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**Presentation from the  
Independent Electricity System  
Operator (IESO)**

**Présentation de la Société  
indépendante d'exploitation du  
réseau électrique (SIERE)**

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**Role and duties of the IESO in  
Ontario**

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**Rôle et les obligations du SIERE en  
Ontario**

Commission Meeting

Réunion de la Commission

September 15, 2022

Le 15 septembre 2022

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SEPTEMBER 15, 2022

# Meeting Ontario's Future Electricity Needs

**Chuck Farmer**, Vice President - Planning, Conservation and Resource Adequacy

# About the IESO



Operate Ontario's province-wide electricity system on a 24/7 basis



Support innovation and emerging technologies



Oversee the electricity market, driving competition to maintain affordability



Work closely with communities to explore sustainable options



Plan for Ontario's future energy needs



Enable province-wide energy conservation

# Key electricity trends in Ontario

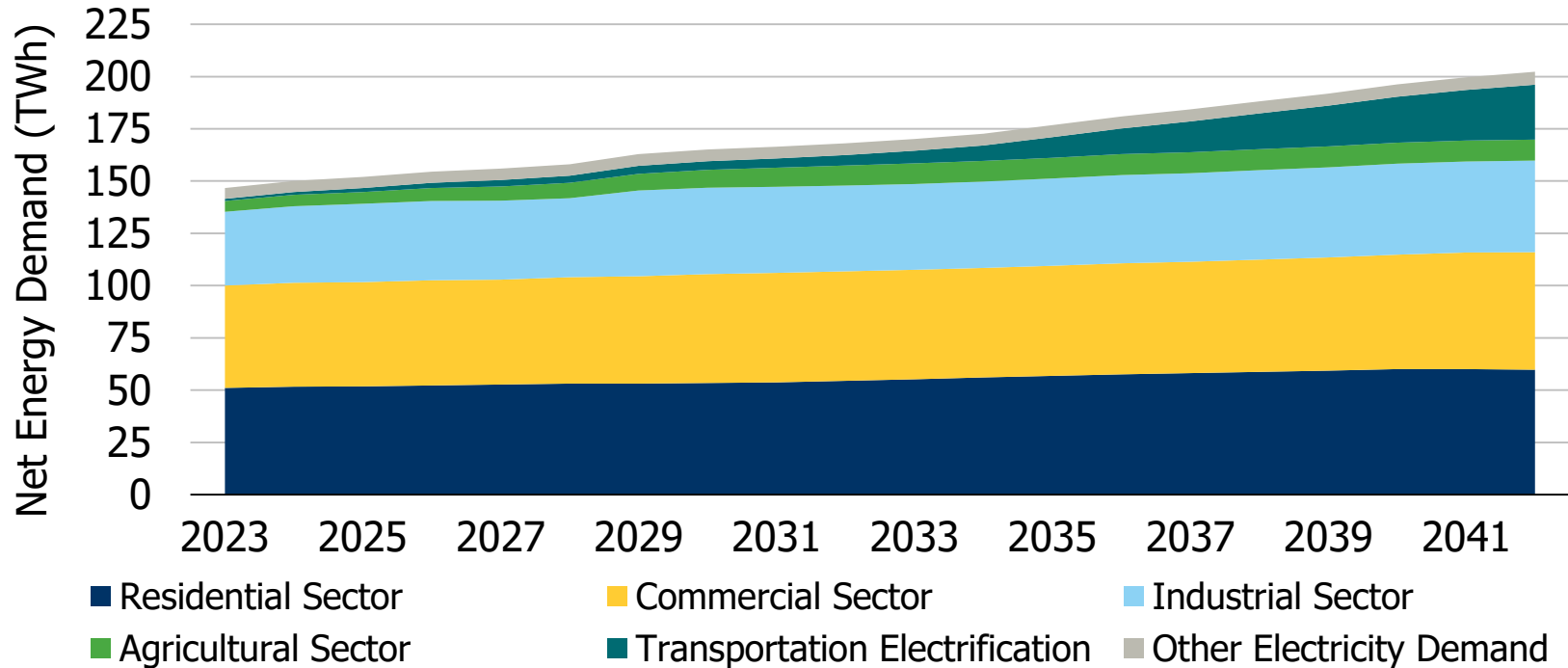
- Demand for electricity is on the rise
- Existing and new resources will be required to maintain reliability
- Technological evolution is leading to more decentralized grid
- Interest in decarbonization continues to grow
- Nuclear refurbishments and retirements are contributing to new supply needs



