

# Regional Electricity Planning – Kitchener-Waterloo-Cambridge- Guelph

## Engagement Plan

### Background

This Engagement Plan outlines the background, objectives, and proposed timelines to engage with communities and other interested parties in the development of an electricity plan – Integrated Regional Resource Plan (IRRP) – for the Kitchener-Waterloo-Cambridge-Guelph (KWCG) Region.

Examples of the input the IESO is seeking include:

- Information to inform the electricity demand forecasts and needs of the area including details about economic development, projected growth and planned energy projects and initiatives.
- Local options that might address needs identified within the planning period – over the near term (up to five years) to medium term (up to 10 years).
- Opportunities to align future goals within community energy plans, community-based energy solutions, and other economic development plans for consideration in the medium to long term (up to 20 years).

All interested parties are invited and encouraged to participate in this engagement initiative including but not limited to local municipalities, Indigenous communities, businesses, industry associations and members of the general public.

**This engagement plan may be subject to review and update as the process evolves.**

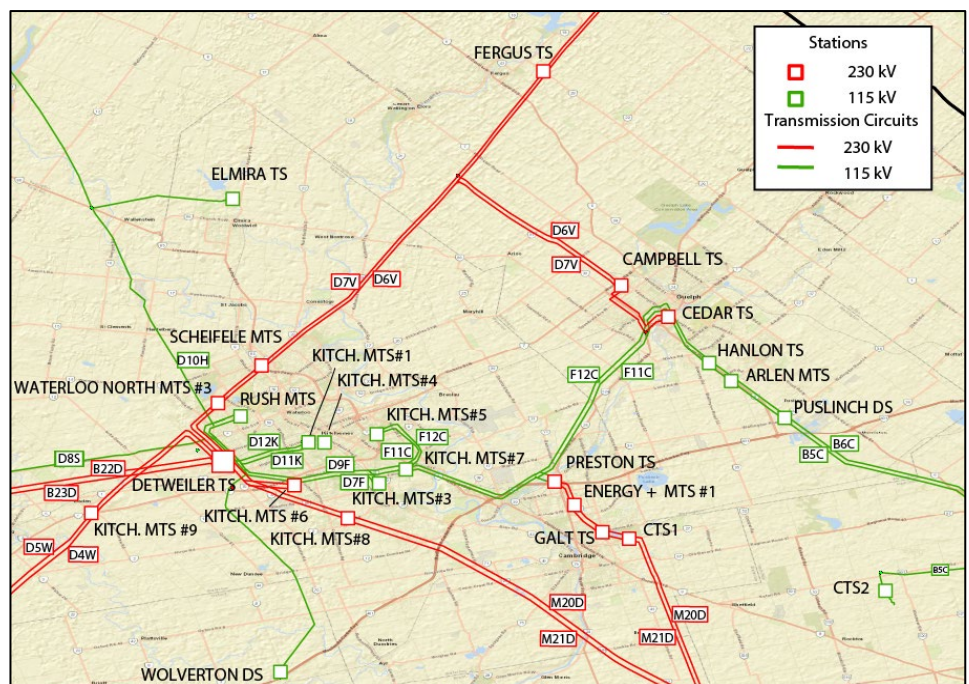
## ABOUT REGIONAL ELECTRICITY PLANNING

Regional electricity planning is about identifying and meeting local electricity needs to ensure the reliability of supply in each of the established 21 electricity planning regions across the province. Planning for each region involves the creation of a 20-year outlook, considering the region's unique needs and characteristics, energy-related projects, and initiatives (e.g. energy efficiency, electrification, distributed energy resources, etc.), local generation, transmission, and distribution. Regional planning is just one component of the broader system planning process, which also includes bulk and distribution system planning. All these elements share the common objective of maintaining a reliable and cost-effective electricity supply. See the Appendix for more information on this process.

