



APPENDIX A: GLOSSARY

GLOSSARY

Term	Description
ACEEE	American Council for an Energy-Efficient Economy; a nonprofit organization that aims to advance energy efficiency policies, programs, technologies, investments, and behaviors in order to help achieve greater economic prosperity, energy security, and environmental protection.
ADEME	The Environment and Energy Management Agency of France; provides expertise, advisory services and financial assistance to support the implementation of projects spanning renewable procurement, air quality, waste management and energy efficiency.
Adjustment	Verified results that were achieved in previous years, but were not reported in a previous years' Annual Verified Results Report released by the IESO.
Allocated Budget	Each LDC's assigned portion of the 2015-2020 Conservation First Framework budget intended to support LDC CDM Plans (\$1.8 billion of the \$2.2 billion budget).
Allocated Target	Each LDC's assigned portion of the 2015-2020 Conservation First Framework 7 TWh Net 2020 Annual Energy Savings Target.
Annual Savings	The energy or peak demand savings that occur in a given year (includes resource savings from new program activity and resource savings persisting from previous years).
APS	Achievable Potential Study; a study that assess long- and short-term energy savings potential that can be realistically obtained in Ontario. The most recent energy efficiency potential study was procured by the IESO and carried out by Nexant and the most recent behind-the-meter generation potential study was procured by the IESO and carried out by Navigant.
APS Milestones: Business Sector	An output of the most recent APS; an estimate of energy conservation potential for the business sector expected in specific years (e.g., 2015, 2017, 2020).

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APS Milestones: Residential Sector	An output of the most recent APS; an estimate of energy conservation potential for the residential sector expected in specific years (e.g., 2015, 2017, 2020).
B/C Ratio	Benefit/cost ratio; a ratio of the benefits of a project/portfolio/measure/etc. expressed in monetary terms, relative to its costs, also expressed in monetary terms.
Baseline-and-credit	A mechanism in which emissions reductions achieved relative to a baseline can be credited and used for compliance purposes.
Behavioural programs	Programs focused on behavioral transformation of end consumers energy use.
BMG	Behind-the-meter generation; comes from an energy system designed and built for a single building or facility to offset the electricity sourced from the grid using an alternate source of energy (e.g., combined heat and power, solar, etc.).
BRI	Business Refrigeration Incentive; a program that provides facility assessments to identify potential electricity savings opportunities and facilitates the installation of commercial refrigeration upgrades aimed at reducing electricity consumption. Participants in the BRI Program are non-residential electricity customers that have an average annual peak demand of less than 250 kilowatts (kW).
Bulk System Planning	Assesses future electricity consumption at the provincial (transmission system) level and assesses solutions to address system needs.
C&T	Cap and trade; a market-based system that sets a hard cap on greenhouse gas emissions while giving flexibility to businesses and industry in terms of how they meet their caps.

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CARB	California Air Resources Board; a government agency responsible for maintaining healthy air quality in California. Operates the state's cap and trade program.
Carbon intensity	The amount of carbon dioxide emitted per unit of energy consumed.
Carbon tax	A tax that explicitly states a price on carbon or that uses a metric directly based on carbon (that is, price per ton of carbon dioxide equivalent or tCO ₂ e).
CCAP	Climate Change Action Plan; Ontario's five-year plan to fight climate change, reduce greenhouse gas pollution, and transition to a low-carbon economy. Released by the Ministry of Environment and Climate Change in 2016.
CCGT	Combined-cycle Gas Turbine; an electricity generation facility that uses both a gas and a steam turbine together to produce up to 50 percent more electricity from the same fuel relative to a traditional simple-cycle gas turbine.
CCM	Culture of Conservation Metric; a metric developed by the IESO that measures, tracks and reports on progress in achieving a Culture of Conservation in Ontario against a base year benchmark.
CDM	Conservation and Demand Management; an acronym used primarily in Ontario that captures electricity conservation activities such as energy efficiency. The eligible technologies and activities that are considered CDM are defined by policy and government direction.
CDM Plans	A six-year conservation plan that each LDC must complete and submit to the IESO for approval as part of the Conservation First Framework requirements. CDM Plans are designed to meet an allocated conservation target given an allocated budget in a cost-effective manner.

