APPENDIX D: SCORECARD AND SNAPSHOT

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THE SCORECARDS AND SNAPSHOTS PROVIDE A QUICK VIEW OF FRAMEWORK PERFORMANCE

- Metrics to provide a quick view of Conservation First Framework (CFF) and Industrial Accelerator Program (IAP) performance were developed and refined with stakeholder input

Scorecard	Snapshot
Certain metrics have specific goals that were set forth at the initiation of the framework. Scorecard metrics include a description of both the metric and the goal, the quantitative result, and the year over year trend of the metric.	Other metrics do not have specific goals associated with them, but provide insight into framework performance nonetheless. Snapshot metrics include a description of the metric and the quantitative result.

- This section is segmented into two sub-sections: Conservation First Framework (CFF) and Industrial Accelerator Program (IAP)
- Within each sub-section, the scorecard is first presented followed by the snapshot, both the scorecard and snapshot are grouped by topic

CONSERVATION FIRST FRAMEWORK (CFF)

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CUSTOMER AND MARKET ENGAGEMENT AND SATISFACTION SCORECARD

METRIC	DESCRIPTION	RESULT	TREND	GOAL	INSIGHT
Program Penetration	• **Metric:** % persisting energy savings by sector acquired in 2015 - 2017[2,3] • **Goal:** same metrics for the achievable potential study in 2015 - 2017				• CDM plans indicate available energy efficiency opportunity in the business sector with possible limitations in the short-term for the residential sectors
	• Residential • Business	164% 120%	↕	100% by 2017	
	• **Metric:** % persisting energy savings by sector acquired in 2015 - 2017[2,3] • **Goal:** same metric for energy savings forecast by LDCs in their CDM Plans for the years 2015 - 2017				
	• Residential • Business	132% 81%	↕	100% by 2017	

Note [2]: Includes 2015 and 2016 verified results and 2017 unverified results.
Note [3]: A significant percent of 2017 progress consists of persisting savings from 2011-2014 framework projects completed in 2015

LEGEND			
TREND	↔ Minimal (less than 5 percentage points year over year) change in the metric relative to prior years	↑ Increase in the metric relative to prior years	↓ Decrease in the metric relative to prior years
RESULT	● Meeting/exceeding goal	● Progress towards goal/monitor for concerns	● Low progress relative to goal/potential action required

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Data as of December 2017. 2017 values reflect 12 months of unverified progress with significant data lags, therefore results and trend indicators are reflective of 2015 and 2016 only

COLLABORATION SCORECARD

METRIC	DESCRIPTION	RESULT	TREND	GOAL	INSIGHT
Joint plans	• **Metric:** Number of Joint CDM Plans (one or more LDC) that are within the same planning region (full – all LDCs in the joint plan are in the same region; Partial – at least 2, but not all LDCs are in the same region) • **Goal:** of 21 regional CDM plans as outlined in government direction	Full: 8 Partial: 3	⟷	21	• Early in the 2015-2020 Framework, IESO and LDCs determined the goal of 21 regional plans was not appropriate
Cost efficiencies realized through collaboration	• **Metric:** [E.g. reduced $/kWh delivery cost resulting from collaboration] • **Goal:** as per government direction LDCs are required to collaborate with gas utilities and encouraged to collaborate with one another to achieve efficiencies	NA	NA	NA	• Efficiencies were not defined within the direction and no quantifiable goals were established at outset of framework • No quantifiable goals have been identified for individual collaboration efforts (e.g. joint CDM Plans, activities reported through Collaboration Fund) (except kWh targets for certain energy management resources reported through Collaboration Fund)
Customer convenience improvements realized through collaboration	• **Metric:** [E.g. improved satisfaction scores following introduction of collaborative activity] • **Goal:** as per government direction LDCs are required to collaborate with gas utilities and encouraged to collaborate with one another to achieve efficiencies	NA	NA	NA	

LEGEND

TREND	⟷ Minimal (less than 5 percentage points year over year) change in the metric relative to prior years	↑ Increase in the metric relative to prior years	↓ Decrease in the metric relative to prior years	
RESULT	Meeting/exceeding goal	Progress towards goal/monitor for concerns	Low progress relative to goal/potential action required	

