

Feedback Form

Clean Energy Credits – February 24, 2022

Feedback Provided by:

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Following the February 24, 2022 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 by March 17, 2022. 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.

Opportunities & Challenges

Topic	Feedback
<ul style="list-style-type: none">• What are the key opportunities and challenges the IESO should be aware of in developing a voluntary clean energy market?	<p>The IESO has the opportunity develop a platform that recognizes both (i) the range of renewable and carbon-free energy technologies available in the market and (ii) the variety of procurement and greenhouse gas reduction practices made by corporations to meet their sustainability goals. Developing from the outset a registry that can accommodate a diverse and evolving market will take significant consultation and collaboration with a range of stakeholders.</p> <p>Microsoft looks forward to the opportunity to work with the IESO to develop a registry that (1) can accommodate increasingly widespread, granular, and aggressive corporate environmental, social and governance targets, (2) will send price signals for investment in advanced technologies and (3) will incentivize investment in generation resources that have the greatest carbon reduction impact.</p> <p>The IESO is not alone in evaluating program design options for a CEC registry. Several existing registries around the world are currently in the process of undergoing reexaminations of their programs to evaluate how to best address increasing consumer demand for data transparency, more granularity, and better program functionality.</p> <p>The IESO now has the unique opportunity to develop a registry from scratch and should look beyond what is the standard design of most existing registries (<i>ex.</i> either monthly or yearly time granularity, no carbon stamping of CECs, 1 MWh increments of CECs) to design a next generation program to accommodate ever-evolving consumer demand. Such a next generation program, that includes hourly granularity and carbon stamping (as discussed below), will send better price signals for investment in new clean energy technologies and will further support decarbonization of Ontario's grid.</p>

Design considerations

Topic	Feedback
<ul style="list-style-type: none">• Which design considerations outlined in this presentation are most important to you and why?	<ul style="list-style-type: none">• Unique tagging upon creation to mitigate potential double counting.• Retirement of CEC allows delineation of which energy credits are being used in each period to meet environmental goals.• Detailed information about the facility and generation provides transparency to enable confirmation that the product meets the buyer's specific requirements.

- What other design considerations should IESO be aware of?

- **Resource eligibility and clean title** – Voluntary Buyers can be assured by purchasing CECs through the IESO managed registry that purchases of environmental attributes (EAs) constitute *a bona fide* purchase and sale that enables the Buyer to claim and market the associated EAs with the CECs.
- **Time stamping** – As voluntary renewable and clean energy procurement commitments continue to evolve, hourly matching of load with clean energy procurement is becoming an increasingly common corporate procurement goal. For example, Microsoft recently announced that by 2030, we will have 100 percent of our electricity consumption, 100 percent of the time, matched by zero carbon energy purchases. This commitment requires that Microsoft track our clean energy procurement on a more granular, hourly basis, to match our hourly load. As the IESO correctly identified the need to “future proof” the registry, the program should be designed from the outset to accommodate corporate clean energy procurement commitments that are based on an hourly procurement basis. Furthermore, hourly granularity of CECs can establish price signals for carbon-free resources to generate at times of the day when such resources are most needed, most in demand and could potentially improve system reliability.
- **Realized carbon savings** – In addition to time stamping a CEC with an hourly signature, the avoided carbon emissions from the clean energy generation, on an hourly basis, should also be provided. Providing data on the avoided carbon emissions, on an hourly basis, could create a price signal to incentivize investment in resources that cause the greatest amount of grid carbon reductions.
- **Broad eligibility** - Participation by enabling resources such as energy storage and demand response should be considered as part of the program’s design. These technologies can complement renewable and carbon free resources and may offer a viable alternative to fossil-based generation.

Topic	Feedback
<p>What other design considerations should IESO be aware of? <i>(Continued)</i></p>	<ul style="list-style-type: none"> • Allow for smaller volumetric increments - Traditionally most CECs have been issued in increments of 1 MWh. The IESO should consider issuing CECs in smaller sizes than 1 MWh, as such smaller volumetric increments could enable market access to small producers and buyers of renewable energy, supporting a more robust and equitable market. • Priority Dispatch – since corporate buyers will be relying on CECs from specific renewable and carbon free assets, the IESO should consider ways to mitigate discretionary curtailment instructions that could otherwise be allocated to resources that do not sell CECs and have make-whole contract payments.

Engagement Process

Topic	Feedback
<ul style="list-style-type: none"> • Which stakeholder groups and/or design topics are most important to include in the planned focus group discussions? 	<ul style="list-style-type: none"> • Clear differentiation between types of carbon free assets. For example, additional (new) renewable assets, existing renewable assets, legacy carbon-free resources (such as nuclear), and energy storage / demand response. • Functionality of the system such as metering integration, timeline for creation, and more sophisticated functionalities such as time stamping, avoided carbon emissions, etc. • Process for verification and onboarding of new resources. • Alignment between the registry and potential future procurements of new renewables by the IESO. • Implementation timelines. • Potential future integration into market dispatch.

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<ul style="list-style-type: none"> Are there any additional engagement opportunities the IESO should consider? 	<p>We appreciate efficient and open communications. As the stakeholder engagement process moves into further engagement and technical stage of development, a concise summary of design elements that are in (or out) of scope for the forthcoming platform would be greatly appreciated.</p>

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<ul style="list-style-type: none"> Would you be willing to participate in a technical session? If so, on which topic(s)? 	<p>Yes. As a large voluntary buyer of renewable attributes with global experience with registries, we can provide meaningful input to the IESO as requested.</p>

General Comments/Feedback

As a potential future buyer of environmental attributes in Ontario, Microsoft welcomes the opportunity to provide constructive feedback and engage in a meaningful way in the development of the Clean Energy Credit registry and we look forward to continued dialogue in the detailed discussions to follow.