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CDM Plans (Joint)	A CDM Plan submitted to the IESO in cooperation with one or more other LDCs, provided that each LDC will at all times have its own CDM Plan Target and Budget allocated to it under the Joint CDM Plan.
CEC	California Energy Commission; California's primary energy policy and planning agency.
Centrally Delivered Program	A program delivered by the IESO with funding from the Central Services Budget and/or value added services funding from LDCs.
Central Services	Services supporting the Conservation First Framework that are administered by the IESO under a defined funding envelope (\$400 million).
CEP/MEP	Community Energy Planning (sometimes referred to as Municipal Energy Planning); long term plans carried out to reduce community energy consumption and greenhouse gas emissions.
CFF	Conservation First Framework; The policy framework that enables programs in market in Ontario from 2015-2020 resulting from the March 31, 2014 Ministerial Directive.
CFIC	Conservation First Implementation Committee; a committee that consists of LDCs, government, and other utilities that is intended to support LDCs in the design and delivery of conservation programs and to guide the success of the CFF.
CHP	Combined heat and power (also known as cogeneration); a form of behind-the-meter generation that uses small to mid-sized natural gas generators that produce both steam (heat) and electricity.
Channel Allies Network	A proposed support program for third parties involved with CDM in Ontario.

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Channel Partners	Third parties who interact with the customer who could support the delivery of conservation programs. Some examples include retailers as part of the Coupon Program and HVAC installation contractors as part of the Heating & Cooling Program.
CO ₂ e / CO ₂ eq.	Carbon dioxide equivalent; a unit for measuring the carbon footprint of different greenhouse gases based on the global warming potential of each gas.
Collaboration Activity	Collaboration between LDCs and/or LDCs and gas utilities that is funded by the IESO through the Collaboration Fund and/or local, regional or pilot programs.
Collaboration Fund	A fund administered by the IESO that is designed to support collaboration activities within the CFF.
Conservation Frameworks	High-level policy and associated government direction for conservation activities in the province. There is a unique framework for both electricity conservation and natural gas conservation.
Conservation Fund	A source of funding external to the 2015-2020 CFF that provides financial support for innovative electricity conservation technologies, practices, research, and pilot programs. Savings from Conservation Fund pilot programs contribute to LDC targets based on the LDC service territory the pilot program is delivered in.
Coupon program	A CFF program promoted through the Save on Energy brand. Coupons are available for discounts on a range of energy-efficient products from participating retailers.
CPP	Critical peak pricing; a form of demand response in which higher prices are charged to consumers during times of system need called critical peak events.
CPUC	California Public Utilities Commission; a regulatory agency that regulates privately owned public utilities in the state of California, including electric power, telecommunications, natural gas and water companies.

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Cross-fuel collaboration	Collaboration between one or more electric utilities and one or more gas utilities.
CSAT	Customer Satisfaction Survey; surveys for both residential and business program participants. The goal of these studies is to measure customer's satisfaction with the process and engagement with each program under the CFF. This research is utilized by IESO to measure and track satisfaction with programs on an ongoing basis.
Delivery Cost	The cost to deliver conservation programs. Often measured vs. the amount of savings achieved or budgeted to achieve e.g. \$/MWh. Includes both incentive and non-incentive costs.
Demand/Load Profile	A customer/facility/systems' electricity use over time (e.g., 8760 profiles, daily profiles, etc.).
DER	Distributed Energy Resources; behind-the-meter or distribution-connected generation or storage resources that supply all or part of a customer's electricity use.
DG	Distributed generation; includes small-scale generating assets on the distribution system that typically provide energy for on-site use. The definition of "small-scale" varies by jurisdiction.
Direct load control	Programs focused on automatically shifting customer load in response to signals from the system operator or aggregator.
Distribution Planning	Assesses future electricity consumption at the LDC (distribution system) level and assesses solutions to address system needs.
DR	Demand Response; technology or approaches that enable load shifting or load reduction in response to signals from the system operator or aggregator.

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DSM	Demand Side Management: the term for conservation initiatives carried out in other jurisdictions or sectors. In Ontario, this is the acronym used for natural gas conservation.
Dx	Distribution System.
E-Blasts	Method for IESO to communicate CDM-related information to a broad-base of stakeholders.
ECA	Energy Conservation Agreement; sets out the contractual relationship between the IESO and LDCs under the Conservation First Framework.
ECAB	Energy Conservation Attitudes & Behaviour; research procured by the IESO that consists of interviews among the supply chain and business customers to better understand the electricity conservation marketplace.
Electrification	The process of powering by electricity and, in many contexts, the conversion to an electric power source from a non-electric power source such as natural gas.
EM&V	Evaluation, Measurement and Verification; the collection of methods and processes used to assess the performance of energy efficiency activities so that planned results can be achieved with greater certainty and future activities can be more effective.
Emission Factors	Measure of the average amount of a specific pollutant or material discharged into the atmosphere by a specific process, fuel, equipment, or source.
Energy Savings	Reductions in electricity use attributable to conservation and demand management activities.
ESCs	Energy Savings Certificates; certificates that utilities in some jurisdictions can trade to represent one megawatt-hour of energy efficiency savings.

