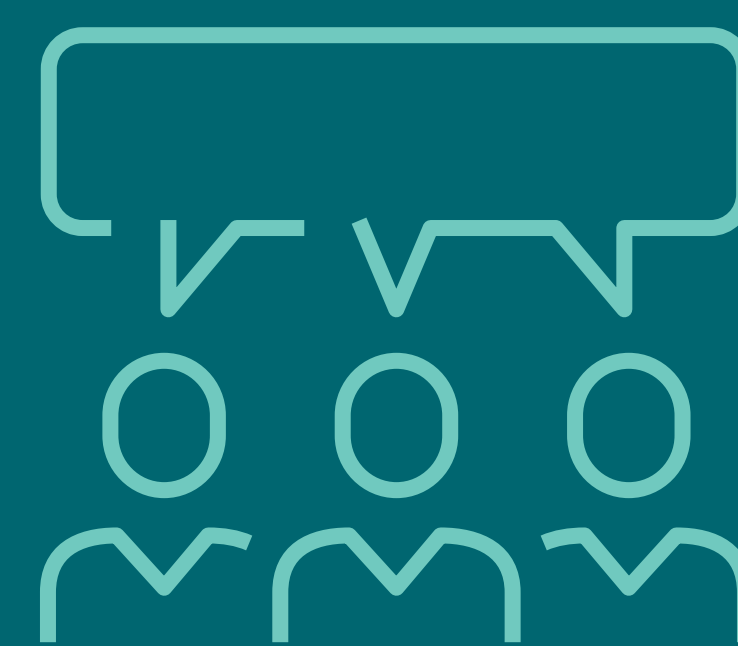
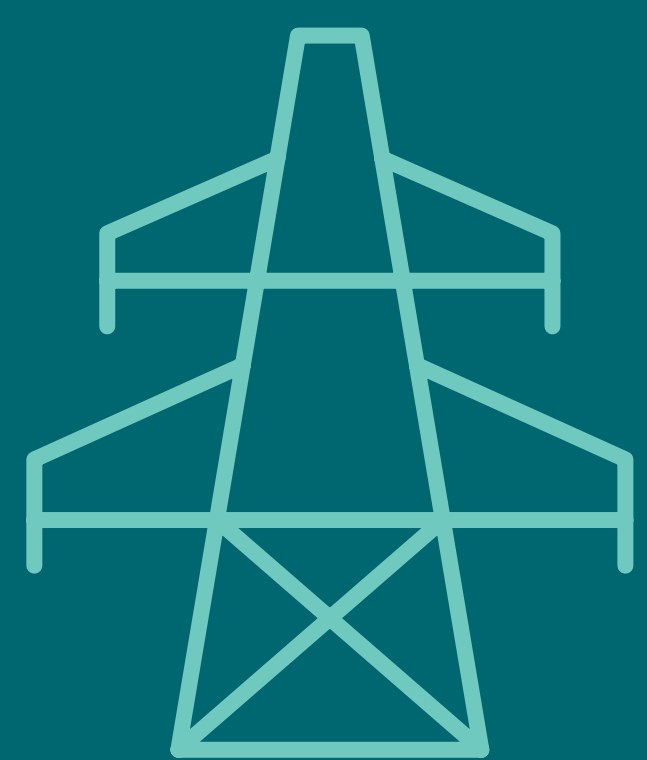


# Welcome

## Longwood to Lakeshore Project

### Community Open House #1



# Purpose of Today's Community Open House

- Provide an overview of Ontario's electricity system and the regional and local need for the project
- Introduce the Longwood to Lakeshore Project
- Discuss the Comprehensive Environmental Assessment (EA) process
- Present the Route Selection Study Area and provide information on the route selection process
- Share the anticipated project timeline
- Answer questions and gather your feedback

# Key Organizations

Building infrastructure to meet the energy needs of tomorrow involves a number of partners, including:



Ministry of the Environment,  
Conservation and Parks

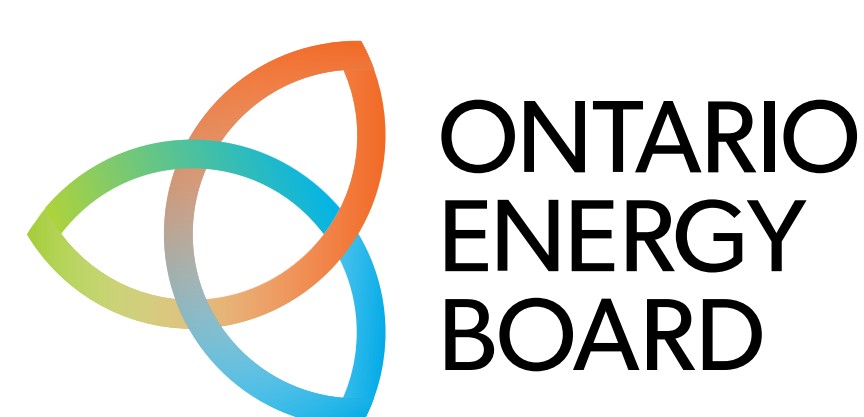
Legislative authority for environmental assessments in Ontario.