Each of the 21 regions undergoes a formal planning process at least once every five years, though at different times. The process unfolds differently each time depending on the region's unique changes, developments, needs, and concerns. The Ontario Energy Board (OEB) requires an IRRP to be completed within 18 months following the determination that an IRRP is necessary. For more information about how this process works, see the Appendix or visit the IESO [website](#).

## REGIONAL ELECTRICITY PLANNING IN Kitchener-Waterloo-Cambridge-Guelph

The KWCG planning region generally encompasses the City of Guelph, the Region of Waterloo including the municipalities of Kitchener, Waterloo, and Cambridge, and the townships of Wellesley, Woolwich, Wilmot, North Dumfries, as well the Townships of Mapleton, Centre Wellington, Puslinch, and Guelph/Eramosa in Wellington County, and the Township of Blandford-Blenheim in Oxford County.



Additionally, within the region is the traditional territory of the Mississaugas of the Credit, Six Nations of the Grand River, Haudenosaunee Confederacy Chiefs Council and Grand River Metis Council.

The current regional planning cycle began with the [Needs Assessment Report](#) published by Hydro One in April 2024, which identified areas that require further review and assessment and may need to be coordinated at the regional level.

The IESO subsequently engaged on and led the development of the [Scoping Assessment Outcome Report](#), published in July 2024, that identifies the path forward to effectively plan for the region. The report determined that a comprehensive and integrated approach is needed to address

the needs identified in the KWCG region. The Technical Working Group will develop the IRRP through an exhaustive process that considers input from communities and stakeholders.

Members of the Technical Working Group include:

- The Independent Electricity System Operator
- Hydro One Networks Inc. (Transmission and Distribution)
- Local Distribution Companies including Alectra Inc., Centre Wellington Hydro, Enova Power Corp., Grandbridge Energy, Halton Hills Hydro Inc., Milton Hydro, and Wellington North Power Inc.

The IRRP will include recommendations to maintain reliability of supply to the region over the next 20 years. To develop the IRRP, the Technical Working Group will work to gather data, identify needs and issues, examine integrated options, recommend actions, and develop an implementation plan.

The goal of the IRRP is to illustrate the integration of forecasted electricity demand growth, conservation, and demand management (CDM) with transmission and distribution system capability, relevant community plans, other bulk system developments, and the potential of distributed energy resources (DERs). Both non-wires and wires solutions will be examined, and communities and stakeholders will be engaged on the options.

The previous planning cycle was completed in 2021. More details can be found on the KWCG regional planning engagement [Webpage](#).

## **2026 Kitchener-Waterloo-Cambridge-Guelph Integrated Regional Resource Plan**

The Technical Working Group is responsible for gathering data and assessing the adequacy and security of the electricity supply to the Kitchener-Waterloo-Cambridge-Guelph region. Engagement initiatives with communities and stakeholders will inform the recommendations and set of actions taken to meet the needs of the region.

Their work is intended to focus on but is not limited to station capacity needs focused in Cambridge, Guelph, Kitchener, and Waterloo<sup>1</sup> as outlined in the 2024 KWCG Scoping Assessment Outcome Report (section 3.2), supply capacity needs in Cambridge and Kitchener, and load security and restoration needs, also outlined in the outcome report (section 3.2). See the Appendix for details on the categories of needs identified and examined through regional planning.

### **ENGAGEMENT OBJECTIVES AND SCOPE**

The objective of this engagement plan is to ensure that interested communities and stakeholders understand the scope of the IRRP and are in a position to provide input into the development of the document.

The IESO is seeking input to ensure the IRRP:

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<sup>1</sup> Through the IRRP process additional needs may be identified or the ones identified may be revised.

- Aligns with community perspectives on local needs.
- Incorporates options to meet the growing electricity demand in the Caledonia-Norfolk sub-region taking into consideration local energy priorities.
- Ensures a reliable source of electricity in the region over the next 20 years.