# Seizing opportunities

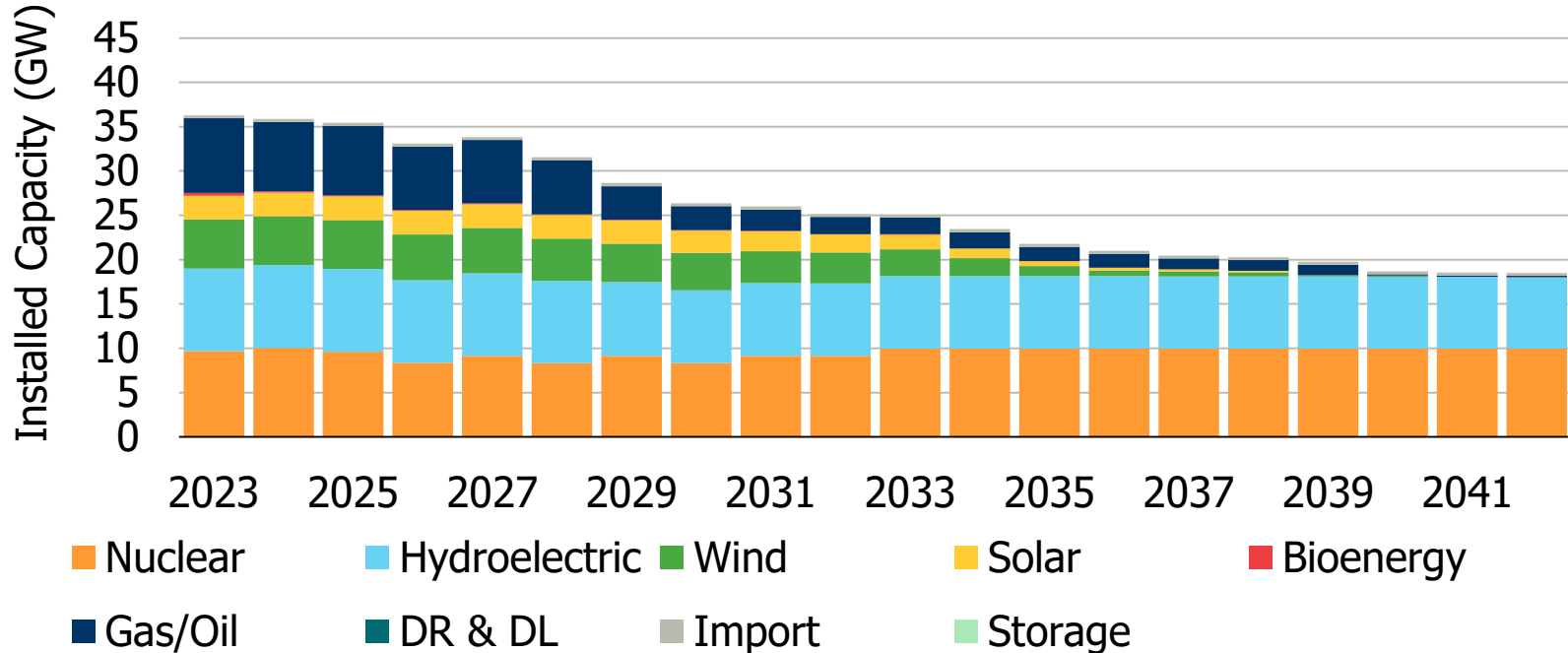
1. Continue to secure new and existing resources to meet growing electricity needs across the province
2. Explore pathways to decarbonization in the electricity system and support decarbonization of other sectors
3. Create opportunities for more resources and customer choice to drive down costs
4. Proactively engage with a wide range of audiences to help inform the many important initiatives underway