Oversees planning to ensure electricity needs are met both now and in the future.



Builds, owns, operates and maintains electricity transmission and distribution facilities across Ontario.



Regulates the electricity market in Ontario, including electricity rates.



Ministry of the Energy

Oversees the regulatory framework for the electricity system, including the Ontario Energy Board and the IESO.

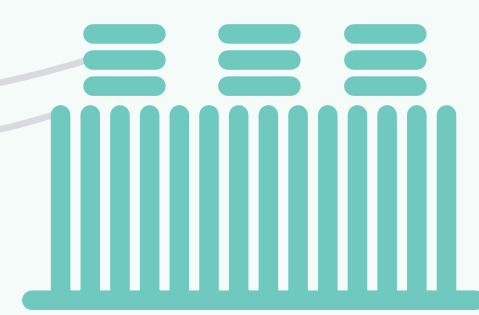


# How the System Works

## Ontario Power Generation and Private Generation Companies



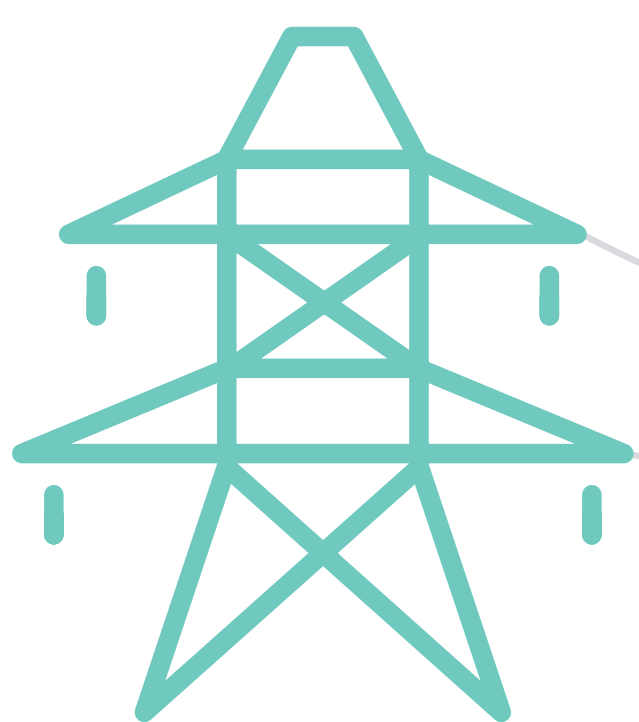
Generation



