

Stakeholder Feedback and IESO Response

Clean Energy Credits – April, 19, 2022

Following the [February 24, 2022](#), Clean Energy Credits (CECs) engagement webinar, the IESO invited stakeholders to provide comments and feedback on the materials presented by March 17, 2022.

Feedback Received

The IESO received over twenty-five submissions through its formal feedback process and the presentation materials and stakeholder feedback submissions have been posted on the IESO stakeholder [engagement webpage](#). Please reference the posted material for specific feedback as the below information provides excerpts and/or a summary only.

Product Offerings

Feedback	IESO Response
<p>Pre-existing Environmental Attributes:</p> <ul style="list-style-type: none">• If Environmental Attributes from existing generators are made available as credits, supply will be much greater than demand, lowering credit value and dis-incentivizing new clean generation	<p>This comment was received from numerous stakeholders and is supported by academic research into other voluntary energy credit markets. The IESO is identifying options that can address this concern.</p>

Feedback	IESO Response
<p>Additionality:</p> <ul style="list-style-type: none"> Several respondents noted the importance of additionality, which means that credit purchases drive new investment and make a difference to Ontario’s supply mix. One respondent provided the specific recommendation that only new, repowered or expanded facilities should be eligible to generate CECs and that these facilities should be able to generate CECs for 30 years from the Commercial Operation Date (COD) 	<p>This issue was the most commonly voiced comment through feedback received. The IESO will include these concerns, and product offering options to address the concerns, in the report back to government.</p>
<p>Range of CEC generation offerings:</p> <ul style="list-style-type: none"> The scope of the CEC market should apply to all non-emitting generating sources feeding both the transmission and distribution systems, and to both merchant and contracted power. 	<p>The IESO agrees that all forms of clean generation should have the chance to participate, regardless of where they are connected to the electricity system.</p>
<p>Local need for CECs:</p> <ul style="list-style-type: none"> CEC registry must be accompanied by new legislation and regulations governing LDCs and distribution grids. The proposed CEC market should allow LDCs to purchase locally generated renewable generation and offer green pricing programs and CECs, and allow non-emitting generators to offer Virtual Power Purchase Agreements (VPPAs) and CECs to local customers. 	<p>The IESO will include options for green pricing programs and VPPAs as well as commentary on the locational aspect of a CEC registry in the report back to government for their consideration.</p>

Feedback	IESO Response
<p>Power Purchase Agreements:</p> <ul style="list-style-type: none"> Corporate buyers find unbundled environmental attributes (i.e. EAs, such as RECs or CECs purchased separately from the electricity they're associated with) less preferable to bundled products as bundled products are more likely to lead to additionality. In the current regulatory environment in Ontario, the only type of Power Purchase Agreement (PPA) that would allow competitive corporate procurement of this kind would be physical behind-the-meter PPAs. Some stakeholders identified Global Adjustment as a barrier to financial PPAs, with one suggesting that PPA purchases should be subject to reduced GA charges. 	<p>This feedback was common amongst stakeholders. The IESO will explore the potential for PPAs in the report back to government for their consideration. An important consideration in relation to Global Adjustment (GA) allocation would be ensuring that GA is not shifted from PPA customers to the general rate base, unduly burdening ratepayers.</p>
<p>Credit Identification:</p> <ul style="list-style-type: none"> The IESO should consider including different classes of credits that differentiate between nuclear and wind/solar/hydro. While nuclear power is clean, it is not renewable. This is an important distinction for energy consumers 	<p>The IESO agrees that credits should be tagged by generation (fuel) type, along with other identifying attributes (facility, location, generation date, facility capacity, etc.) to support customer choice/preferences.</p>
<p>Greening existing generation:</p> <ul style="list-style-type: none"> Encourage the program to include greening of existing generation assets. For example, the use of renewable gas in existing Combined Heat & Power assets should be included. 	<p>The IESO is seeking to provide a solution to enable customers to acquire the types of clean energy credits they need and want and is therefore open to all forms of clean and renewable generation being included in the registry. It will be up to customers to determine the generation types from which they wish to secure credits.</p>

