

# PowerLogic Users Group Conference 2019

Jon Feldman

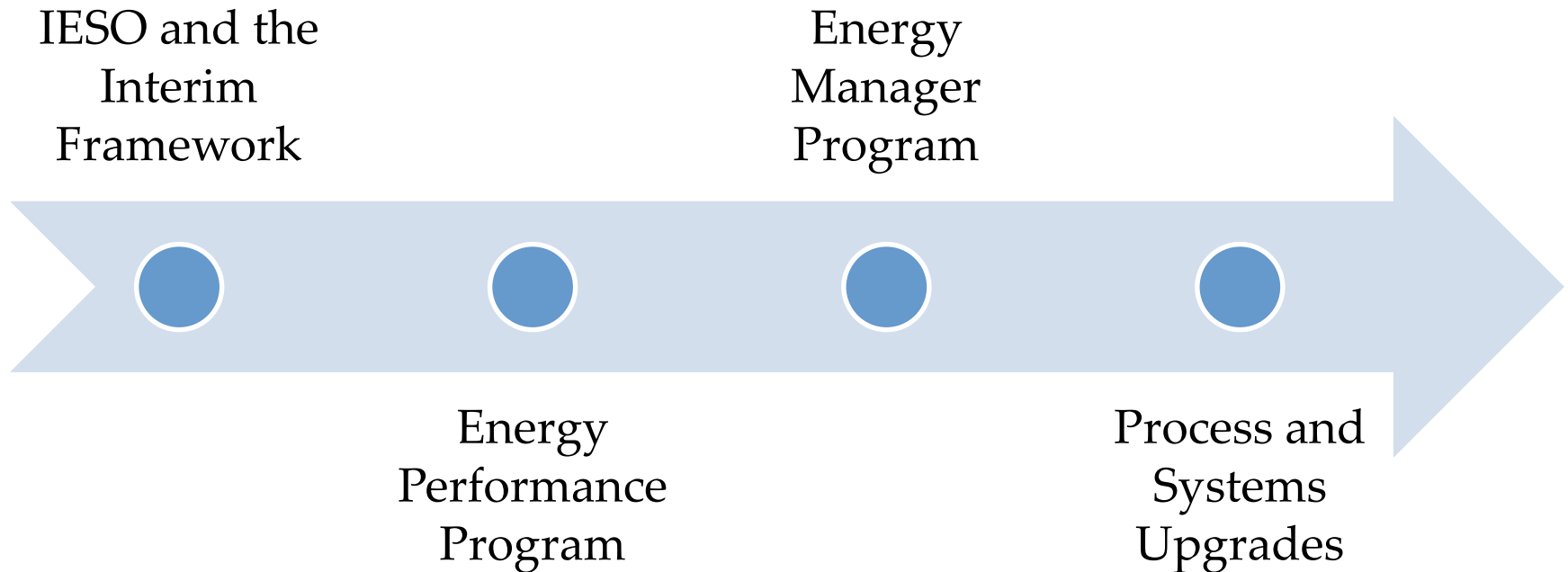
Senior Technical Officer, Industrial Energy Efficiency