Step-up Transformer Station



## Hydro One or Licensed Transmitter

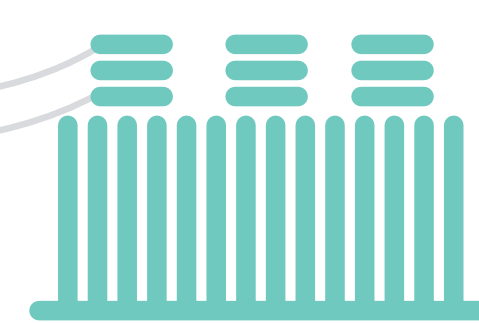


Transmission Lines  
115,000–500,000 volts

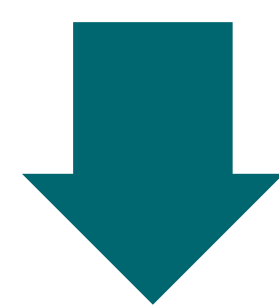
Transmission Lines



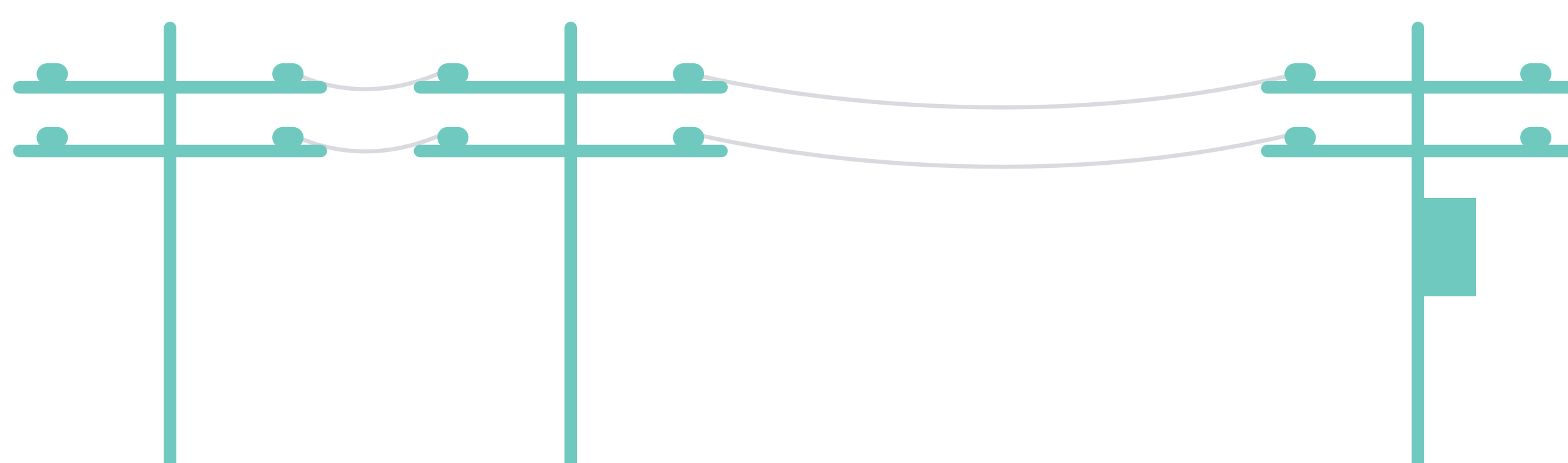
Transformer Station



Distribution Station

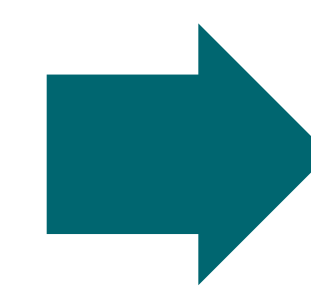


## Hydro One or Local Distribution Company

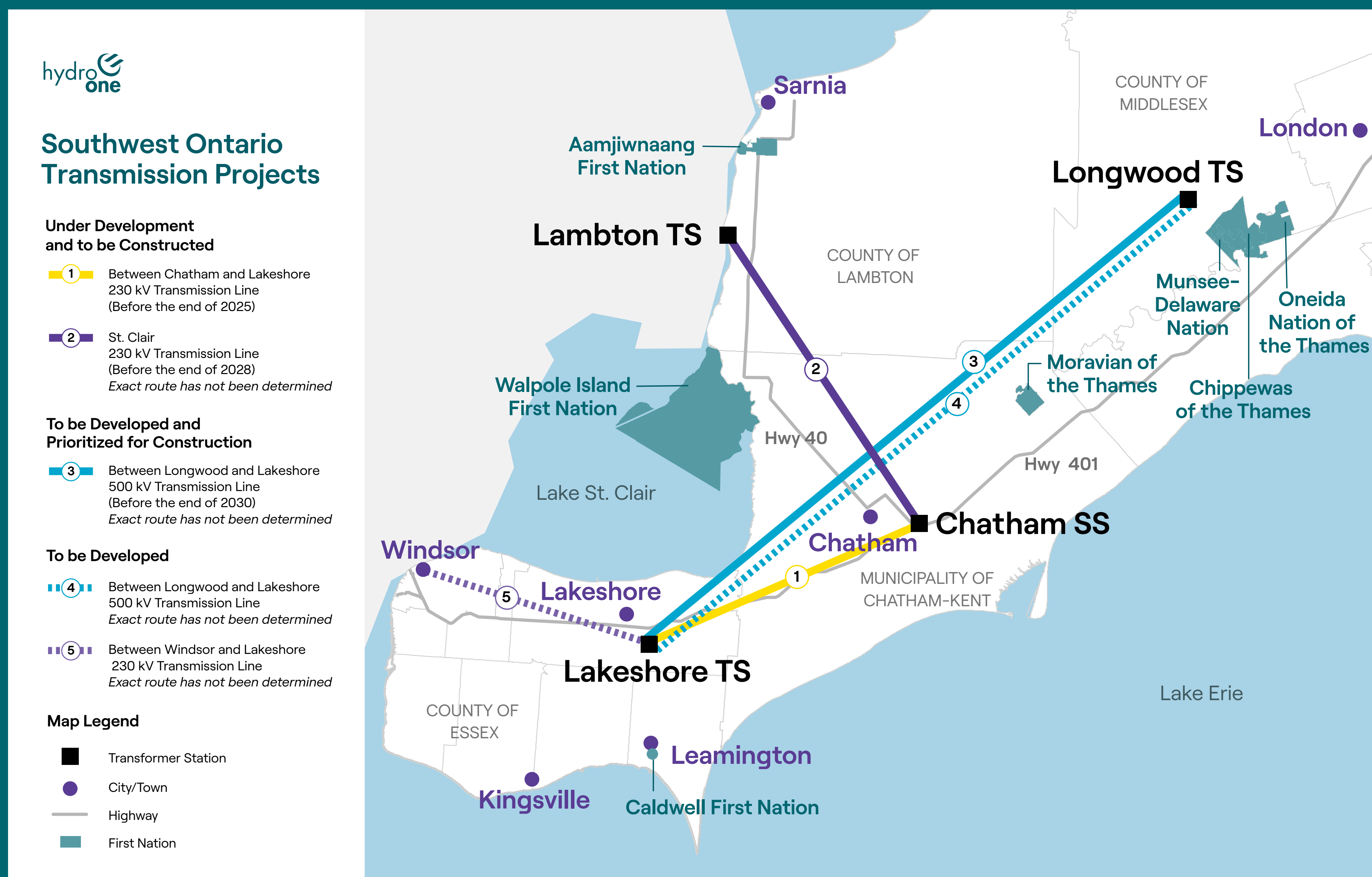


Distribution Lines

Pole Mounted Transformer



Home Wiring  
120–240 volts



For illustrative purposes only and not reflective of preferred routes.