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ETS	Emission Trading System; a system in which emitters can trade their emission units to meet their compliance obligations. The two main types of ETSs are cap-and-trade and baseline-and-credit.
EU ETS	European Union Emissions Trading System; the system used in the European Union to facilitate emissions trading through a cap-and-trade structure.
EUL	Effective Useful Life; an estimate of the number of years an energy efficiency asset is projected to remain in service.
EVs	Electric vehicles; Plug-in electric vehicles are considered primarily in this report as they relate to the ability to shift and manage customer load or to be used as storage.
FCR	Full Cost Recovery; CFF funding mechanism whereby LDCs are paid for the eligible amount spent to administer CDM programs.
FIT / microFIT	Feed-in-tariff / micro feed-in-tariff; program that provides customers that are accepted into the program(s) standard offer payment amounts for the renewable electricity they generate. In Ontario, the distinction is made between large (FIT) and small (microFIT) renewable energy projects: those equal to or less than 10kW are subject to the micro feed-in-tariff rates.
Forecast	Expectations of program activity, savings, net-to-gross adjustments, expenditures and cost effectiveness as indicated in each LDC's submitted CDM Plan and supporting Tools. Forecasts at the province wide level are the sum of LDCs' forecasts.
FS	Fuel switching; the process of changing the fuel used for power. Fuel-switching often occurs to replace inefficient fuels with cleaner and more economical alternatives.
g/kWh	Grams per kWh, a unit measuring emissions per unit of electricity.

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Term	Description
Gas Distributors	Organizations that distribute natural gas to customers in Ontario (Enbridge Gas Distribution and Union Gas). Natural gas distributors offer DSM programs to customers to encourage reductions in natural gas use.
Gas peakers	Natural gas generation facilities that are scheduled during hours with high electricity demand.
GHG	Greenhouse gas; gases that trap heat in the atmosphere such as CO ₂ and N ₂ O. Reducing GHGs is typically the primary goal of climate change policies.
GJ	Gigajoule; a unit of energy.
GT&D	Generation (G) – the generation of electricity from renewable or hydrocarbon sources. Transmission (T) – the transport and delivery of generated electricity across large distances to transmission-connected customers and distribution utilities. Distribution (D) – the transport and delivery of electricity across shorter distances to distribution-connected customers.
HAP	Home Assistance Program; a program available as part of the CFF for qualified Ontario homeowners, tenants and social and/or assisted housing providers receive assessments and installation of energy-saving measures.
Heating & Cooling program	A program available as part of the CFF that provides incentives to upgrade to high-efficiency air conditioning systems and furnaces. Eligible participants include homeowners and businesses that use residential systems.
HVAC	Heating, ventilation and air conditioning.
IAP	Industrial Accelerator Program; the policy framework that enables programs in market available to transmission connected customers in Ontario from 2015-2020.

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Term	Description
Incentive Costs	Costs incurred by a CDM program that are provided to the customer to encourage energy savings behaviours or offset the cost of energy efficient technologies.
Incremental Conservation	Conservation activities that are carried out in addition to the provincial conservation under CFF and IAP. These are typically considered for planning purposes in the IRRP.
Incremental Savings	The energy or peak demand savings newly attributable to activity procured in a particular reporting period based on when the savings are considered to 'start'. Savings attributed to activity performed or completed in 2016 are presented as 2016 savings.
Innovation Fund	A source of funding under the 2015-2020 Conservation First Framework separate from LDC CDM Plan Budgets that the IESO maintains to support LDC led program design and market testing of new initiatives. Savings from LDC Innovation Fund pilot programs contribute to the LDCs savings targets based on the LDC service territory the pilot program is delivered in.
IRRP	Integrated Regional Resource Plan; a part of regional planning that considers incremental conservation (and other resources) to meet electricity system needs in a particular region involving both IESO and LDCs with stakeholder involvement.
ISO-NE	The Independent System Operator of New England, Inc.; an independent, non-profit Regional Transmission Organization, serving Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.
KWh, MWh, GWh, TWh	kilowatt-hour, megawatt-hour, gigawatt-hour & terawatt-hour; units of energy of differing orders of magnitude.
LAC	Local Advisory Committees; committees engaged to provide feedback throughout the regional planning process.