Through the planned engagement activities, the IESO will seek input on:

- Local and regional growth and economic development (current, planned, potential).
- Projects that may have an impact on local growth rates and electricity demand (e.g. regional transit expansion, electrification, large incremental loads connecting to the system, significant DER projects, etc.).
- Options for addressing local electricity needs, including non-wires alternatives (e.g., CDM and DERs) and local support and interest for developing those options in the near- (five year), medium- (10 year) and long-term (20 year).
- Information from municipal plans including the implementation of those projects that could impact electricity use, specifically from community energy plans, energy reporting/CDM plans, official plans, and secondary plans.

Topics out of scope for discussion include:

- Projects and plans already underway as part of the previous planning cycle
- Policy-level decisions or direction
- Provincial procurements
- Existing program rules
- Local connection requirements of any individual projects unless there is an opportunity to align with broader regional needs

## **INTERESTED PARTIES**

Input into the development of the IRRP is encouraged and welcomed from any community member or interested stakeholder, however, those that may be particularly interested include:

- Municipalities (e.g., elected officials, planning, sustainability, climate change and economic development staff)
- Indigenous communities
- LDCs
- Consumer groups and associations (e.g., community/resident associations, business improvement areas, home builders' associations, etc.)
- Local boards of trade and/or chambers of commerce
- Academia and research organizations (e.g., colleges and universities)
- Environmental groups and associations
- Other public sector organizations (e.g., hospitals and school boards)
- Energy service providers
- Generators
- Businesses and other private entities

## **APPROACH AND METHODS FOR DEVELOPING THE IRRP**

Any engagement with the community and interested stakeholders will be conducted in accordance with the IESO's [Engagement Principles](#).

This is a public engagement process. [The KWCG Engagement Webpage](#) will house all the information for the region's IRRP while the plan is in development. Engagement sessions will be held throughout the engagement initiative to keep all interested parties informed and provide opportunities to provide input into IRRP development. Engagement sessions will be carried out at four major junctures during this IRRP:

1. Draft engagement plan and the regional load forecast
2. Priority needs and screened-in options for the priority needs
3. Option analysis and recommendations for priority needs, and the screened-in options for the remaining needs, and seek feedback
4. Option analysis and recommendations for the remaining needs, and seek feedback

Based on the results and progress of planning and engagement efforts, additional engagement sessions may be incorporated into the engagement process.

A feedback form will be provided for interested parties to provide their input typically over a three-week period for consideration in the planning process. Written feedback will be posted (with consent) along with IESO responses on the engagement webpage.

In addition to public engagement sessions, the IESO may also conduct targeted outreach to key communities and stakeholders where specific local needs and issues require further investigation to help progress through each stage of the IRRP. The content and outcome of these discussions will be shared through the other activities that will be undertaken as part of this engagement initiative.

Following completion of an IRRP, the full report, including all accompanying appendices and associated datasets, will be archived on the IESO's Kitchener-Waterloo-Cambridge-Guelph regional planning webpage. A full schedule of these items is provided below.

## **DATA AND INFORMATION**

The IESO is committed to making regional planning information and data available to support constructive stakeholder and community participation in the process, consistent with the IESO's engagement principles<sup>1</sup> and recommendations from the OEB's Regional Planning Process Advisory Group.<sup>2</sup>

The [Regional Planning Information and Data Release Guideline](#) outlines the categories of information and data, format and timing in which it is typically made available during an IRRP. By outlining the types and timing of information and data expected to be made available, engagement participants and interested parties will be able to offer more meaningful feedback to the process and decisions to be made.

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<sup>1</sup> <https://www.ieso.ca/en/Sector-Participants/Engagement-Initiatives/Engagement-Principles>

<sup>2</sup> 1 RPPAG Report to the OEB – Recommendations to Improve Ontario's Regional Planning Process, available at <https://www.oeb.ca/>

See Table 1 in the Appendix for a summary of regional planning information.