# Electricity Needs in Southwestern Ontario

Hydro One is committed to providing safe and reliable electricity where and when it's needed.

In southwestern Ontario, electricity demand is anticipated to quadruple by 2035 according to the Independent Electricity System Operator (IESO). To meet this demand, a network of electricity infrastructure projects have been identified. This includes three projects already underway:

- **Chatham to Lakeshore Line:** Starting construction in Spring 2023
- **St. Clair Transmission Line:** Undergoing a Class Environmental Assessment
- **Longwood to Lakeshore Project:** Beginning a Comprehensive Environmental Assessment

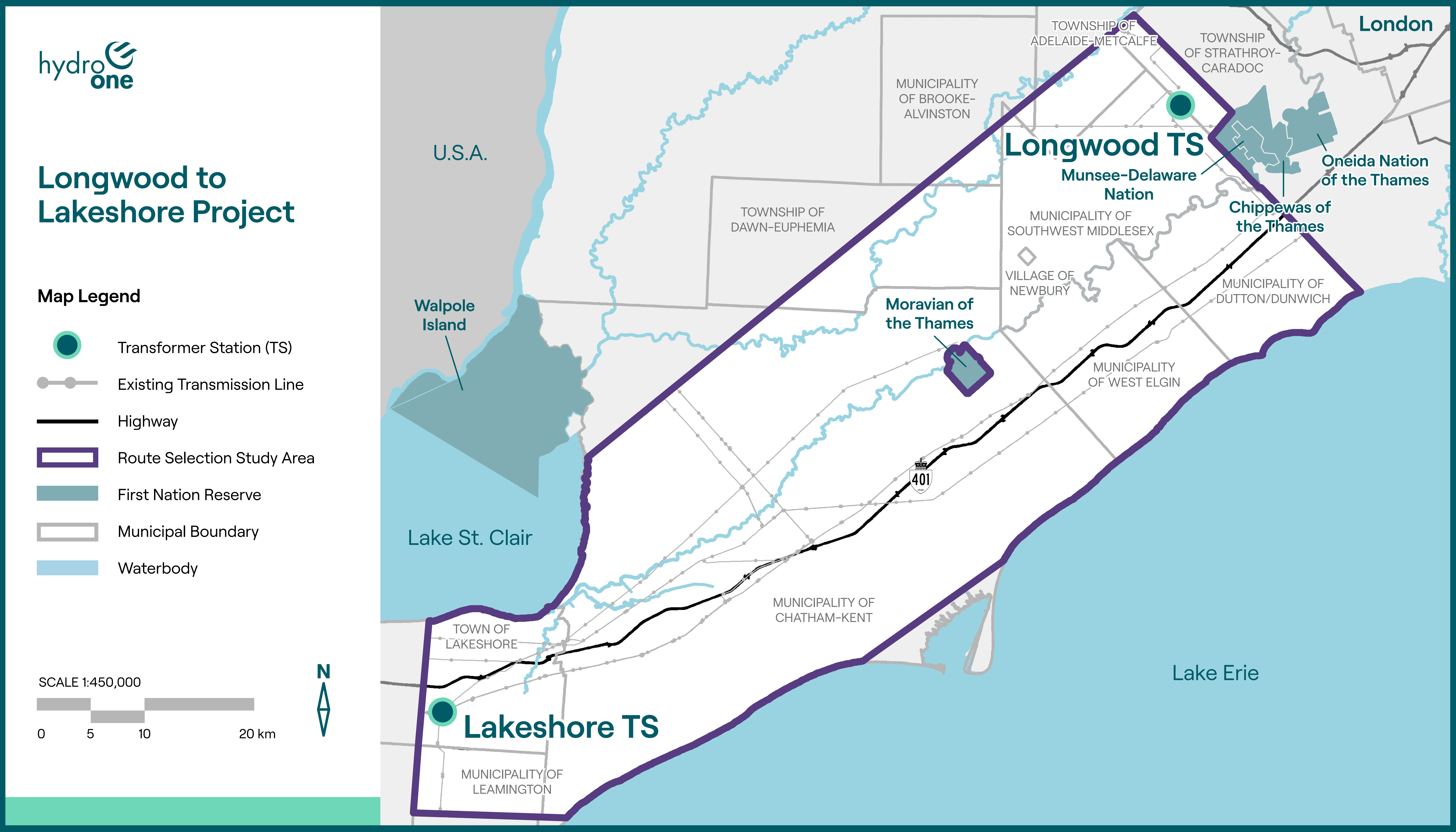
This network of projects will provide many regional benefits including improved resiliency and reliability, economic growth and investments, and support for local food supply and security.