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Term	Description
LDC(s)	Local Distribution Company; provides electricity distribution service and conservation programs to distribution-connected customers.
Legacy Framework	Programs achieving savings in 2015 from programs continuing from the 2011-2014 CDM framework resulting from the April 23, 2010 GEA CDM Ministerial Directive. Programs were funded separately from 2015-2020 Conservation First Framework Programs but savings achieved in 2015 are attributed towards the CFF target.
LMMRS	Longitudinal Mass Market Research Survey; multi-faceted survey that has run since 2011 and acts as an input into annual EM&V results of IESO funded Save on Energy programs. The study helps the IESO gain an understanding of consumers awareness, participation and opinions of the Save on Energy campaign overall and the initiatives within the Consumer program. The study objectives include measuring the awareness of energy conservation initiatives and Save on Energy, program specific awareness and participation, and customer satisfaction, evaluation of program elements, and participation likelihood in the future. Also called the “triple A” survey.
Load shape	Customer/facility/systems’ electricity use over time (e.g., 8760 profiles, daily profiles, etc.).
Local Program	Programs designed by LDCs and approved by the IESO to serve their communities.
LTEP	Long Term Energy Plan; a strategic plan developed by the Ministry of Energy to guide changes to Ontario's electricity system. The previous LTEP was released in 2013, and an updated LTEP was released in 2017.
Market transformation programs	Programs that create lasting change in market behavior by removing identified barriers or exploiting opportunities to accelerate the adoption of energy efficiency measures.

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Measures	Technologies used in energy efficiency programs.
Microgrids	A small network of power assets (generation, storage, distribution etc.) that is connected to the traditional grid, but can disconnect to function autonomously.
Ministerial Direction	The Minister of energy may, subject to the approval of the Lieutenant Governor in Council, issue a directive to the IESO setting out the Government of Ontario's requirements to carry out certain activities (e.g. the implementation of the long-term energy plan) and the date by which said activity must be completed.
MISO	Midcontinent Independent System Operator; provides open-access transmission service and monitors the high-voltage transmission system in the Midwest United States and Manitoba, Canada and a southern United States region which includes much of Arkansas, Mississippi, and Louisiana.
MOE	The Ontario Ministry of Energy; tasked with developing the electricity generation, transmission and other energy-related facilities that power Ontario's economy. Also responsible for the policy driving CDM and DSM and oversees the OEB and IESO.
MOECC	The Ontario Ministry of Environment and Climate Change; tasked with protecting Ontario's land, air, and water and coordinating climate policy.
MT	Megatonne, or one million tonnes.
MW	Megawatt; a unit to measure electricity demand or supply.
NERC	North American Electric Reliability Corporation; NERC's mission is to assure the reliability and security of the bulk power system in North America.

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Term	Description
Net metering	A system in which renewable energy generators are connected to a public-utility power grid and surplus power is transferred onto the grid, allowing customers to offset the cost of power drawn from the utility.
Net Savings	The energy or peak demand savings attributable to conservation and demand management activities, net of free-riders, spill over, etc.
Net-zero energy building	A building which achieves zero net energy consumption by generating enough renewable energy to offset the total amount of energy it uses.
NPCC	Northeast Power Coordinating Council, Inc. (NPCC) is responsible for promoting and enhancing the reliability of the international, interconnected bulk power system in Northeastern North America.
NWA	Non-wires alternatives (NWAs) are solutions to electricity planning that does not involve conventional infrastructure upgrades. NWAs include conservation, distributed generation and other methods to provide capacity relief.
NYISO	The New York Independent System Operator; monitors the reliability of the state's power system and coordinates the daily operations to distribute electricity supply.
OEB	Ontario Energy Board - Ontario's independent energy regulator. The OEB regulates electric and natural gas utilities.
Offset mechanisms	An offset designates the emission reductions from project-based activities that can be used to meet compliance or corporate citizenship objectives vis-à-vis GHG mitigation.
OPA	Ontario Power Authority; previous entity responsible for the administration of CDM in Ontario. OPA merged with the IESO effective January 1, 2015.

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Term	Description
P4P	Pay for performance; CFF funding mechanism whereby LDCs are paid a \$/kWh rate for a particular program.
Paris Agreement	An agreement within the United Nations Framework Convention on Climate Change (UNFCCC) dealing with greenhouse gas emissions mitigation, adaptation and finance starting in the year 2020.
Participation rate	A measure of eligible participation in a conservation program. Specifics for this vary based on the program.
Peak Demand	The highest point of electricity demand during a period, measured in MWs. Typically, electricity planning is focused on meeting peak demand.
Peak Demand Savings	Electricity reduction during a particular time period attributable to CDM activities. The time period is defined within the IESO's EM&V Protocols.
Performance-based funding	Performance-based incentive payment calculated via use of whole-building advanced metering infrastructure (AMI) and associated analytics.
Pilot Program	A program run for a specific time period intended to achieve energy or demand savings that is funded extraneous to an LDC's CDM Plan Budget. Pilot programs follow an LDC-led program design and market testing of small-scale pilot programs, which refine program design and delivery at less risk to the ratepayer.
PJM	PJM Interconnection, Inc. is a regional transmission organization that coordinates the movement of wholesale electricity in all or parts of 13 states and the District of Columbia.
Policy	Government initiatives that set forth goals for a particular sector, for example, the energy sector's Long Term Energy Plan.