IESO

---

October 17, 2019

# Our Journey Today



# IESO: Who We Are and What We Do



Reliably operate  
Ontario's province-wide  
system 24/7



Support innovation



Create electricity  
market efficiencies



Work closely with  
communities to explore  
sustainable options



Plan for Ontario's  
future energy needs

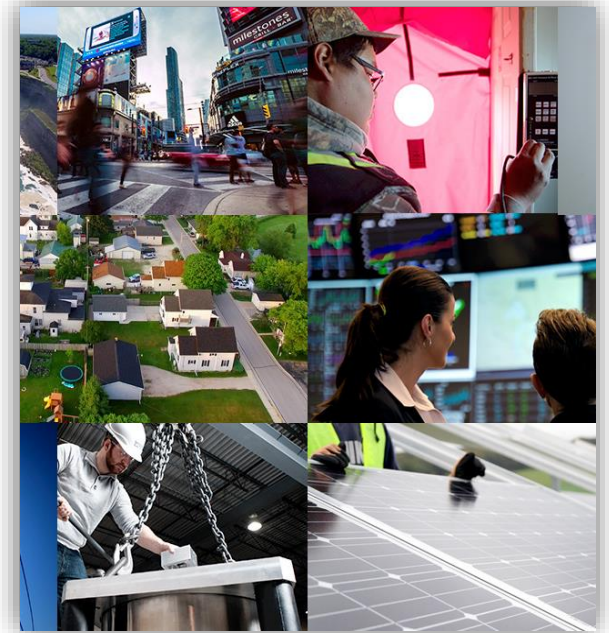


Enable province-wide  
energy efficiency

# Energy Efficiency in Ontario

## Energy efficiency makes a lasting contribution toward reducing long-term energy costs

- When planning for Ontario's long-term electricity needs, the IESO forecasts, and counts on, the extent to which energy-efficiency initiatives will reduce those needs
- Since 2006, energy-efficiency programming has resulted in 16.5 TWh of energy savings and 5,000 MW of demand savings



# 2019-2020 Interim Framework

- The IESO is delivering a suite of energy-efficiency programs from April 1, 2019 to December 31, 2020, with support of various delivery partners
- Focused on reducing the cost of program delivery, while ensuring the availability of energy efficiency to support consumers and the electricity system
- Emphasis on business programs and on the Home Assistance Program and energy-efficiency programming for Indigenous communities



# Energy-Efficiency Programs

Ontario businesses have access to incentives for energy-efficiency projects to see lowered energy costs and contribute to meeting electricity system needs

- Retrofit Program
- Small Business Lighting
- Energy Manager Program
- Process and Systems Upgrades
- Energy Performance Program

Breakdown of programs, budgets and targets available on [IESO website](#)



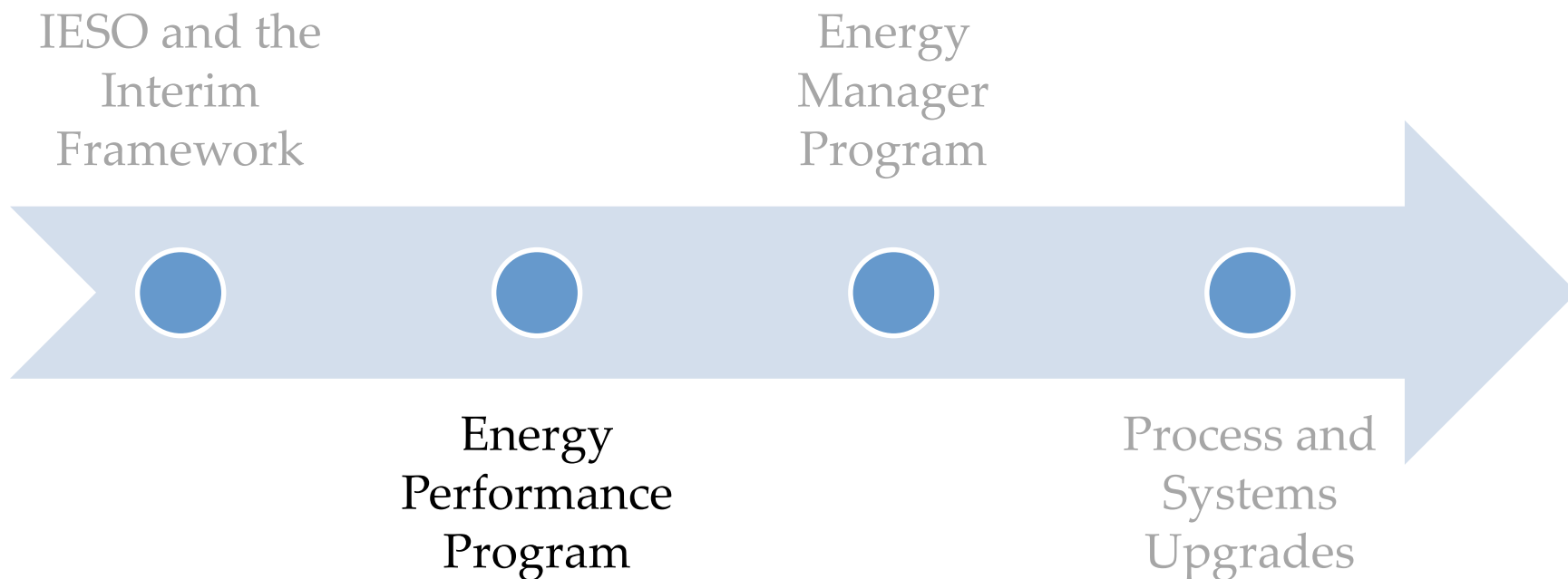
# Why Save on Energy Programs?

