

Feedback Form

Clean Energy Credits – April 21, 2022

Feedback Provided by:

Name: Anshul Bhatnagar

Title: Senior Manager, Origination

Organization: Ontario Power Generation

Email: [REDACTED]

Date: May 5, 2022

Following the April 21, 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 **May 5, 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.

Registry Design Features

Topic	Feedback
Are there any registry features missing from the proposed list, either basic requirements or future functionality?	<ul style="list-style-type: none">• IESO has captured most of the requirements for a registry which should facilitate the creation, certification, tracking, transfer and retirement of CECs. It is important to recognize that CECs are intended to provide customers a line of sight to a generation source without necessarily being directly connected to that generation source.• It is important for the registry to function as a tool to facilitate tracking the transfer and retirement of ownership of CECs. The registry should not serve as a trading or sales platform, or specify or restrict the commercial terms, as commercial agreements for the sale of CECs exist outside the registry between counterparties involved in the transactions.• It is also important to ensure that there is a process for validating the clean generation that is uploaded into the registry. <p>The IESO should consider addressing or including the following items of basic features:</p> <p>Individual CECs should:</p> <ul style="list-style-type: none">• Display who the CEC is transferred to and from whom (for parties to the transaction, not for public consumption).• Indicate who retired it and on behalf of whom (if applicable).• Indicate the name of the facility generating the CEC, volume of CECs transferred, and vintage details. <p>Registry Requirements:</p> <ul style="list-style-type: none">• Accessibility for customers to view data and download reports summarizing available CEC inventory and volumes transferred.

- Allow all valid generation technologies, whether existing or new, to be uploaded, providing customer/purchaser choice on the CECs. This is consistent with how the voluntary market works elsewhere and allows customers ability to report on targets, tailored to the reporting framework used.
- Develop a robust verification process to ensure that uploaded generation is accurate and truthful, without being too cumbersome. Verification standards should be published well in advance of the launch of the registry to allow sellers sufficient time to ensure compliance.
- Include hourly credit creation, tracking, and retirement in the initial design, establishing Ontario as a leader in Canada for enabling this product market. This is an area of growing interest with customers that wish to align their purchased CECs with electricity consumption on an hourly basis.

Registry Performance:

- Provide a user-friendly user interface with ease of access to reports and all data.
- Ensure ease of use to upload generation data such as in standardized formats and a well implemented upload portal and process.
- Ensure a smooth and efficient process for the approval of uploaded generation data (i.e. approval should only take a few days. As an example, M-RETS does this within 5 days).
- Ensure that CEC transfers can be reflected on the registry in a timely fashion (i.e., within the same business day if possible) to mitigate the delivery risk that would be associated with longer timelines.
- Have customer support with a response time of within 1 business day.

Questions on Registry Development:

- Does the IESO plan to develop the registry in-house or does it plan to partner with an existing registry platform?
- How does the IESO intend to recover the cost of developing and operating the registry?

CEC Product Offering Options

Topic	Feedback
Has IESO identified the right set of CEC product offerings? Are there any missing?	<ul style="list-style-type: none"> At a high level, the options presented cover the various possibilities.

Topic	Feedback
Are there benefits/challenges to any of the proposed CEC product offerings that have not been covered?	<p>The main benefit of CECs is providing customers a line of sight to a generation source without requiring direct connection. By purchasing CECs – from either existing or new generation sources – a customer can demonstrate title to the environmental attribute from that specific type of generation source. CECs are different in nature to carbon offsets, which should be recognized in the structuring of the registry. For example, under the GHG Protocol, renewable or clean energy credits are used to support claims with respect to energy use, not to support claims of avoided emissions. It will be important for the registry not to impose additionality or similar requirements on registered CEC when such requirements are not fundamental to, and may be incompatible with, the carbon accounting needs of buyers.</p>

Topic	Feedback
Which CEC option(s) works best for your company? For Ontario?	<p>If the government has a long term goal of bringing new clean generation to the Ontario grid this will reduce emissions from the supply mix – i.e. provide additionality – and address those Scope 2 emissions attributable to a specific customer’s load. Given the degree to which the Ontario grid is already non-emitting and the time it might take to bring new clean generation online (in quantities to meet consumer demand), it is important to include the voluntary market supply from existing clean generation sources. This is consistent with how the market has formed elsewhere, and can help to drive the price and demand signals for new clean generation.</p>

Continued

Customer interest in the CEC market is broad and is driven by individual corporate preference for technology type, location, vintage, granularity (annual matched vs hourly) and reporting needs. Benefits in sourcing CECs from existing and new generation include:

- Current available volumes to establish the market and allow the right structures and price signals to form in order to incentivize new clean generation.
- Customer choice on type of CEC products to attain their individual climate goals and associated accounting.
- A 24/7 clean energy product as the existing supply mix can be made available in all hours of the year using existing generation. This time-matched product can provide the right price signals to ensure that the right types of clean technology are developed – those that meet the customer’s required load profile to further decarbonize the grid.

