

# Feedback Form

## Pathways to Decarbonization – February 24, 2022

### Feedback Provided by:

Name: Justin W. Rangooni

Title: Executive Director

Organization: Energy Storage Canada

Email: [REDACTED]

Date: March 16, 2022

Following the February 24 engagement webinar, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on the items discussed during the webinar. The webinar presentation and recording can be accessed from the [engagement web page](#).

**Please submit feedback to [engagement@ieso.ca](mailto:engagement@ieso.ca) by March 16.** Please attach research studies or other materials for consideration by the IESO to support your submission.

If you wish to provide confidential feedback, please submit as a separate document, marked "Confidential." Otherwise, to promote transparency, feedback that is not marked "Confidential" will be posted on the engagement webpage.

## Policy

Topic	Feedback
Are the assumptions indicated reasonable and comprehensive in terms of scale and timing?	ESC is supportive of the assumptions used.  As carbon pricing and thresholds during the outer years of the study is uncertain, we suggest that the IESO work in some sensitivity analysis into its modelling approach (e.g., a range of prices and corresponding thresholds).

Topic	Feedback
Are there other considerations for the IESO?	See below.

## Demand

Topic	Feedback
Are the assumptions indicated reasonable and comprehensive in terms of scale and timing?	ESC is generally supportive with the IESO's approach.

Topic	Feedback
Are there other considerations for the IESO?	See below.

## Resources

Topic	Feedback
Are the assumptions indicated reasonable and comprehensive in terms of scale and timing?	ESC is generally supportive with the IESO's approach.

Topic	Feedback
Are there additional data sources that we should consider	See below.

Topic	Feedback
Are there other considerations for the IESO?	See below.

## General Comments/Feedback

ESC is very supportive of this IESO study. Energy storage is a proven technology and well positioned to support the transition to a zero emissions grid. Energy storage is an essential ingredient in Canada’s transition to a low-carbon economy. Storage has the unique ability to extract more value from existing zero-carbon assets, such as nuclear, solar, wind and hydro. It is also unmatched in its efficacy providing multi-service benefits, including flexible capacity, peak capacity, ancillary services, deferral of additional investments in generation, transmission and distribution, and the augmentation of the reliability of the grid.

Therefore, we offer the following for the IESO’s consideration within the study:

- We feel it is important to include a few different supply mix scenarios within the IESO’s modelling and analysis to demonstrate that there are multiple potential pathways for achieving a zero emissions grid in Ontario. Each scenario will have different characteristics and therefore different concerns, or challenges related to grid operations, costs, development timelines, environmental impacts, and other trade-offs.
- From a resource cost perspective, it is important for the IESO to recognize that different energy storage technologies have different cost profiles and may be suitable for different purposes. It would not be appropriate for the IESO to apply a generic storage cost into its analysis. For example, seasonal storage costs may be different then hour-by-hour storage costs.

We look forward to continued discussion with IESO as it continues to progress with its analysis. We welcome the opportunity to meet and review assumptions related to energy storage and supply mix.