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Data as of November 2017

GOVERNANCE AND OPERATIONS SCORECARD

METRIC	DESCRIPTION	RESULT	TREND	GOAL	INSIGHT
CDM plan review metrics	Joint CDM Plan Review • **Metric:** mean number of calendar days from LDC submission of CDM Plan to IESO approval of CDM Plan (excluding the LDC response time to IESO questions, and resubmissions) • **Goal:** requirements within the Energy Conservation Agreement	25 days	↓	30 days	• On average, CDM Plan review times are within contractual requirements • 14 plans exceeded service timelines at an average of 6 days over timelines • 44 individual CDM plans and 34 joint plans were reviewed in addition to 22 resubmissions
	Individual CDM Plan Review • **Metric:** mean number of calendar days from LDC submission of CDM Plan to IESO approval of CDM Plan (excluding the LDC response time to IESO questions, and resubmissions) • **Goal:** requirements within the Energy Conservation Agreement	40 days	↓	60 days	

LEGEND					
TREND	↔	Minimal (less than 5 percentage points year over year) change in the metric relative to prior years	↑	Increase in the metric relative to prior years	↓ Decrease in the metric relative to prior years
RESULT	●	Meeting/exceeding goal	●	Progress towards goal/monitor for concerns	● Low progress relative to goal/potential action required

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Data as of July 2017

GOVERNANCE AND OPERATIONS SCORECARD

METRIC	DESCRIPTION	RESULT	TREND	GOAL	INSIGHT
Program and pilot approval metrics	Local/Regional Program Review • **Metric:** mean number of business days between LDC submission of business case and IESO response • **Goal:** Service standard stated in IESO process documentation within the LDC Toolkits. *There is an expedited review process for programs that address peak demand, are collaborative or are pay-for-performance	17 days Expedited Review Process: 11 days	N/A	20 days Expedited Review Process: 10 days	• The IESO implemented a new business case review process in June 2016, metrics reflect business cases for pilots and programs submitted under the new process
	Innovation Fund Pilot Review • **Metric:** mean number of business days between LDC submission of business case and IESO response • **Goal:** Service standard stated in IESO process documentation within the LDC Toolkits. *There is an expedited review process for programs that address peak demand, are collaborative or are pay-for-performance	20 days Expedited Review Process: 11 days	N/A	20 days Expedited Review Process: 10 days	

LEGEND

TREND	Minimal (less than 5 percentage points year over year) change in the metric relative to prior years	Increase in the metric relative to prior years		Decrease in the metric relative to prior years	
RESULT	Meeting/exceeding goal	Progress towards goal/monitor for concerns		Low progress relative to goal/potential action required	

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Data as of December 2017

BUDGETS, TARGETS AND COST EFFECTIVENESS SCORECARD

METRIC	DESCRIPTION	RESULT	TREND	GOAL	INSIGHT
Energy savings-to-date	• Metric: Net incremental first year energy savings, separated by year • Goal: CDM Plan forecasts for each individual year	2015: 1,606 GWh 2016: 1,380 GWh 2017 793 GWh	⇔	1,212 GWh 1,264 GWh 1,406 GWh	• LDCs exceeded forecasted savings in 2015 and 2016 according to verified results (unverified results indicate LDCs exceeded savings in 2016) • The majority of 2015 savings came from Legacy Extension Programs • Another factor influencing higher 2015 results relative to 2016 is the fact that there has been more time to allow for true-ups of 2015 data
Energy savings vs. target	• Metric: 2015 through 2017 energy savings persisting to 2020 • Goal: 7 TWh CFF target	3,779 GWh	↓	7,000 GWh	• Persisting savings have declined over 14% from 2015 to 2016 • Trend and indicator are representative of 2015 and 2016 only

LEGEND					
TREND	⇔ Minimal (less than 5 percentage points year over year) change in the metric relative to prior years	↑ Increase in the metric relative to prior years	↓ Decrease in the metric relative to prior years		
RESULT	Meeting/exceeding goal	Progress towards goal/monitor for concerns	Low progress relative to goal/potential action required		

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Data as of December 2017. 2017 values reflect 12 months of unverified progress with significant data lags, therefore results and trend indicators are reflective of 2015 and 2016 only