## PROPOSED ENGAGEMENT SCHEDULE

	Outreach
	Public Engagement

Date	Event/Objective	Expected Actions/Notes
<b>November 2024</b>	<b>One-on-one discussions</b> with key communities and stakeholders as identified such as municipalities	<ul style="list-style-type: none"> <li>Seek input on current, planned, and potential growth, development, and priorities to inform the development of an electricity demand forecast and Engagement Plan</li> <li>Consider input to inform next engagement phase</li> </ul>
<b>November 2024</b>	<b>Outreach with municipalities begins</b>	<ul style="list-style-type: none"> <li>Register to attend public webinar #1</li> </ul>
<b>December 2024</b>	<b>Public Webinar #1:</b> <ul style="list-style-type: none"> <li>Summary of input from targeted discussions</li> <li>Provide update on planning activities underway</li> <li>Summarize preliminary regional demand forecasts, draft engagement plan</li> </ul>	<ul style="list-style-type: none"> <li>Seek input to inform electricity demand forecast</li> <li>Seek input on draft engagement plan</li> <li>Post feedback and IESO response to feedback, including rationale</li> </ul>
<b>January 2025</b>	<b>Feedback due for Public Webinar #1</b>	<ul style="list-style-type: none"> <li>Feedback posted</li> </ul>
<b>Q1 2025</b>	<b>One-on-one discussions</b> with key communities and stakeholders, as identified	<ul style="list-style-type: none"> <li>Seek input on identified electricity needs and local preferences on potential solutions</li> <li>Consider input to inform next engagement phase</li> </ul>
<b>Q1-Q2 2025</b>	<b>Public Webinar #2:</b> <ul style="list-style-type: none"> <li>Summary of input from targeted discussions</li> <li>Overview of defined needs and range of potential options/solutions to be examined for Priority Needs</li> </ul>	<ul style="list-style-type: none"> <li>Seek input on the screened-in options shared for the Priority Needs</li> <li>Post feedback and IESO response to feedback, including rationale</li> </ul>
<b>Q1-Q2 2025</b>	<b>Feedback due for Public Webinar #2</b>	<ul style="list-style-type: none"> <li>Feedback posted</li> </ul>



<b>Q2 – Q3 2025</b>	<b>One-on-one discussions</b> with key communities and stakeholders, as identified	<ul style="list-style-type: none"> <li>• Seek input on local priorities, preferences, and development to inform plan</li> <li>• Consider input to inform next engagement phase</li> </ul>
<b>Q3 2025</b>	<b>Public Webinar #3:</b> <ul style="list-style-type: none"> <li>• Summary of input from targeted discussions</li> <li>• Overview of defined needs and range of potential options/solutions to be examined for Remaining Needs</li> <li>• Overview of options analysis and draft IRRP recommendations for Priority Needs</li> <li>• Discuss considerations for communities and interested parties to consider in the medium- to long-term planning</li> </ul>	<ul style="list-style-type: none"> <li>• Seek input on the screened-in options shared for the Remaining Needs</li> <li>• Seek input on recommendations for the Priority Needs</li> <li>• Post feedback and IESO response to feedback, including rationale</li> </ul>
<b>Q3 2025</b>	<b>Feedback due for Public Webinar #3</b>	<ul style="list-style-type: none"> <li>• Feedback posted</li> </ul>
<b>Q4 2025</b>	<b>Public Webinar #4:</b> <ul style="list-style-type: none"> <li>• Summary of input from targeted discussions</li> <li>• Overview of options analysis and draft IRRP recommendations for Remaining Needs</li> <li>• Discuss considerations for communities and interested parties to consider in the medium- to long-term planning</li> </ul>	<ul style="list-style-type: none"> <li>• Seek input on recommendations for the Remaining Needs</li> <li>• Determine whether further outreach is required</li> </ul>
<b>Q4 2025</b>	<b>Feedback due for Public Webinar #4</b>	<ul style="list-style-type: none"> <li>• Feedback posted</li> </ul>
<b>Q4 2025</b>	<ul style="list-style-type: none"> <li>• <b>Finalize IRRP</b></li> </ul>	<ul style="list-style-type: none"> <li>• Post final report on KWCG regional planning webpage and IRRP engagement webpage</li> <li>• Conduct survey on engagement process</li> </ul>