Ontario CECs would allow Ontario’s clean generation mix to be better recognized – attracting new loads to the province. It also maximizes the value of existing clean generation and also lays the foundation for ensuring that Ontario clean energy is recognized in other markets (for example, one of the stated assumptions for the Lake Erie Connector is to allow Ontario’s excess clean energy to be exported to the PJM market). Recognition of Ontario CEC products will ensure that Ontario’s clean energy is properly valued when sold. Consideration can be taken to ensure the level of CECs exported do not exceed physical exports of power from the Province, but it is important to ensure that the clean attributes of Ontario’s power is valued, when that power is helping to decarbonize neighbouring jurisdictions.

Tracking and reporting CEC sales is complex. Carbon accounting standards are still evolving, however; Ontario has the opportunity to be a leader in this space. Ontario should develop a registry that facilitates a market for CECs from both new and existing clean generation. In doing so, consideration could be given to releasing volumes from existing generation in pre-defined tranches. OPG supports either setting a cap on sales from existing generation – or establishing a clean supply mix floor. Any caps should be

Topic	Feedback
	<p>established in a manner that does not restrict the market from developing.</p> <p>From the centralized reporting available in the registry, the IESO should make clear how this information will be incorporated into a residual grid intensity calculation for reporting purposes.</p> <p>OPG supports either Option 1 (b) or 1 (c). The initial market design should be for unbundled CECs from existing assets. The IESO could release <i>some</i> of the CECs from its existing contracts making them available to sell by either the generator or by third-parties. This approach has a number of benefits:</p> <ul style="list-style-type: none"> • It will provide customers more options for sourcing CECs. • Suppliers of existing contracted resources will be incentivized to maximize the proceeds from the sale of these CECs, and some of these suppliers are also experienced in negotiating these sales based on similar arrangements in other jurisdictions. Allowing suppliers to negotiate these sales will also ensure the IESO does not have to generate the significant resources that would be necessary for that purpose if it were to sell CECs directly. • Customer choice amongst existing and new generation ensuring a sufficient supply of different technologies and product offerings. • It is consistent with other established voluntary markets. • Aiding to achieving corporate emissions goals. If IESO retires CECs or fully limits sales, customers might not be able to achieve their goals, depending on individual reporting preferences – driving investment away from Ontario. <p>For additionality/incremental generation – Option 3(a) could enable new investment in Ontario. However, the impacts of global adjustment will require careful thought to ensure costs are not unfairly shifted to the ratepayer and existing assets are not stranded.</p>

CEC Customer Preferences Survey

Topic	Feedback
What are the most relevant findings from the CEC customer survey?	<p>The CEC customer survey indicates a clean energy market exists in Ontario. It is encouraging to see that nearly all the large customers in Ontario have renewable goals and half have plans to target 100% clean electricity consumption and targets to reduce Scope 2 emissions. This demonstrates the commitment from Ontario loads to achieve a net zero grid.</p> <p>Nearly half of respondents were interested in investing in hydroelectric. Hydroelectric is a source of clean, renewable energy and a relied upon source of generation in Ontario. Load customers value having hydroelectric CECs available in the registry as a way to attain their targets. Ontario has a significant amount of hydro generation and making CECs available from existing hydro resources would allow customers to have immediate access to this clean generation source while supporting 24/7 matching of CECs to a customers load profile.</p> <p>More than half of respondents do not want to limit or cap the sales of CECs. Capping sales could limit a customer's ability to reach 100% of their Scope 2 targets and could potentially drive customers to other jurisdictions as it could be perceived that achieving 100% renewable energy in Ontario is too difficult.</p> <p>Mechanisms such as controlled releases of CECs from existing assets can allow the market to form, ensuring access for a broader range of market participants while managing the short-term impact to residual mix as participants explore participation in the market.</p>

General Comments/Feedback

- Although not necessarily part of the registry itself, the IESO should provide centralized and transparent reports to the market on CEC transfers and their impact on grid intensity/residual supply mix, in particular for those who do not purchase CECs and rely on the grid mix for their carbon reporting.
- Selling CECs from existing generation does not change the amount of clean energy produced in Ontario, it does change the remaining – residual – supply mix reflected in a consumer's carbon accounting – particularly those consumers who have not opted to purchase CECs as those sold CECs are no longer available to the customer.
- To complement the Ontario registry, the IESO should work with stakeholders to develop a consistent and transparent methodology for calculating the residual grid intensity and generation mix which the IESO can then calculate and publish on behalf of all Ontario consumers, factoring in CEC sales from all generation sources connected to the IESO grid. This calculation should factor in the null energy resulting from CEC sales as well as the emissions impact or cleanliness of electricity imports and exports. An opportunity exists for Ontario to be a leader in establishing such process/methodology.
- It should offer flexibility in the types of CECs that can be tracked on the registry. For example, it should not restrict whether the CECs must come from existing or additional generation resources. Doing so can unduly constrain market preferences.