



## November 2, 2023

# **RE: Clean Air Council Input on IESO Clean Electricity Fund**

The Province of Ontario has stated its interest in advancing a Clean Electricity Fund from the sale of Clean Energy Credits. In response to the Ministry of Energy's "Powering Ontario's Growth" initiative, the IESO was tasked with developing insights and recommendations for a Future Clean Electricity Fund (FCEF).

While the Clean Air Council supports the development of an Ontario Clean Electricity Fund to increase renewable electricity generation projects, the Clean Air Council is not supportive of the sale of the Clean Energy Credits held by the IESO and OPG due to the impact the sale of these credits will have on Ontario's past climate leadership and the Province's 2030 GHG reduction target. In addition, over 65 Ontario municipalities have passed climate emergencies and have either set or are in the process of setting science-based GHG reduction targets. It is highly unlikely that the Province will be able to achieve its already reduced 2030 GHG reduction target with the sale of environmental attributes resulting from the decarbonization of Ontario's electricity system. Furthermore, the sale of these environmental attributes will pose significant challenges for Ontario's municipalities in achieving their GHG reduction targets.

If the Province still decides to sell the environmental attributes resulting from the decarbonization of the electricity system to fund the Clean Electricity Fund, then transparency must be ensured regarding the sale's details, including the identity of buyers, quantities sold and the time frame for attributes sold. Additionally, the Province must be transparent about how the sale of environmental credits affects the GHG coefficients for the electricity system and the associated time frame.

It is important to note that past credits would not meet the additionality criteria for offsets. GHG reductions are considered additional only if they would not have occurred without the existence of a market for offset credits. If these reductions would have happened regardless of the opportunity to sell carbon offset credits, they do not meet the additionality requirement. This is crucial for maintaining the quality of carbon offset credits, as purchasing offset credits without true additionality can exacerbate climate change. Therefore, to meet the additionality requirement, only GHG reductions resulting directly from the sale of Clean Electricity Fund credits should be eligible for sale, while past environmental attributes should not be eligible.

# What type of clean electricity projects are you exploring?

Many municipalities are looking to advance renewable energy projects, with a particular focus on solar photovoltaics on municipal buildings and land. There is also keen interest in advancing battery storage projects, either alongside renewable projects or to address the use of lowercost electricity to offset higher-cost and higher fossil fuel use during peak hours.

### What barriers have you experienced in implementing clean electricity projects?

Municipalities have encountered several barriers related to the need to upgrade the distribution system to connect renewable energy projects to the grid. A significant limitation cited is the lack of capacity, as determined by the LDC, which has hindered the installation of many municipal renewable projects. Municipal staff have also identified necessary distribution system upgrades as a barrier to community installation of renewable projects. While this is not a universal issue, certain areas have faced challenges where utilities have indicated they will not approve renewable grid connections. As such, there is a pressing need for collaboration among municipalities, the IESO, and LDCs to strategically invest in the distribution system thereby making more locations eligible for grid-connected renewable installations. These distribution system upgrade investments could be incorporated into the Clean Electricity Fund, but the CAC recommends a separate effort that brings together municipalities, the IESO, and LDCs to develop a longer-term distribution system decarbonization investment plan.

#### What tools would be helpful to overcome these barriers?

In addition to the Clean Electricity Fund, the advancement of virtual net metering regulations would support municipal renewable projects. These regulations would help address the longer-term payback associated with many renewable projects by providing additional business models capable of addressing the upfront capital costs.

### Any additional streams that should be considered?

There is the need for Ontario's electricity system to undertake the needed risk and vulnerability assessments to better understand the risk to the electricity system because of climate change and extreme weather. Toronto Hydro's Limited Climate Change Vulnerability Assessment and the Climate Change Vulnerability Assessment of Ontario's Electrical Transmission Sector are examples of the types of studies that need to be undertaken across the system as a whole.

An example of more recent climate change risk assessment was conducted by an American utility, Consolidated Edison: <u>Climate Change Vulnerability Study (coned.com)</u>. This utility also did a similar report in 2017. Consolidated Edison has also published information detailing what they are doing in response to the findings of these reports: <u>Addressing Climate Change Impacts |</u>

<u>Sustainability Report 2022 (conedison.com)</u> and <u>Our Climate Change Resiliency Plan | Con</u> <u>Edison</u>.

The Ontario Provincial Climate Change Impact Assessment (2023) did include a very high level review of climate risks to the electrical sector as one of many utilities. On page 165 of this report, the electrical sector is rated at medium and high risk of physical impact associated with extreme weather. A more detailed consideration really is required, taking into account projected future extreme weather. A detailed climate risk assessment for the grid was recommended by the Expert Panel on Climate Adaptation that was completed in 2012. That work has never been done. The more detailed climate risk assessment should result in a prioritized list of risk reduction actions across the province's entire electrical system. Funding streams should be identified for climate adaptation actions needed for generation, transmission and distribution systems to keep electrical power disruption risks to an acceptable level. Transparency regarding the risk assessment results and plans for climate adaptation is vitally important to municipalities and other sectors highly reliant on electricity. Care should be taken to not reveal electrical equipment vulnerability information that could be useful to persons seeking to inflict intentional damage to the system.

## What considerations should go into determining priority projects?

Project prioritization should be based on those projects that can help reduce peak electricity requirements; where projects do not require distribution system upgrades to connect; and where the installation of renewable projects can help delay infrastructure system upgrades. There is the need for the Clean Electricity Fund to consider the economic savings to the infrastructure system when identifying the value of those distributed energy projects that reduce the need for infrastructure investments and bring those benefits into consideration for the project's value to the electricity system as a whole. Those wider benefits should be considered when determining the business case for projects that reduce or eliminate the need for transmission and distribution system investments.

That doesn't mean that a more robust and wholistic distribution system investment plan isn't necessary (the CAC as noted above believes that the IESO, LDCs and municipalities need to work together more to identify a more holistic and strategic distribution system investment plan to support distributed energy resource installation and decarbonization efforts). Simply that it makes sense to prioritize earlier renewable projects in areas where the distribution system can accommodate grid connections.

There is also the need for LDCs to update their grid connection calculations from the fit model to the net metering model. At present there is the assumption used by many LDCs that the renewable installation can only be connected to the grid if the grid can handle 100% of the installed capacity to be connected to the grid, and in the net metering model in practice at

present, it is never the case that 100% of the installed capacity would be sent to the distribution grid.

# Did your municipality provide, or decline to provide, support to a project in the IESO's expedited long-term procurement?

Many of the CAC municipal councils are part of the 34 Ontario municipalities that have passed resolutions requesting the Government of Ontario phase out electricity generating gas plants. Additionally, Toronto, Thorold, and Kingston have not approved fossil fuel electricity generating stations within their jurisdictions.

# How could the fund be used to bolster support and decision-making for providing support to generation projects located in your municipality?

The CAC seeks a better understanding of how environmental attributes would be considered if they receive funding as part of the Clean Electricity Fund. Specifically, we are interested in whether the IESO would own all the environmental attributes or only a portion based on the percentage of IESO funding that supported the project. It is likely that municipal participation in the Clean Electricity Fund would be limited if the environmental attributes associated with these projects do not contribute (at least in portion) to municipal GHG reduction targets. For more information on any of the above input please contact Gaby Kalapos

( ) to schedule a discussion with Clean Air Council member municipalities.