# KWCG IRRP Engagement Appendices

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## Appendix

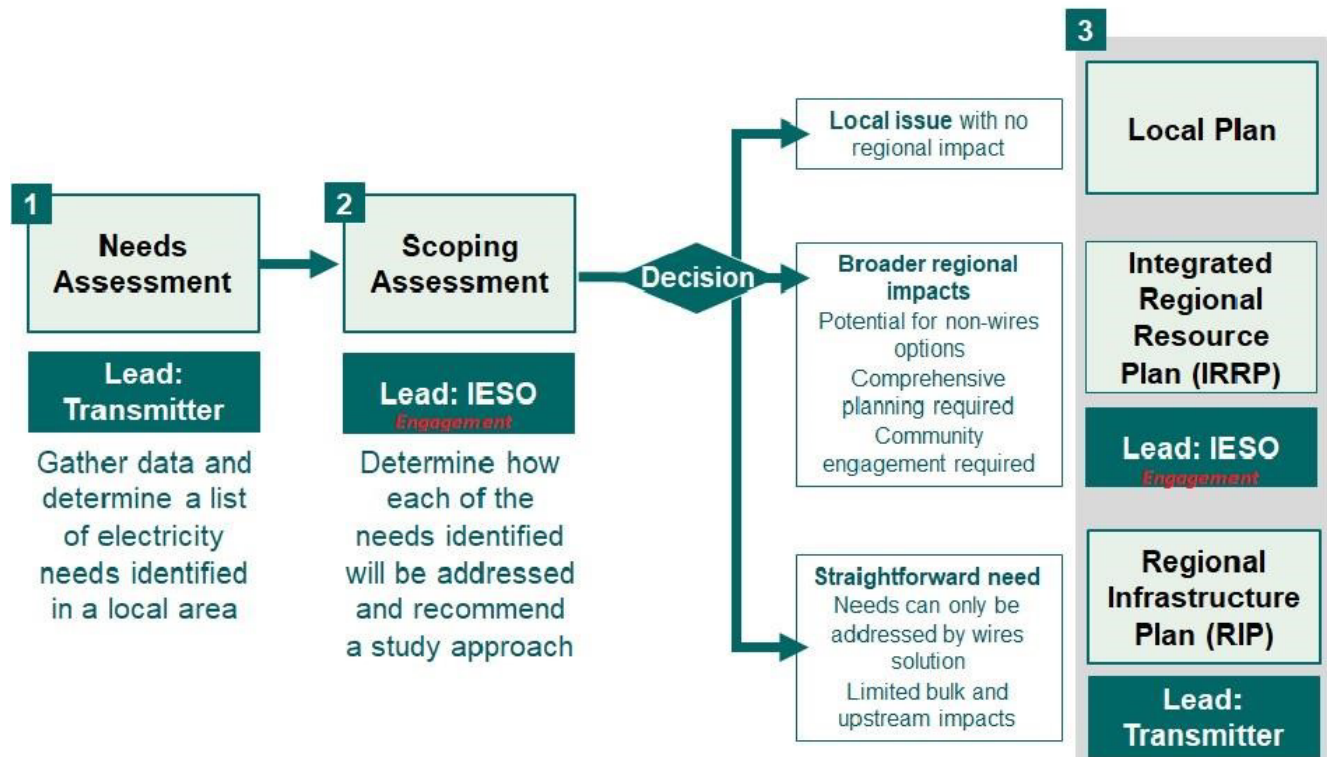
### Regional Planning Process

Regional planning is ongoing, with electricity reliability evaluated at least once every five years in each region. Community engagement is a critical part of the planning process and the IESO encourages all interested parties to join this discussion to:

- Learn more about the regional planning process and local electricity needs.
- Provide input into shaping a community's electricity future by discussing options for meeting local needs, including applicable non-wires alternatives, and discussing the local community's support for development of these options.
- Share perspectives for future growth in the area, and how to work together to shape the area's future electricity supply.
- Determine opportunities for coordinating and aligning local planning activities and initiatives with the regional planning process.