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Power What's Next? Campaign Research	The Save on Energy Power What's Next campaign launched on June 13, 2016. Surveys are being done to measure brand awareness, brand attributes and effectiveness of the campaign. This report includes results as of December 2016.
Program	A CDM offering focusing on a particular opportunity or customer end-use (i.e. Retrofit, Heating & Cooling) as part of the 2015-2020 Conservation First Framework.
Progress or Comparison of results	An assessment of actual results versus verified and unverified results.
Province-Wide Program	Programs available to all LDCs to deliver that are consistent across the province.
QA/QC	Quality assurance / quality control; the process or set of processes used to measure and assure the quality of a product, and quality control, the process of ensuring products and services meet consumer expectations.
R&D	Research and development; work directed toward the innovation, introduction, and improvement of products and processes.
R&D pilots	Trial initiatives to test new approaches and strategies.
RBCF	Results-Based Climate Finance; a funding approach where payments are made after pre-defined outputs or outcomes related to managing climate change, such as emission reductions, are delivered and verified.
RE	Renewable energy; energy that is collected from renewable resources, which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat.

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Term	Description
REC	Renewable Energy Certificates, also known as Green tags, Renewable Energy Credits, Renewable Electricity Certificates, or Tradable Renewable Certificates; tradable, non-tangible energy commodities that represent proof that 1 megawatt-hour (MWh) of electricity was generated from an eligible renewable energy resource (renewable electricity) and was fed into the shared system of power lines which transport energy.
Regional Infrastructure Plan (RIP)	The RIP is part of Ontario's regional planning process that identifies wires-only solutions to meet regional needs.
Regional Planning	Carried out by the transmission utility, the IESO, LDCs and LACs. Regional planning investigates wires- and non-wires alternatives to meet demand. Overlaps with bulk and distribution system planning.
Regional Program	Programs serving regional needs in multiple LDC territories.
Resource acquisition	Programs that promote products and practices used by energy consumers that drive investments in the short-term.
Retrofit program	Incentive program to reduce project and operational costs for businesses to upgrade to more efficient systems (lighting, HVAC, chiller, building envelope etc.).
RGGI	Regional Greenhouse Gas Initiative; a market-based partnership between nine American states that aims to reduce CO2 emissions from the power sector.
RPS	Renewable portfolio standard; a regulatory mandate to increase production of energy from renewable sources such as wind, solar, biomass and other alternatives to fossil and nuclear electric generation.

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Save on Energy	The brand that represents energy conservation programs for homes and businesses in Ontario. Programs are delivered through LDCs or directly through IESO, and funded through CFF.
SCGT	Single cycle gas turbine; a type of gas turbine most frequently used in the power generation, aviation (jet engine), and oil and gas industry (electricity generation and mechanical drives).
Solar PV	Solar photovoltaic (PV) cited on customer premise, delivered via a utility or 3rd party partner.
Solar PV-storage	Combination of solar PV and storage technologies into a customer-sited nanogrid.
Storage Program	Utility incentives designed to accelerate adoption of storage technology. Programs may enable the utility to utilize stored power during peak events.
Supply Mix	Refers to the mix of energy sources of given electricity supply.
TOU	Time-of-use; a pricing program that modifies customer-facing pricing into tiers based on the time of day (and/or season).
Tx	Transmission System.
Unverified savings	Program activity savings and expenditures as determined by the LDC. For savings: 1) for prescriptive projects/programs: calculating quantity x prescriptive savings assumptions; and 2) for custom program projects/programs: calculated using prescribed methodologies.
Verified savings	The IESO's annual EM&V assessed program activity, savings, net-to-gross, expenditures and cost effectiveness.

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Voltage reduction	Reduction of energy consumption resulting from a reduction of feeder voltage/voltage optimization.
WCI, Inc.	Western Climate Initiative, Inc.; a non-profit corporation formed to provide administrative and technical services to support the implementation of state and provincial greenhouse gas emissions trading programs.
WG	Working Groups; groups with representatives from LDCs, gas utilities and government organizations, intended to represent all electric and gas utilities in the province. WGs are reported by the Collaboration Fund, and facilitate collaboration initiatives and strategies for conservation programs.