Energy-efficiency programs enhance the competitiveness of Ontario businesses:

- Reduce O&M costs
- Increase reliability
- Increase comfort
- Increase competitiveness
- Enhance customer experience
- Improve tenant retention
- Attract employees



# Our Journey Today





# Pay-For-Performance is Changing The Market

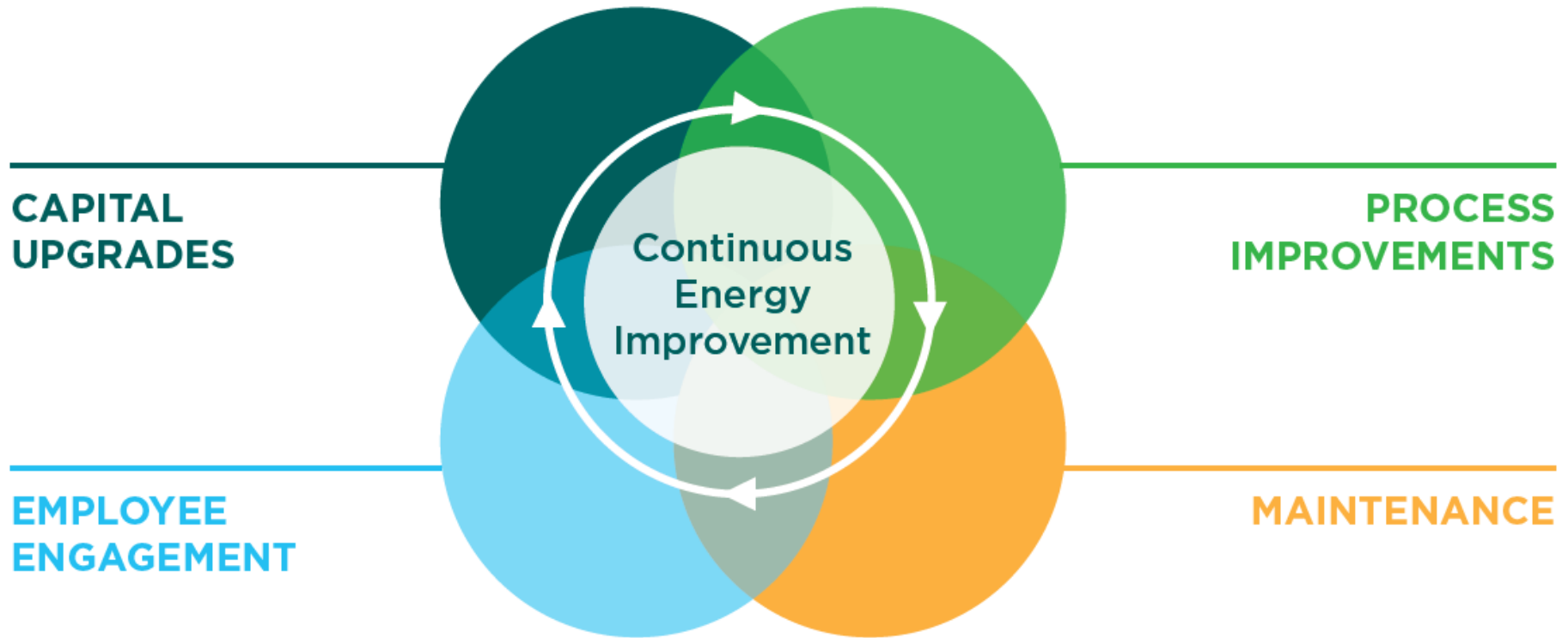


Image Credit: Toronto Hydro

# Energy Performance Program (EPP)

- Holistic approach to energy savings: O&M + behaviour + capital
  - Single facility eligible
  - Ends December 31, 2021
- Incentive of \$0.04/kWh paid annually
- Savings are determined by comparing annual metered consumption to a building-specific energy model
  - Data normalized for weather + significant building operations
  - Modelling incentive of \$1,500 for each accepted facility, up to a maximum of \$15,000 for 10 approved facilities