For more information on the Chatham to Lakeshore Line or the St. Clair Transmission Line Projects, please visit [HydroOne.com/projects](https://www.hydroone.com/projects)

# Longwood to Lakeshore Project



See our table maps or use our interactive map for more detailed information.





# Longwood to Lakeshore Project

- Hydro One is beginning planning activities for two new single-circuit 500 kilovolt transmission lines between Longwood Transmission Station (TS) in the Municipality of Strathroy-Caradoc to Lakeshore TS in the Municipality of Lakeshore.
- In February, we commenced a Comprehensive Environmental Assessment (EA) for the project. The EA is a regulated decision making tool and a key step for the planning and building of transmission infrastructure in Ontario. Through this process, route alternatives will be assessed and preferred routes selected.
- The Independent Electricity System Operator (IESO) has identified the need for the first transmission line to be in-service by 2030 or sooner. To meet future electricity demand, the Government of Ontario has advised Hydro One to simultaneously conduct early development work on the second transmission line, while the IESO further assesses the future energy needs of the region. Studying both of the lines at the same time will allow for more efficient planning, as well as more meaningful and transparent consultations with Indigenous Communities, residents, municipalities, and stakeholders.

# The Comprehensive Environmental Assessment

- The project will be planned as a Comprehensive Environmental Assessment (EA) in accordance with Ontario's *Environmental Assessment Act*. This process is required due to the size and scope of the project, and ensures that potential natural, economic, social, and cultural effects are thoroughly considered before a project begins.
- The Comprehensive EA consists of two key steps.



Ongoing engagement

## Step 1 – The Terms of Reference (ToR)

The ToR sets out the workplan and decision-making process to be followed during the EA. This includes outlining the studies and consultation activities to be completed, along with identifying the route alternatives for the new lines.

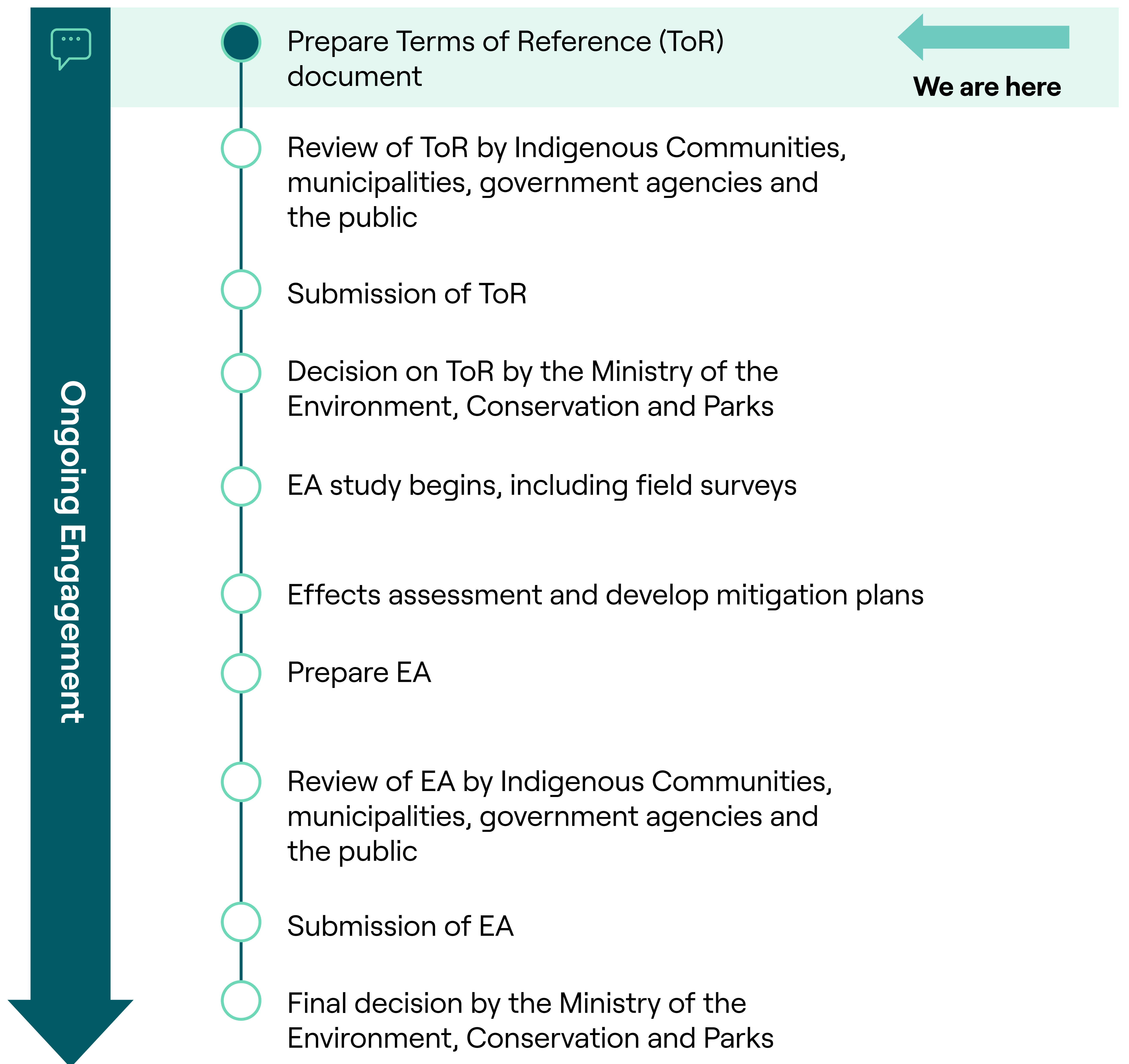
## Step 2 – The Environmental Assessment (EA)

