

DECEMBER 14, 2020

Overview of the New 2021–2024 CDM Framework

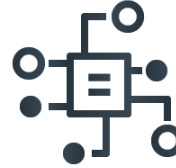
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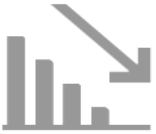
IESO: Who We Are and What We Do



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 conservation

10+ Years of Conservation and Demand Management

- **2011-2014 CDM Framework** – Introduction of Save on Energy brand, province-wide programs; LDC-delivered
- **2015-2019 Conservation First Framework** – Building a culture of conservation, helping consumers save on energy costs; LDC-delivered
- **2019-2020 Interim Framework** – emphasis on business programs, focus on low-income and Indigenous communities; IESO-delivered
- **2021-2024 CDM Framework** – focused on cost-effectively meeting needs of electricity system, consumers; IESO-delivered

Interim Framework Timelines

- Retrofit applications submitted by December 4, 2020, to be considered for pre-approval by December 31, 2020
- Process and Systems Upgrade applications submitted by December 4, 2020, for projects to be considered for contract by December 31, 2020
- Energy Manager agreements to be contracted by December 31, 2020
- Energy Performance Program applications are no longer being accepted
- Interested participants of the Small Business Lighting Program and Home Assistance Program may apply to December 31, 2020

New 2021-2024 CDM Framework

- On September 30, the IESO directed to implement a new \$692M, four-year CDM Framework to launch in January 2021
- Recognizes benefits to electricity system and consumers, as well as contributions programs provide to Ontario's economy and competitiveness
- To be centrally delivered by the IESO under the Save on Energy brand



CDM Framework: Targets

- Programs to target commercial, institutional and industrial customers
- Renewed programming for income-eligible electricity consumers and on-reserve First Nation communities
- Mid-term review by December 2022 to reassess budgets and targets based on customer and system needs



Meeting System Needs Today and Tomorrow

- Framework designed to target bulk system peak demand and local or regional needs rather than delivering 24/7 energy savings
- Will leverage competitive procurements, calls for proposals, improve cost-effectiveness, solicit consumer-based solutions
- Will address limited system needs in near term and increase CDM investments to meet needs emerging in mid-2020s
- Energy efficiency auction pilot to procure peak demand reductions scheduled for March 2021, \$5M budget from Grid Innovation Fund

Retrofit Program Enhancements

- Enhanced list of fixed measures, improved application process and reduced administrative burden for applicants
- Previous custom track replaced by three streams of measures to include those most commonly applied in former custom measure track
 - Includes Lighting, HVAC and Manufacturing and other Equipment
- Opportunity to keep pace with changing marketplace needs over the four-year framework

Retrofit Measures - Lighting

- High Bay
- Horticultural
- Integrated LED Fixture
- Lighting Controls
- Low Bay
- Reflector
- Tube
- Display Case LED Fixture

High Bay Fixture

Measure	Incentive (per unit)
LED High Bay Fixture	Up to \$110

Horticultural

Measure	Incentive (per unit)
Horticultural Inter-lighting LED Grow Light Fixture	\$100
LED Grow Light - Cannabis Greenhouse	\$125
LED Grow Light - Cannabis Warehouse	\$200
LED Grow Light - Vegetable Greenhouse	\$200

Retrofit Measures - HVAC

- Rooftop Units
- Chillers
- Cooling
- Fan Motors
- HVAC Controls
- Ventilation

Rooftop Units

Measure	Incentive (per unit)
Advanced Rooftop Unit Controls	Up to \$5,780

Chillers

Measure	Incentive (per unit)
HVAC Chiller - Air-Cooled Chiller	Up to \$1,320
HVAC Chiller - Water-Cooled Centrifugal	Up to \$10,810
HVAC Chiller - Water-Cooled Positive Displacement	Up to \$11,640

Retrofit Measures – Manufacturing and Other Equipment

- Agriculture
- Agriculture - Dual and Natural Exhaust Ventilation System
- Compressed Air
- Equipment
- Process Chillers
- Manufacturing Controls
- Motors
- VFDs

Compressed Air

Measure	Incentive (per unit)
Engineered Nozzle	Up to \$85
Compressed Air Low-Pressure Drop Filter (20 HP to 100 HP)	Up to \$730
Primary Air Receiver Tank	Up to \$7,640
Compressed Air Variable Displacement Compressor	Up to \$13,720
Compressed Air Variable Speed Drive Compressor	Up to \$17,140
Zero Loss Drain	\$140

Energy Performance Program

- Holistic approach to energy savings: capital + operational + behaviour
- 1,500,000 kWh minimum; can aggregate up to five facilities in a single baseline energy model
- Data normalized for weather and significant building operations
- Savings are determined by comparing annual metered consumption to the baseline energy model
- Facilities to save at least 5% energy savings over two years
- Incentive of \$0.04/kWh paid annually

Energy Performance Program Enhancements

- Annual incentives for achieving peak demand savings (\$50/kW), in addition to annual energy savings (\$0.04/kWh)
- Extended contract term of three years
- Upfront incentive payments to support implementing capital improvements and energy management practices - Baseline Energy Consumption x 2.5% x \$0.04/kWh; no \$1,500 modelling incentive
- Technical requirements streamlined to improve customer experience
- To include industrial consumers in 2021

Energy Manager Program

- Since 2011, 150+ managers across Ontario have become part of highly skilled network of energy professionals
- Program will evolve over the course of the four-year framework
- Companies interested in hiring an Energy Manager can apply during application window in 2021