# Preparing for future growth



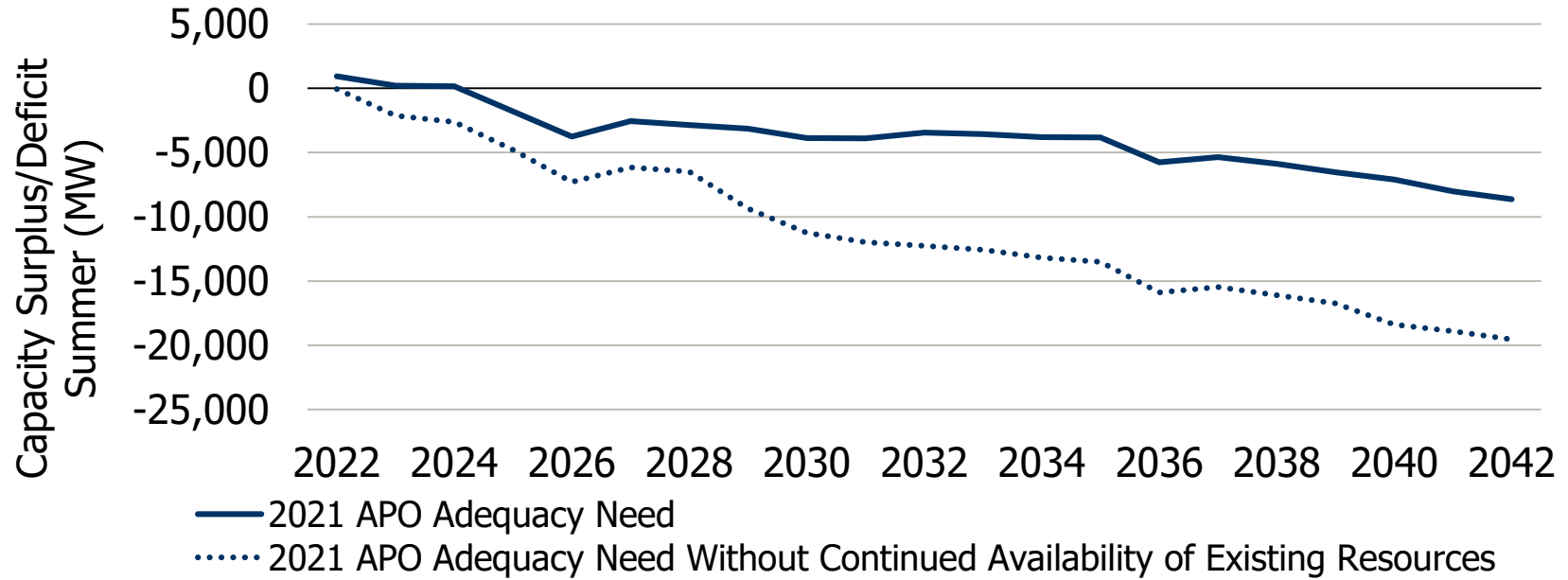
# Assessing the supply available

Installed capacity without reacquisition of expired contracts 2023 - 2042



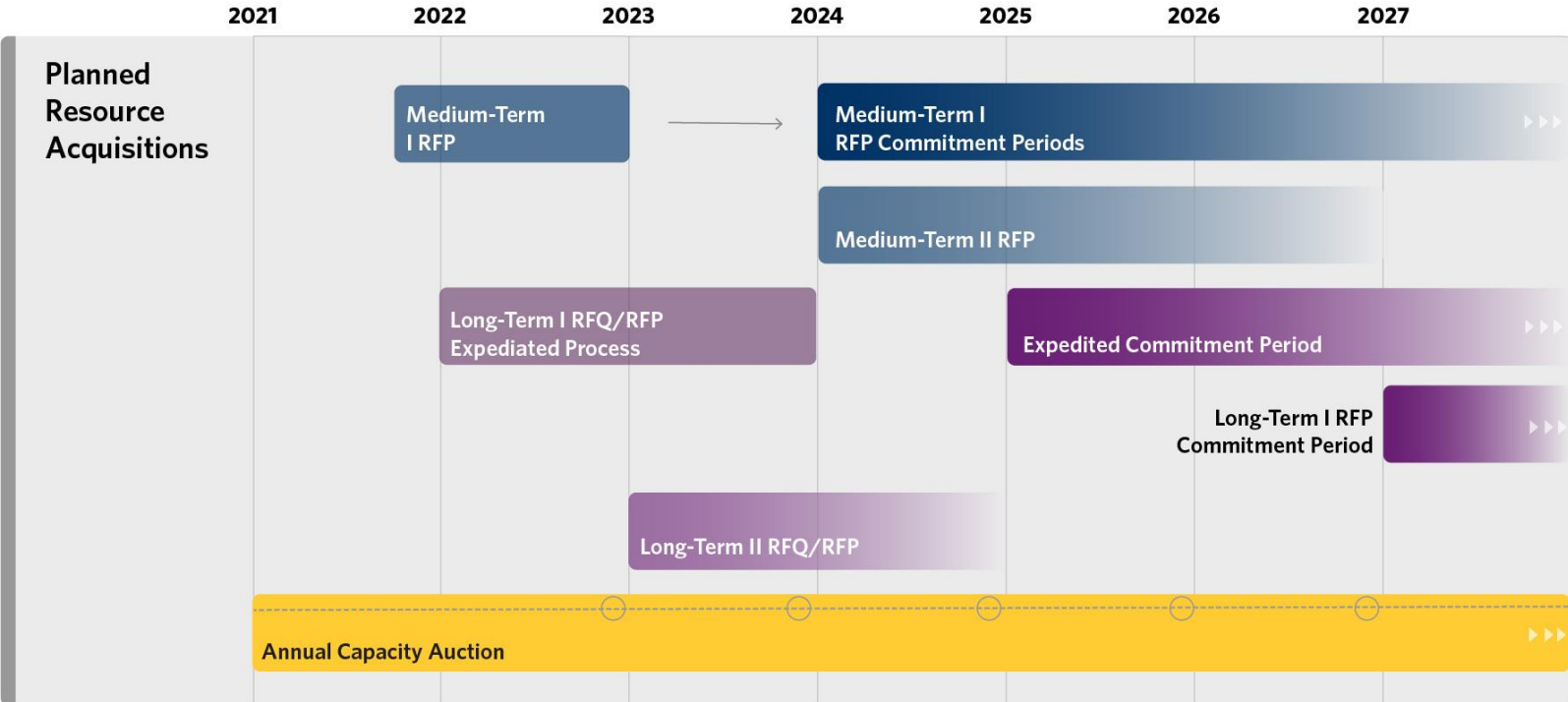
# Identifying Ontario's future supply needs