**Facilities participating in the Energy Performance Program are seeing an average overall electricity saving of 6.5%**

# EPP is Unique

EPP

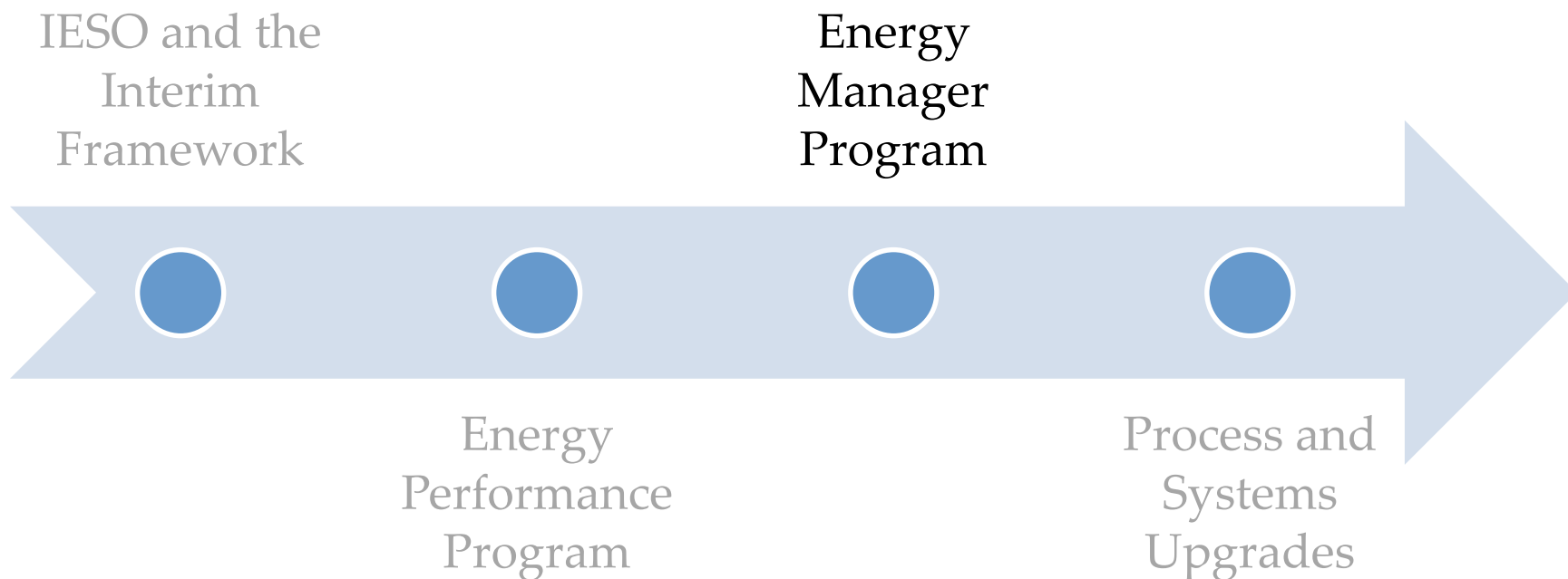
Incentives based on whole facility savings

