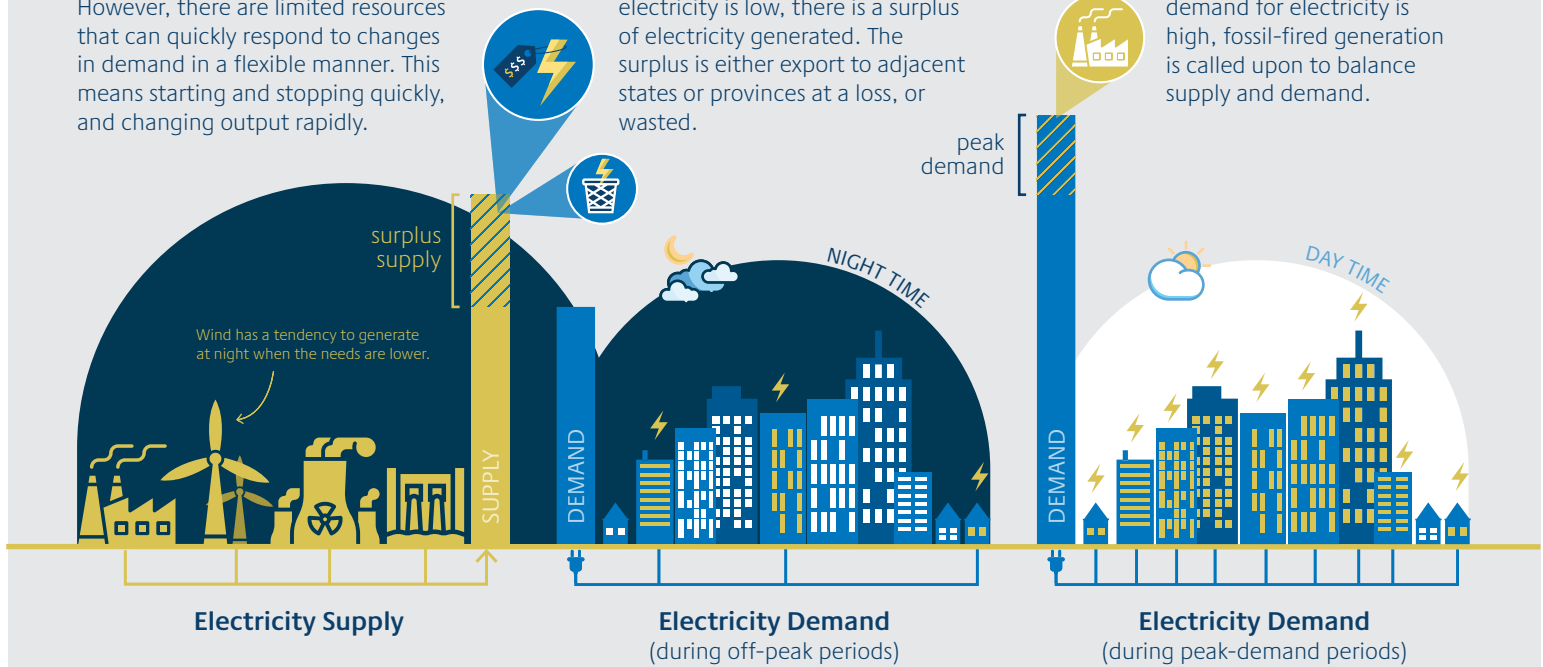
Source: Ontario Society of Professional Engineers

## A CLOSER LOOK AT ONTARIO'S CURRENT ELECTRICITY SYSTEM

Ontario has a diverse power system. However, there are limited resources that can quickly respond to changes in demand in a flexible manner. This means starting and stopping quickly, and changing output rapidly.

At night, when the demand for electricity is low, there is a surplus of electricity generated. The surplus is either export to adjacent states or provinces at a loss, or wasted.

During the day, when the demand for electricity is high, fossil-fired generation is called upon to balance supply and demand.



## THE PROJECT ADDRESSES WEAKNESSES

When there is low demand and a surplus of electricity, the project will use this excess electricity to pump water and store it in the reservoir.

During periods of high demand, water is released, spinning turbines to produce electricity. This reduces the need for gas-fired power generation, resulting in lower greenhouse gas emissions, and providing clean, renewable electricity for all Ontarians.