BUDGETS, TARGETS AND COST EFFECTIVENESS SCORECARD

METRIC	DESCRIPTION	RESULT	TREND	GOAL	INSIGHT
Energy savings vs. plan : business	• Metric: Persisting savings from 2015 through 2017 from business programs • Goal: Forecasted savings for business programs from LDC CDM Plans (2015-2017)	2,509 GWh	⇩	2,889 GWh	• The majority of business savings came in 2015 • The majority of 2015 savings came from Legacy Extension Programs • Significant data lag, more savings likely as more data becomes available
Energy savings vs. plan: residential	• Metric: Persisting savings from 2015 through 2017 from residential programs • Goal: Forecasted savings for residential programs from LDC CDM Plans (2015-2017)	1,191 GWh	⇧	496 GWh	• The residential savings in 2015 - 2017 were more than double the CDM plan target driven by performance in Coupons • The majority of these savings came in 2016 • The 2016 Coupon program savings was equivalent to almost the entire residential forecast for 2016
Persisting energy savings	• Metric: Savings from 2015 through 2017 CFF projects persisting to the end of the framework, 2020 • Goal: Forecasted persisting savings for all CFF programs from LDC CDM Plans	3,779 GWh	⇩	3,561 GWh	• Verified 2020 persisting savings from 2015 and 2016 exceeded CDM plan forecasts • A slightly higher proportion of persisting savings came from 2015 results than 2016 results

LEGEND					
TREND	⇔ Minimal (less than 5 percentage points year over year) change in the metric relative to prior years	⇧ Increase in the metric relative to prior years	⇩ Decrease in the metric relative to prior years		
RESULT	Meeting/exceeding goal	Progress towards goal/monitor for concerns	Low progress relative to goal/potential action required		

NAVIGANT

Data as of December 2017. 2017 values reflect 12 months of unverified progress with significant data lags, therefore results and trend indicators are reflective of 2015 and 2016 only

BUDGETS, TARGETS AND COST EFFECTIVENESS SCORECARD

METRIC	DESCRIPTION	RESULT	TREND	GOAL	INSIGHT
LDCs % of energy target achieved	• Metric: The percentage of CFF target achieved in 2015 through 2017, average weighted by LDCs' allocation of total CFF target • Goal: Forecasted energy savings from LDC CDM Plans	54% 		50%	• LDCs exceeded their forecast in 2015 and 2016 by 5% • Overperformance of select LDCs, including two that have met or exceeded their target, contribute to this result

LEGEND					
TREND		Minimal (less than 5 percentage points year over year) change in the metric relative to prior years		Increase in the metric relative to prior years	 Decrease in the metric relative to prior years
RESULT		Meeting/exceeding goal		Progress towards goal/monitor for concerns	 Low progress relative to goal/potential action required

NAVIGANT

Data as of December 2017. 2017 values reflect 12 months of unverified progress with significant data lags, therefore results and trend indicators are reflective of 2015 and 2016 only

CUSTOMER AND MARKET ENGAGEMENT AND SATISFACTION SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT[1]	INSIGHT
Brand	Awareness	2016 % of brand awareness (brand and brand with description) from Power What's Next Survey. Responses from general residential population.	69%	• Brand metrics have remained consistent over time
	Trustworthiness	2016 % brand trustworthiness (brand and brand with description) from Power What's Next Survey. Responses from general residential population.	89%	
Customer Satisfaction	Satisfaction with Retrofit program	% of program participants in 2016 that reported their "participation met expectations" or "exceeded expectations" as per Customer Satisfaction and Business Customer Experience surveys. Responses from program participants.	91%	• Customer satisfaction metrics are high compared to industry benchmarks and similar studies
	Satisfaction with Heating & Cooling program		94%	
	Satisfaction with Coupon program		93%	

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Data as of March 2017

CUSTOMER AND MARKET ENGAGEMENT AND SATISFACTION SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT[1]	INSIGHT
Market Share	Participation rate, Heating & Cooling program	% eligible customers that participated as per Longitudinal Mass Market Research Survey and Power What's Next surveys. Responses from general residential population.	60%	
	Participation rate, Coupon program		35%	