The following diagram illustrates the steps, parties, and outcomes of the regional planning process.





For more information, visit the Regional Planning Process webpage at:

<https://www.ieso.ca/en/Get-Involved/Regional-Planning/About-Regional-Planning/How-the-Process-Works>

## Categories of Electricity Needs

### Capacity Needs

- Station capacity refers to the ability to convert power from the transmission system down to distribution system voltages
- System capacity (or “load meeting capability”) refers to the ability of the electricity system to supply power to customers in the area, either by generating the power locally, or bringing it in through the transmission system

### End-of-Life Asset Replacement Needs

- Based on the best available asset condition information at the time
- Evaluated to decide if the facility should be replaced “like-for-like”, “right-sized”, or retired

### Load Restoration and Supply Security Needs

- Load restoration describes the electricity system’s ability to restore power to those affected by a major transmission outage within reasonable timeframes
- Supply security describes the total amount of load interrupted following major transmission outages

## Regional Planning Information and Data Availability

Table 1 describes the categories of regional planning information and data and the opportunity for input and timing in which it is typically made available during an IRRP. **Table 1 | Summary of Regional Planning Information**

Data	Opportunity for Input	Timing
Regional Planning Dashboard outlining updates and status of planning activities	No	Updated biannually and available for download on the IESO website: <a href="https://ieso.ca/RegionalPlanning">Regional Planning (ieso.ca)</a>
Engagement Plan for IRRP	Yes	Draft engagement plan posted prior to first engagement; the final engagement plan is published following a comment period
Planning Assessment Criteria	No	Referenced in the IRRP report; and available in the IESO's Market Rules & Manuals Library: <a href="https://ieso.ca/MarketRulesManualsLibrary">Market Rules &amp; Manuals Library (ieso.ca)</a>
Load Forecast (PDF)	Yes	High-level summary provided at first engagement for input; detailed methodologies are published with the IRRP report
Load Forecast (Spreadsheet)	Yes	Overview of preliminary forecast provided at first engagement for input; draft data published following engagement for comment; final dataset published with IRRP report
Load Forecast – Energy Efficiency (Spreadsheet)	No	Draft data provided after first engagement; final data with IRRP report
Load Forecast – Embedded Generation (Spreadsheet)	No	Draft data provided after first engagement; final data with IRRP report
Historical Demand	Yes	Data posted prior to first engagement for input on load forecast; published with the IRRP report
Transmission end-of-life Information	No	This data is updated by Hydro One every five years; a consolidated list of end-of-life information for all transmission asset owners will be updated annually
Transmission System Assumptions	No	Facilities in scope of the IRRP and expected in-service dates are published in the Scoping Assessment Outcomes Report; and additional details published in the IRRP report
Resource Assumptions	No	General and/or aggregate assumptions by resource type are published with the IRRP report
Planning Scenarios	No	Summary published with the IRRP report
System Needs	No	Presented in materials provided in advance of the second engagement; and published with the IRRP report
Non-Wires Options Evaluation (PDF)	Yes	Preliminary information discussed at third engagement with opportunity for input; and published with IRRP report
Non-Wires Options Evaluation (Spreadsheet and/or PDF)	Yes	Provided at third engagement; draft data provided after comment period; and final data published with the IRRP report
Economic Assessment Assumptions	Yes	Preliminary information provided and discussed at the third IRRP engagement on solution options with an opportunity to provide feedback; and final assumptions published with the IRRP report