Energy Manager Program

- Approved companies will receive \$20,000 upon hire of energy manager and up to \$150,000 per year
- Performance payment of \$300/kW of summer peak-demand reduction
- In 2023, program will evolve from embedded energy manager model to a strategic energy management model
- New model will provide enhanced technical support, resources to companies with dedicated energy managers



Small Business Lighting Program

- Continued one-stop-shop approach for direct, no-cost replacement of inefficient equipment up to \$2,000
- Program to expand in mid-2021 with more opportunities for small businesses to reduce electricity costs, recover from the impacts of COVID-19
- Expanded measures to include common non-lighting opportunities, such as HVAC and refrigeration



Process and Systems Upgrade Program

- In response to feedback and to support more customer-focused solutions, Process and Systems Upgrade program to be discontinued as of December 31, 2020
- In 2022, replacement offering will focus on helping participants get larger, more complex projects off the ground
- Programming shift to reduce administrative burden for participants and help address specialized needs of industrial consumers



Training and Support

Incentives will be available for a variety of energy-efficiency training opportunities:

- Dollars to \$ense – covers up to 50 per cent of fees, or \$300/day for any full-day standard or customized workshop
- End Use Training (e.g., Compressed Air Systems) covers up to 50 per cent a maximum of \$750 for each course fee
- Certified Energy Management – covers up to 50 per cent or a maximum of \$1,600 of course fees



saveonenergy.ca/For-Contractors-and-Allies/Training-and-Support

Local Program Opportunities

- Targeted local programming will:
 - Maximize ratepayer and customer value
 - Demonstrate value of energy efficiency as a resource to manage local electricity demand, avoid or defer infrastructure investments
- Opportunities for local program initiatives will be targeted based on needs identified through IESO's regional planning process



Additional Programs

- Energy Affordability Program - support income-eligible electricity consumers in lowering their monthly electricity costs and in increasing their home comfort
- Residential Offerings – resources, tips, helpful content to help residential consumers save energy and to better manage their electricity costs
- First Nation Communities - available to assist on-reserve First Nation communities to benefit from energy-saving upgrades to help residents and communities save on energy costs
- Details available on the Save on Energy site

Engagement on Future Opportunities

- Engage with marketplace on potential energy-efficiency opportunities to be implemented during framework through discussion of:
 - Opportunities for large industrials
 - Local program opportunities
 - Midstream programming
 - Mid-term review of the framework to address any incentive and budget requirements

Energy Efficiency Auction Pilot – Enrolment Now Open

- Procure demand reduction from energy efficiency (EE) and non-dispatchable load-shifting projects during peak periods
- Open to all sectors (e.g., industrial, commercial, institutional, residential) and participation by facility owners/managers and aggregators
- Visit the Energy Efficiency Auction Pilot page on ieso.ca for more information

Key Dates

Dec. 1, 2020-Feb. 10, 2021: Prospective auction participants submit information to verify participant and resource eligibility

March 2021: Auction takes place

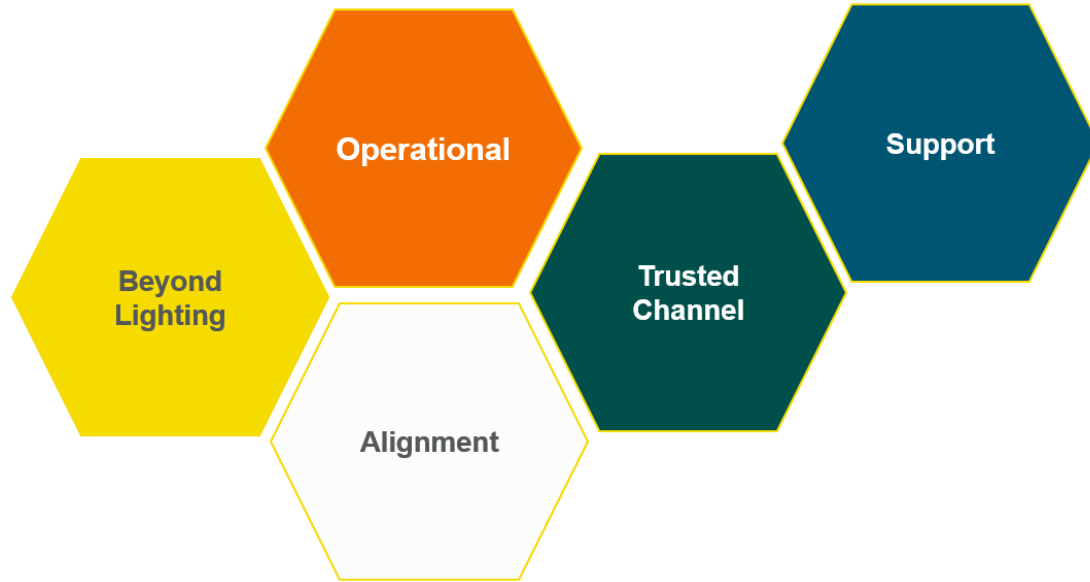
Nov. 2022 and/or June 2023: Resources must be fully implemented

Mid-Tier Commercial Real Estate Energy Study

- WHO: class B/C office 20,000 sf to 100,000 sf
- WHY: Achievable Potential Study – 19% consumption, 15% electricity savings; low participation in Save on Energy, lighting
- HOPE TO LEARN: drivers, barriers, decision making, access to capital, awareness / views on energy efficiency, how to engage them
- HOW: survey 76 companies, 351 buildings, 8 site visits



Mid-Tier CRE Energy Study – Top 5



Thank You

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