The EA will proceed as outlined in the approved ToR and includes important aspects, such as evaluating the route alternatives to select the preferred routes, assessing potential effects of the new transmission lines, and determining measures to avoid or mitigate these effects.

For more information on the Terms of Reference and Comprehensive EA process, refer to our handout or visit [HydroOne.com/Longwood-to-Lakeshore](https://HydroOne.com/Longwood-to-Lakeshore)



# Overview of the Comprehensive Environmental Assessment Process



# Developing Route Alternatives

**ToR Stage**



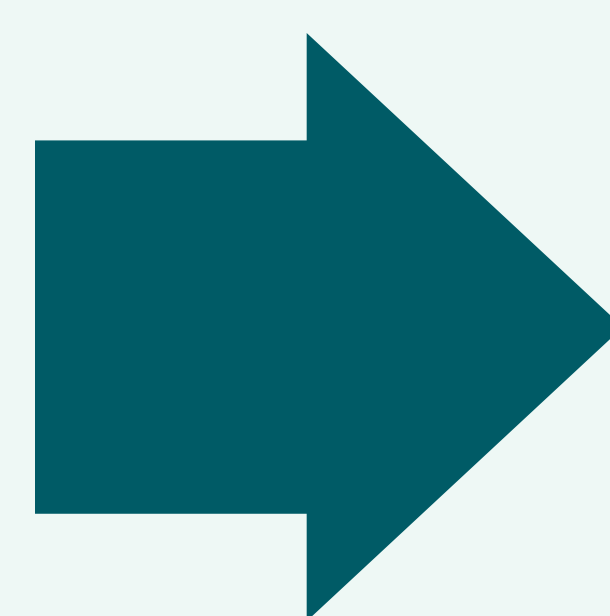
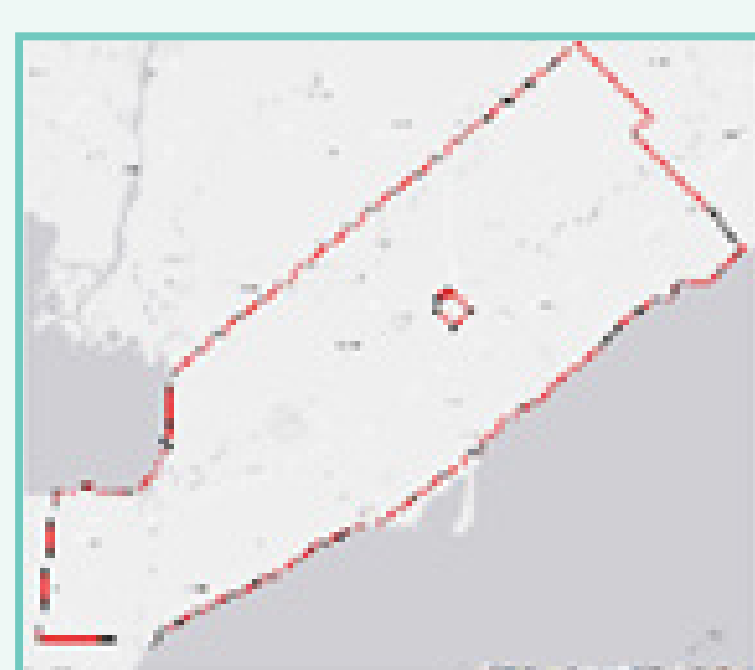
**EA Stage**

Route alternatives will be identified within the route selection study area based on feedback received and initial technical and environmental information collected.