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Data as of October 2016

COLLABORATION SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT
LDC Collaboration: CDM Plans and programs	# joint CDM plans with regional/ demographic alignment	# of joint CDM plans comprising of LDCs within the same IESO zone or customer breakdown as per OEB yearbook	13/14	• Most joint LDC plans are consist of LDCs that have either regional or customer alignment • There is collaboration amongst electric LDCs on programs and pilots • Market research will attempt to better understand any non-IESO reported collaboration as it relates to programs and plan delivery • Quality metrics (e.g., quantitative impact to customers or costs) are not clearly defined as part of CDM plan criteria and as such are not collected
	# LDCs collaborating on Programs and Pilots	# of electric LDCs collaborating on local/regional programs and/or innovation pilots	18/68	
	% of target pursued through collaborative efforts	% of targets achieved through programs and pilots that are delivered with another LDC	N/A	

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Data as of November 2017

COLLABORATION SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT
LDC Collaboration: Collaboration Activities	# of collaboration projects	# of approved IESO Collaboration Fund applications (includes: approved, complete or executed)	26/32	• Collaboration activities captured reflect IESO reported activities through the Collaboration Fund • Market research will attempt to understand collaboration that occurs without IESO funding • Quality metrics (e.g., quantitative impact to customers or costs) are not clearly defined as part of the Fund criteria and as such are not collected
	# of ongoing collaboration projects	# of collaboration activities that have continued beyond the collaboration funding term	N/A	
	# of collaboration projects not approved	# of IESO Collaboration Fund applications not approved (excludes applications invited to resubmit)	4/32	
	Collaboration Budget ($ millions)	Proportion 2015-2020 budget committed to date (includes WG and LDC projects)	3.96M/25M	
LDC Collaboration: Cross-fuel Collaboration	# of LDCs collaborating with natural gas utilities	Proportion of LDCs that have collaborated with gas utilities through collaboration fund activities, local/regional programs, and/or innovation pilots	6/68*	• Market research will attempt to understand the barriers that may be resulting in the low number of collaboration activities expressed within this scorecard • Market research will attempt to also capture collaboration that is not reported by the IESO • 1 cross-fuel collaboration activity is targeted towards low income customers
	# of collaboration projects	# of approved IESO Collaboration Fund applications that involve both a natural gas and electric utility (includes: approved, complete or executed)	2/26	
	# of programs and pilots	Proportion of local/regional programs and innovation pilots that feature cross fuel collaboration	4/32*	

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*Data as of March 2017. *Updated LDC count cross-fuel collaboration metric as of December 2017*

GOVERNANCE AND OPERATIONS SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT
General Indicators	% non-incentive vs. incentives in program costs	Budgeted non-incentive costs include both fixed and variable labour, marketing, other program costs The non-incentive cost is represented as a percent of total costs (non-incentive + incentive)	36%	• Budgeted non-incentive costs are 36% for the 2015-2020 period • This metric is generally aligned with other utilities in North America • Non-incentive costs are 28% at the IESO portfolio level (2015 & 2016, Conservation First Framework + Industrial Accelerator Program) • Non-incentive costs were 29% for the 2011-2014 portfolio
	Cost reimbursement processing metrics (by LDCs to customers)	Data unavailable	N/A	
	Key metrics from LDC survey on satisfaction with Conservation First Framework processes	LDCs surveyed that had a “good” or “very good” overall impression of the IESO Conservation Division (October 2017)	92%	• This result encompasses a number of Conservation First Framework processes and illustrates a high level of overall satisfaction

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Data as of December 2017

GOVERNANCE AND OPERATIONS SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT
CDM Plan Reviews	# of CDM plans reviewed	The total number of CDM Plans submitted by LDCs and reviewed by the IESO since 2015 (excludes withdrawn)	115*	• IESO is currently undergoing an internal audit of the business case review process, results are expected to be available early summer 2017 • IESO is currently reviewing collecting data that will be able to reflect the "mean time for LDC response to IESO questions" in the final report
	# of CDM plan revisions	The number of times CDM Plans required revisions, requiring an LDC to submit a new version since 2015 (excludes withdrawn plans)	100*	
	# of request responses resubmitted	The number of requests for information that resulted in a resubmitted CDM Plan	22	
	Mean time for LDC response to IESO questions	Data unavailable	N/A	

