Challenge Statement:

Maximize Existing Resources

- Ontario faces a significant near term, growing and enduring supply gap to meet increased demand that will continue with electrification of the broader economy. At the same time, contracts for several existing resources will expire within the next decade, in most cases, well prior to the end of the useful life of the assets
- What tools and mechanisms should the IESO use to cost effectively and reliably optimize the acquisition and continued operation of existing supply and demand side resources?

Supportive Facts and Rationale:

- Ontario taxpayers subsidize the rate impacts of existing resources to the tune \$6.5B in 2021, which highlights the need for prudent procurement
- Ontario's installed electricity capacity is 38,216 MW, almost 19,000 of which is rate regulated (OPG) and a further 6,550 MW under long term contract (Bruce Nuclear). As such, resource reacquisition mechanisms are focused on the remaining ~33% of existing assets
- 43% of the contracts for existing Ontario supply resources will expire over the next decade
- The IESO's Annual Planning Outlook assumes the continued operation of existing assets over the horizon of the Outlook, yet asset owners may not have the investment confidence to make that same assumption
- The IESO's current or planned re-acquisition mechanisms or "toolkit" includes annual capacity and forward capacity auctions, mid term RFPs, same technology expansions and programs
- There is no process for reacquiring smaller existing, embedded non-market participant facilities, highlighting a revenue adequacy issue for small resources

Stakeholder Advisory Committee – Challenge Statement

IESO Role:

- Understand each resource type and what is in scope for optimization
 - Description
 - o Example
 - Include opportunities for pairing technologies that optimize them (storage, hydrogen, etc.)
- Provide transparent opportunities for assets owners to communicate optimization from their perspective
- Develop fit-for-purpose tools
- Ensure ensuing contracts offer flexibility that aim to meet environmental, policy and societal goals
- Ontario grid provides reliable, affordable and clean power

Role of Others:

- Generation, transmission, distribution and demand response resources communicate effectively what optimization looks like in their world
- Customers and other stakeholders communicate their need for reliable, low cost and clean power such that the IESO understands what are customer "tipping points"

Strategic Considerations and Committee Advice:

- Consider the government's use of ministerial directives to direct procurement/operational matters, and focus on establishing principles and the characteristics they expect to see optimized, such as cost, environmental, reliability, etc.
- Existing electricity resources should be procured using mechanisms which balance the need for investment certainty and ratepayer value, regardless of the technology type or point of connection (grid-connected or behind the meter). However, also consider different clearing prices for emitting and non emitting resources.
- The policy, regulatory and governance frameworks should be designed by the IESO and OEB to encourage distribution utilities to procure third-party electricity resources to meet local distribution needs while allowing these resources to value stack in order to reduce overall costs to the consumer.