Lower program costs

Broader and deeper savings

Suited for customers with advanced energy management capability

# Our Journey Today





# Energy Manager Program



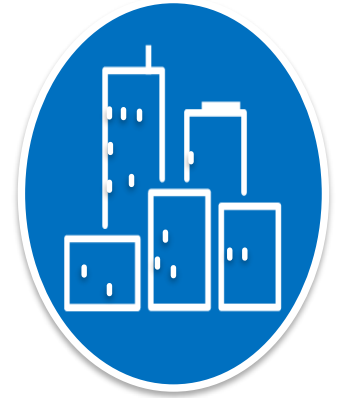
\$70m  
Largest EM  
Program



Up to  
\$150K/yr  
per EM



150 EMs  
across ICI  
by 2020

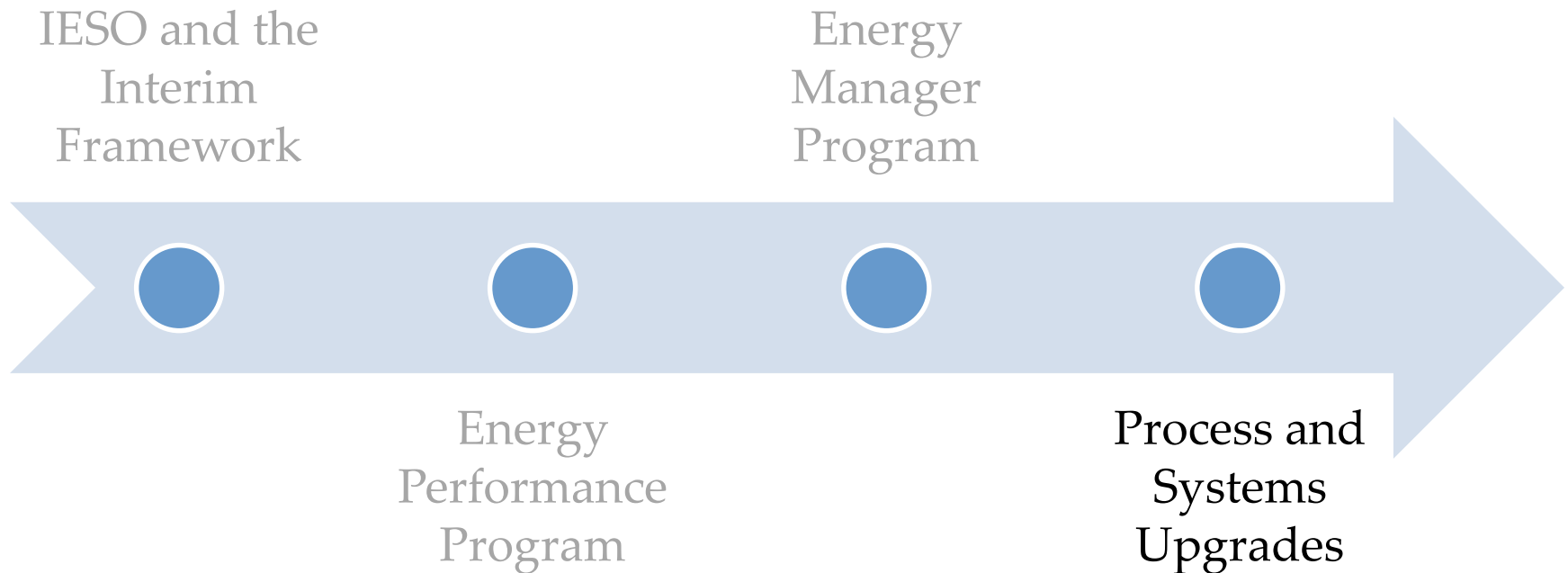


820 GWh  
savings  
target

# Energy Manager Program



# Our Journey Today



# Process & Systems Upgrade (PSU)

- Project incentive rate is lesser of:
  - \$200/MWh of savings
  - 70% of eligible project costs
  - one-year project payback
- Capped at \$10M per project
- Minimum project size of 300 MWh of savings
- Waste Energy Recovery capped at 10MW



# PSU – Measurement & Verification (M&V)

- Incentive is paid based on actual savings delivered and capped at 120% of contracted value
  - No longer a minimum savings threshold
- For projects with incentives <\$1M:
  - 1<sup>st</sup> quarter and 1<sup>st</sup> year M&V required
- For projects with incentives >\$1M:
  - 4 years of M&V reporting required, with ability for IESO to confirm savings for an additional 6 years
- All measures must have at least five years' persistence

# PSU – Study Funding

- Engineering Studies replaced with Engineering Feasibility Study (EFS)
- The IESO will assess the reasonableness of study funding amounts to determine incentive limit
- 50% of study funding to be paid upon study completion
- 50% to be paid if a project is contracted and is deemed “In-Service”
- EFSs must be completed by April 30, 2020 to be eligible for incentive funding

# PSU – Process Enhancements

- Single type of project contract regardless of project size
- Need for Solvency Certificate removed
- Payment process has been simplified
- For Advance Payment, Performance Security requirements reduced
- Allow third-party ownership of projects

# Thank you



**ieso.ca**

 @IESO\_Tweets

 OntarioIESO

 [linkedin.com/company/ieso](https://www.linkedin.com/company/ieso)



**saveonenergy.ca**

 @SaveonEnergyONT

 SaveonEnergyOntario

 [linkedin.com/company/saveonenergy-ontario](https://www.linkedin.com/company/saveonenergy-ontario)

Jon Feldman

416 969 6295

[Jon.feldman@ieso.ca](mailto:Jon.feldman@ieso.ca)