Actions are underway to address the coming supply gap over the next decade – through annual auctions, medium-term RFP for existing resources, and long-term RFPs for new resources.



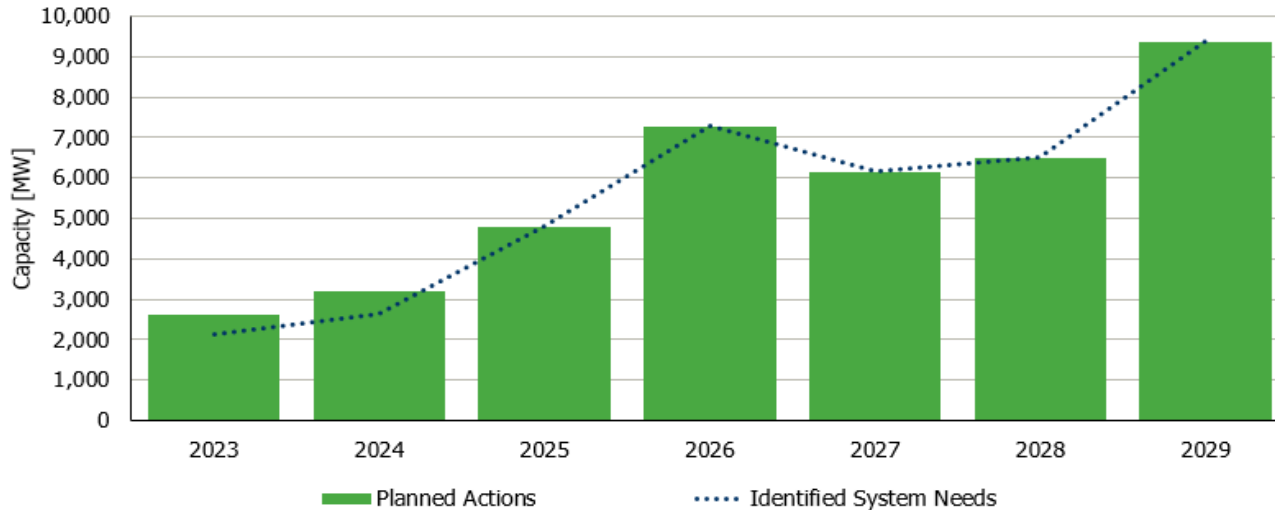


# A framework for resource acquisition



# Ontario's planned actions to address system needs

Actions are underway to address the coming supply gap over the next decade – through competitive RFPs and capacity auctions.



# Exploring pathways to decarbonization

- The IESO is developing achievable pathways to decarbonizing our sector, considering factors such as system reliability, cost and timelines.
- Study will consider a potential increase in resources like energy storage, imports and energy efficiency.
- Potential electrification forecasts showing demand could double or triple.
- Continue to work with provincial and federal governments to ensure our focus aligns with environmental policy objectives.

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# Thank You!

Independent Electricity  
System Operator

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