Registry Design

Feedback	IESO Response
<p>Realized carbon savings:</p> <ul style="list-style-type: none"> The avoided carbon emissions from the clean energy generation, on an hourly basis, should 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. 	<p>At present, carbon emissions and offsets are considered out of scope for this project. However, this idea will be included in the report as an area for future consideration in the registry.</p>
<p>Interconnected and comparable CEC Registry:</p> <ul style="list-style-type: none"> The registry should be interconnected and comparable to other environmental attributes markets. This interconnectedness will provide cost-savings associated with designing a registry from scratch or the need to re-design an Ontario-only registry at later date to integrate with other registries. Interconnecting with other registries will also provide Ontario credit buyers and sellers with a bigger participation pool and more choices. 	<p>This was a common comment on registry design. The IESO will include the ability to interconnect with other registries in a proposed list of basic functional requirement recommendations to the Government in our report back. This functionality can help with the concept of “future-proofing” outlined in the Minister’s letter.</p>
<p>Allow for third-party certification:</p> <ul style="list-style-type: none"> Allow interested parties to obtain third-party certification for credits (through programs like ECOLOGO or Green-e) to label them accordingly. Third-party certification does not need to be a requirement for all credits, but the registry should allow companies that have invested in additional certification to market those efforts. 	<p>The IESO will recommend that credits can be tagged with third-party certification in the report back to government.</p>
<p>Engage with those who use registries and those who depend on the output of registries:</p> <ul style="list-style-type: none"> Gather user requirements from clean energy service providers and those who develop software for clean energy markets 	<p>The IESO will conduct a technical session with stakeholders who have volunteered to discuss this topic.</p>

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<p>Hourly load matching:</p> <ul style="list-style-type: none"> 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. 	<p>While the IESO does not envision hourly credit matching to be available immediately on the registry, this requirement will be included in the “future-proofing” considerations.</p>
<p>Provide finality with respect to retirement:</p> <ul style="list-style-type: none"> Ensure the retirement of a credit from the registry is final and cannot be reversed. This will preserve the integrity of the registry system and help avoid issues like double-counting and unnecessary distortions to supply. 	<p>The IESO agrees that all credit retirements should be final and un-reversible. The recommended requirements for a registry will include this functionality.</p>
<p>Employ standard vintaging:</p> <ul style="list-style-type: none"> The registry should track the vintage of assets at least to the level of month and year. Industry standards with respect to vintaging typically allow RECs to be used within a 21-month window inside and around a given calendar year (meaning when looking to use a credit for activity in 2022, the REC must have been created within last six months of the previous calendar year (2021), the full 12 months of the current calendar year (2022), or the first three months of the next calendar year (2023)). 	<p>The IESO would like to better understand the broader market/customer preference around the vintage of purchased credits. The IESO understands the request for a registry to have – as minimum functionality – the ability to track the vintage of each credit included in the registry. This question was included in the customer preference survey. Though the findings of the survey are not available at this time, they will be made public at a later date. This question will also be explored further through the technical sessions that the IESO will undertake in May 2022.</p>

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<p>Employ standard tracking and transferability:</p> <ul style="list-style-type: none"> All credits on the registry should be serialized and able to transfer between accounts. Serial number tracking is common practice and helps avoid issues like double-counting. It also helps to ensure transparency with respect to the retirement of credits. Some existing registries require generation data to be submitted by a third-party while others allow generation data to be self-submitted by the generator. 	<p>The IESO agrees that this should be included in the basic functional requirements of the registry.</p>

Other Considerations

Feedback	IESO Response
<p>Double Counting and Residual Mix Impact:</p> <ul style="list-style-type: none"> Be aware of the risk of double counting Environmental Attributes in a voluntary market lacking a Renewable Portfolio Standard. For example, if companies are retiring CECs to make their claims, then Ontario cannot use the same CECs to contribute to its % clean grid number. Creating a residual mix emissions factor will negatively impact Ontario customers not purchasing CECs 	<p>The IESO is investigating methods to account for CEC sales in our public reporting. The IESO is also organizing a technical session with stakeholders who volunteered to discuss this topic in more detail. Stakeholder concerns about residual mix impacts from existing generator CEC sales will be included in the report back to government along with potential solutions.</p>

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<p>Monetize Investments Principle:</p> <ul style="list-style-type: none"> One stakeholder expressed concern with the following registry design principle included in the Minister's Jan. 26, 2022 letter to the IESO: The "Monetize investments made" principle will be a "deal breaker" for most consumers of CECs. This principle states that "Credit offerings should include existing non-emitting generation with best efforts made to enable proceeds from CEC sales to flow to ratepayers." This would mean these credits have no "additionality". Stakeholders expressed concern that the sale of credits associated with existing non-emitting generation would just flow money from credit buyers to credit sellers without incentivizing actual carbon reductions or incremental clean electricity production. This approach would fail to recognize that the only reason consumers are willing to pay for voluntary credits is to help accelerate decarbonization. 	<p>The IESO recognizes that no single product offering option can address all the design considerations and policy goals identified in the request from the Minister of Energy. The IESO is working to identify and develop options that meet customer needs while satisfying the design considerations outlined by government.</p>