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*Data as of June 2017. *Updated CDM Plan reviews and revision as of November 2017*

GOVERNANCE AND OPERATIONS SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT
Local/ Regional Programs	# unique	The number of in-market local/regional programs that have unique offerings	10	• The majority of in-market local/regional programs are not unique • A small number of local/regional programs have been rejected • 47 local/regional programs have been submitted (includes resubmissions) • 5 local/regional Business Refrigeration Incentive programs have transitioned to a province wide program • A small proportion of budget has been assigned to local/regional programs • Local regional programs are more often re-submitted rather than formally withdrawn • The majority of regional/local programs focus on residential sector, however the majority of savings come from business sector and the only program transitioned to province-wide served the business sector • IESO is currently undergoing an internal audit of the business case review process, results are expected to be available early summer 2017
	# in market	The number of local/regional programs that have approved timeframes out to 2017 and on	27	
	# transitioned to full programs	The number of local/regional programs transitioned to full programs	5	
	# withdrawn	The number of local/regional programs that have been withdrawn.	1	
	# not approved	The number of local/regional programs that have been rejected or not approved	6	
	Proportion of budget assigned to local/regional programs	The proportion of budget assigned to approved local/regional programs out of total CDM Budget	9%	
	# of regional/local - by sector (residential)	The number of approved residential local/regional programs	16	
	# of regional/local - by sector (business)	The number of approved business local/regional programs	12	

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Data as of December 2017

GOVERNANCE AND OPERATIONS SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT
Innovation Fund Pilots	# complete	The number of innovation pilots that have been completed during the Conservation First Framework	8	• The majority of pilots are currently-in market (i.e., not complete) • 30 pilots have been submitted (includes resubmissions) • Pilot applications are more often re-submitted rather than formally withdrawn • A small amount of pilots have transitioned into local/regional programs, all of which have been carried out by the same LDC
	# in market	The number of innovation pilots that are currently in-market	11	
	# withdrawn	The number of innovation pilot applications that have been withdrawn	2	
	# not approved	The number of innovation pilot applications that have been rejected or not approved	4	
	# transitioned to full programs	The number of Innovation Fund Pilots that have been successfully transitioned into local/regional programs	3	
	Satisfaction with programs and pilots	Data unavailable	N/A	

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Data as of December 2017

GOVERNANCE AND OPERATIONS SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT
Province-wide Programs	# of changes to province-wide (residential)	The number of Business Cases approved by the IESO requesting changes to province-wide residential programs	6	• 30 business cases have been submitted to IESO for changes to province-wide programs (includes resubmissions) • More changes have been successfully made to business programs than residential programs, however more business program changes have been rejected than residential program changes • IESO is currently undergoing an internal audit of the business case review process, results are expected to be available early summer 2017
	# of changes to province-wide (business)	The number of Business Cases approved by the IESO requesting changes to province-wide residential programs	16	
	# withdrawn	The number of province-wide programs that have been withdrawn.	2	
	# not approved	The number of province-wide programs that have been rejected or not approved	1	
	Program Business Case approval metrics (mean time for IESO review)	The average number of business days between the submission of a business case by and LDC or Working Group and approval by the IESO	18 days	
	Mean time for LDC response to IESO questions	Data Unavailable		

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Data as of December 2017

PLANNING INTEGRATION SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT
Specific integration metrics	% of total incremental growth met through CDM in regional plan	The % of gross peak demand growth met by CDM (Conservation plus Distributed Generation) in the forecast period of each Integrated Regional Resource Plan (IRRP) was assessed, and a weighted average was calculated using each IRRPs final year proportion of gross peak demand	39%	• CDM is primarily taken into account when building the load forecast for regional plans • Minimal incremental CDM has been recommended through regional planning due to pent-up demand in most areas necessitating wires-only solutions, however conservation is always considered as an option • 2 local demand response pilots were identified during the regional planning process as potential alternatives to provide capacity relief* • 1 demand response pilot has been approved incremental to the IRRP • Additional efforts are underway to begin the first steps of how to integrate CDM into planning • There is a strong desire amongst the community in favour of using conservation in place of wires for meeting demand needs
	% of total need met through conservation beyond the provincial targets	CDM contributing to local needs identified through regional planning that exceeds Conservation First Framework targets	0%	
	# of programs targeting transformer stations in congested areas	Targeted energy efficiency or demand response programs identified through the regional planning process	1	

