

# Engagement Plan

## Artificial Intelligence (AI) Whitepaper

### Introduction

In 2018, the IESO published the [Innovation Roadmap](#), setting out its research and innovation priorities. The activities contemplated under the Innovation Roadmap included the associated [Innovation Whitepaper Series](#) which seeks to deepen the understanding of emerging economic, technical, environmental and social issues that could transform the future of the electricity markets in Ontario. To date, the Innovation Whitepaper Series has covered a wide range of topics, including facilitation of Distributed Energy Resource (DER) participation in the wholesale market and understanding consumer electricity preferences, as examples.

The Artificial Intelligence (AI) Whitepaper is part of the IESO's Innovation Whitepaper Series. It will seek to coalesce information on this fast emerging technology from market participants and expert sources. The objective: to better understand the state of AI insofar as its current state of deployment and potential future use in the electricity sector. This in turn will help inform the IESO on future strategy to exploit the potential of this technology and help understand the aspirational goals of market participants with respect to AI-based interactions with IESO markets and programs.

Already the IESO is aware of numerous examples where applications of AI are being used by market participants in such areas as forecasting, asset management and conducting operations in the IESO-administered markets. In other jurisdictions around the world AI technologies have gone far beyond this stage and are making a material difference in the bottom line for energy utilities that have already invested heavily in the technology.

Within the IESO, various applications of Artificial Intelligence are also beginning to take hold. In recent years, the IESO has moved forward with the first stages of its Data Excellence Program to examine and catalogue the IESO's vast stores of data pertaining to the wholesale market, the retail sector, and its numerous programs. In addition, the IESO is beginning initial activities in its own machine learning development environment.

Defining AI itself is a daunting task. The challenge is not unlike the IESO's recent and ongoing efforts with respect to Distributed Energy Resources. In a manner similar to the IESO's recent whitepaper series on DERs the AI whitepaper is a first step to framing the opportunities and challenges that the IESO and its market participant

## Stakeholders and Communities

The IESO encourages all interested parties to participate in this engagement through the public engagement activities described in the Approach section below. The IESO anticipates that this initiative will be of particular interest to:

- All market participants and program participants presently using or contemplating the use of AI-based technologies with respect to their interactions with eh IESO-administered markets and programs.
- The IESO is also seeking input from prospective market participants and service providers that see a strategic interest future application of AI to IESO market and program participation.

## Engagement Objectives

- This engagement will culminate in the publication of the AI Whitepaper which is intended to provide deeper insight into the state of AI with IESO Market Participants and their future needs.
- By consolidating the input from its stakeholders, the AI whitepaper will help focus the potential problem space that the IESO must address with respect to this emerging technology.

## Approach

- This engagement plan will be implemented in accordance with the IESO's approved engagement principles. This is a public engagement process.
- All materials will be posted on the dedicated IESO engagement webpage, and, any information/input supplied by interested parties will also be posted (with consent). The approach for this engagement includes opportunities to provide input through various channels such as webinars, surveys and written feedback.
- The project team will consider all relevant input and illustrate how feedback was considered to shape the stated objectives.

## Proposed Engagement Schedule

- The anticipated timing for this engagement is presented below. Note that timing and content associated with upcoming activities are subject to change.

<b>Timing</b>	<b>Engagement Activity</b>
February	AI Whitepaper Survey launched

Timing	Engagement Activity
Feb. 23	Stakeholder Engagement Webinar <ul style="list-style-type: none"> <li>• Introduce initiative</li> <li>• Provide background on AI</li> <li>• Solicit interest in taking part in survey</li> <li>• Seek feedback on key considerations for the whitepaper</li> </ul>
Mar. 11	Deadline for feedback via the supporting survey.
Mar. 17	Deadline to provide other feedback on key considerations for the whitepaper
Mar. 31	Feedback published
July 20	Stakeholder Engagement Webinar <ul style="list-style-type: none"> <li>• Summary of AI Survey findings</li> <li>• Draft outline of whitepaper</li> </ul>
Sept 21	Stakeholder Engagement Webinar <ul style="list-style-type: none"> <li>• Final draft of whitepaper presented</li> </ul>

### Additional Background and Resources

- IESO [Innovation Roadmap](#)
- IESO [Innovation Whitepaper Series](#)
- IESO [Innovation and Sector Evolution White Paper Series Engagement](#)