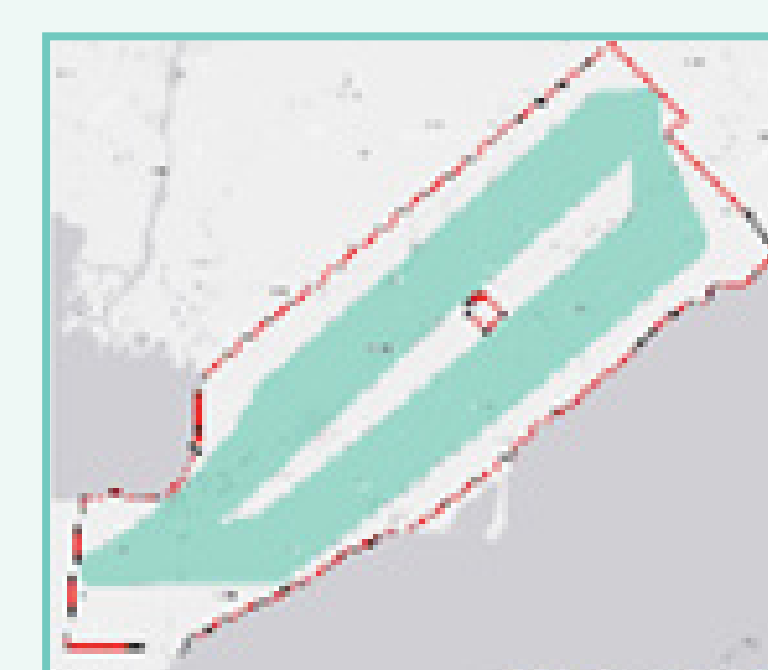
Engagement is vital to the planning process and a key component of Hydro One's identification of route alternatives. We will meet with Indigenous Communities, members of the public, businesses, government agencies and other interested parties to better understand the region and identify criteria that considers local interests.

At the same time, we will also review known technical and environmental considerations. While also looking for opportunities to reduce project impacts.

## Route Selection Study Area








## Route Alternatives



\* Graphics are for illustrative purposes only and do not represent any decisions on route alternatives

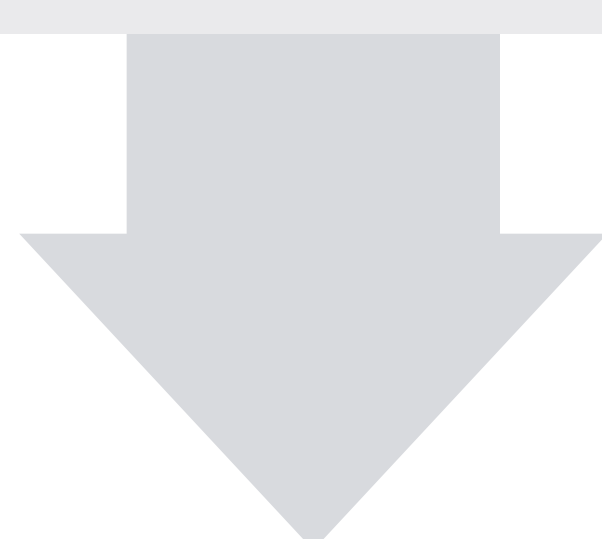
# Routing Criteria We Consider

Using feedback and information collected, criteria will be developed under the four categories and will be used to identify the route alternatives.

Categories		Examples
 Socio-Economic Environment		<ul style="list-style-type: none"> <li>• Rural residences and agricultural building</li> <li>• Dense residential and commercial areas</li> </ul>
 Natural Environment		<ul style="list-style-type: none"> <li>• Environmentally significant areas</li> <li>• Water bodies and wetlands</li> <li>• Woodlots and hedgerows</li> </ul>
 Technical and Cost		<ul style="list-style-type: none"> <li>• Existing infrastructure (rail corridors, road/highways networks, and transmission lines)</li> </ul>
 Indigenous Culture, Values and Landuse		<ul style="list-style-type: none"> <li>• Proximity to areas of historical significance</li> </ul>

# Selecting the Preferred Routes

ToR Stage



EA Stage

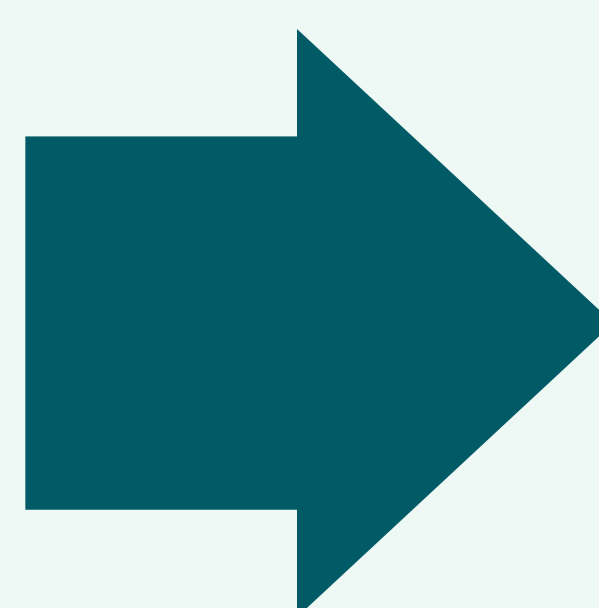
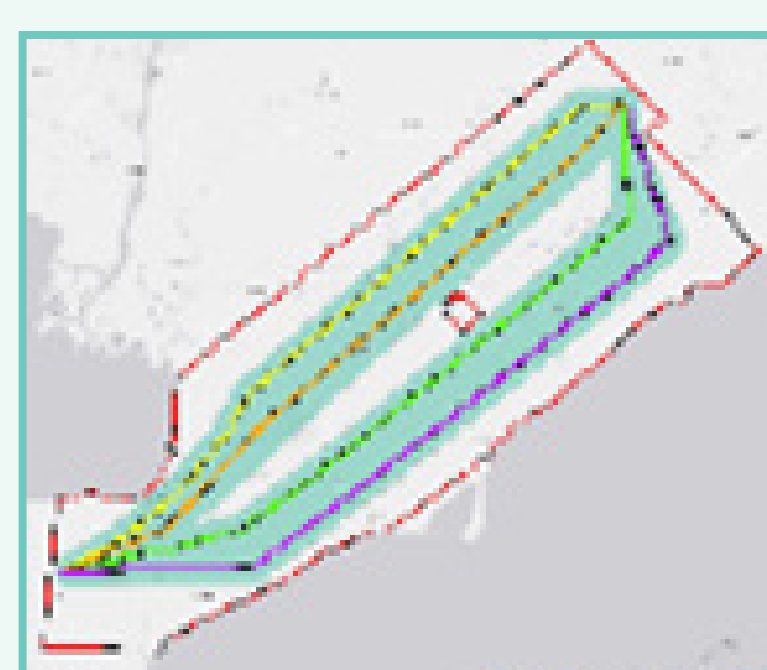
Once the Terms of Reference (ToR) has been approved, Hydro One will begin the EA.

Over the course of the EA, we will focus on studying and learning more about each route alternative by:

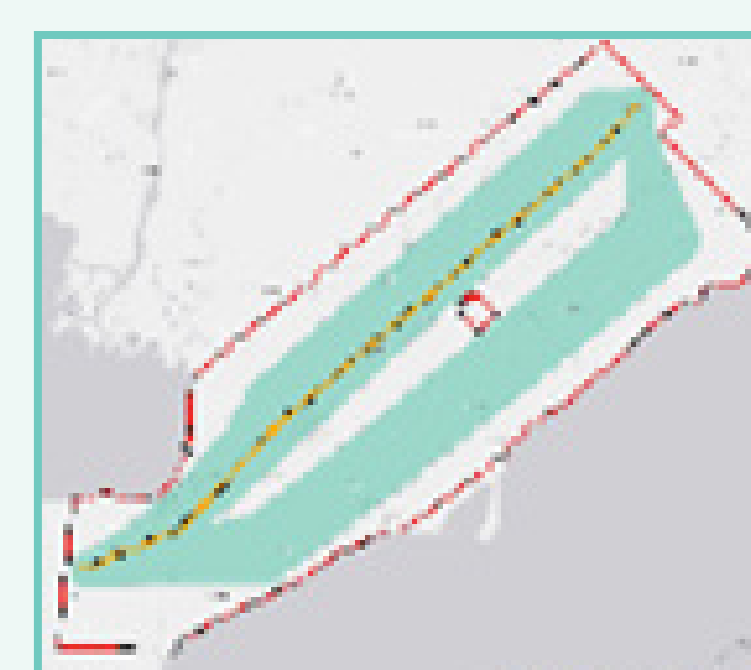
- Collecting data from a variety of sources such as existing reports and plans
- Conducting environmental field surveys and technical assessments
- Holding a wide range of engagement opportunities to collect input and feedback

Through this process, we will evaluate and compare the advantages and disadvantages of each of the route alternatives to select the preferred routes for the new transmission lines.

## Route Alternatives



## Preferred Routes



\* Graphics are for illustrative purposes only and do not represent any decisions on route alternatives

# Project Development Timeline\*



Ongoing Engagement



Line 2 construction and in-service date will be determined upon further planning by the IESO

\*Timelines are subject to change

\*\*Leave to Construct under Section 92 of the Ontario Energy Board Act is a regulatory process to obtain approval from the Ontario Energy Board to build and operate a transmission line.



# Community Engagement

- Hydro One is proud to have been trusted with energizing communities across the region for more than 100 years.
- We rely on early, meaningful and open engagement to help shape project planning and we are committed to listening to the community as we expand our electrical infrastructure to bring more power to Southwest Ontario.
- We will host a wide range of engagement opportunities to gather input and feedback, which is critical as we plan the project.
- We will continue to keep communities, residents and members of the public involved in our planning and project activities.
- We encourage you to sign up for our project contact list at [HydroOne.com/Longwood-to-Lakeshore](https://HydroOne.com/Longwood-to-Lakeshore)

# Working with Indigenous Communities

- At Hydro One, we're committed to developing and maintaining respectful and positive relationships with Indigenous Communities across Ontario.
- Hydro One takes a collaborative approach with Indigenous Communities during projects to ensure meaningful consultation throughout while providing ongoing updates.
- In addition, Hydro One will explore equity partnerships with Indigenous Communities when developing large scale transmission lines such as the Longwood to Lakeshore Project.
- Learn more at [HydroOne.com/IndigenousRelations](https://www.hydroone.com/IndigenousRelations)



# Thank You!

Your input is important to us. Please share your feedback with our team and complete a comment form before you go. To provide comments or to be added to the project contact list, please call or email:



**1.877.345.6799**



**Community.Relations@HydroOne.com**

For the most up-to-date project information and project updates, visit our project website:



**HydroOne.com/Longwood-to-Lakeshore**