**The Brant Area local DR pilot is currently on hold and the Toronto DR pilot was cancelled*

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Data as of June 2017

PLANNING INTEGRATION SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT
Supporting integration metrics	Ratio of energy savings to peak demand savings	2020 energy savings from all measures within LDC CDM Plans divided by 2020 peak demand savings from measures within LDC CDM Plans	5,900 MWh/MW	• The majority of measures have a reduction to peak demand • The previous framework ratio was 4,600 MWh/MW*
Average effective useful life	Portfolio	Average effective useful life of measures, weighted by summer peak (MW) and rounded to the nearest year	15	• As expected, the portfolio effective useful life reflects the business sector measures (higher % of savings) • Minimum and maximum effective useful life is 1 and 30, respectively
	Residential		13	
	Business		16	

**MWh/MW numbers have been rounded to nearest hundred and useful life numbers have been rounded to nearest year*

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Data as of June 2017

CLIMATE CHANGE SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT
GHG metrics	GHG reduction per MWh saved (tonnes GHG avoided/MWh)	Avoided tonnes GHG calculated by IESO for 2015 verified results divided by the net verified energy savings achieved in 2015	0.089	• Avoided GHG is calculated net of any increases in GHG emissions due to natural gas CHP projects • 2015 CFF spending does not include legacy framework, however, GHG avoided considers savings from legacy framework (savings achieved in 2015)
	$ spent per GHG reductions ($/tonnes GHG avoided)	The incentive plus non-incentive spending in 2015 divided by avoided tonnes GHG calculated by IESO for 2015 verified results	189	
CDM Plan Metrics	% of LDC CDM Plan allocated to natural gas behind the meter generation (BMG)	Planned target achievement (2020 energy savings) within LDC CDM Plans that specified BMG = “TRUE”	12%	• Based on LDC CDM Planned amounts (not actual)

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Data as of August 2017

BUDGETS, TARGETS AND COST EFFECTIVENESS SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT

Energy savings by program (vs. CDM Plans)	Coupons	Verified and reported results for 2015 through 2017 divided by CDM Plan forecasted results for 2015 through 2017 (all values in net 2020 Annual gigawatt-hours)	958 / 535 (179%)	• Most programs over-performed forecasted amounts from CDM Plans
				• The "Industrial Programs" category consists of the following programs:
				  • Process & Systems Upgrades
				  • Energy Manager
				  • Monitoring & Targeting
				  • Legacy extension industrial programs
				• The "Other" category consists of all remaining programs not listed in the table including
				  • Energy Audit Funding Program
				  • Existing Building Commissioning
				  • Certain legacy extension programs - (Aboriginal Conservation program, Program enabled savings)

	Heating & Cooling		180 / 157 (115%)	
	Home Assistance		33 / 27 (120%)	
	Residential New Construction		16 / 22 (73%)	
	Retrofit		1,850 / 2,174 (86%)	
	Small Business Lighting		65 / 95 (68%)	
	High Performance New Construction		76 / 90 (85%)	
	Industrial Programs		451 / 626 (72%)	
	Local Programs		48 / 60 (80%)	
	Pilot Programs		15 / 22 (70%)	
	Other		87 / 65 (134%)	

Numerator values reflect verified and unverified data (as of December 2017). Denominators include CDM plan forecasts as of December 2017.

BUDGETS, TARGETS AND COST EFFECTIVENESS SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT

Peak demand savings by program	Coupons	Verified net incremental annual peak demand savings by program for 2015 and 2016 (sum of 2015 and 2016) *(note: MW are not available for unverified results)*	39 MW	• The majority (61%) of *verified* peak demand savings were achieved in 2015
				• Verified peak demand savings are 101% of forecasted CDM Plan savings
				• High Performance New Construction has the lowest cost per MW of savings ($245K/MW), whereas Local Programs have the highest ($4M/MW)
				• The portfolio cost per MW was $617K/MW
				• The "Industrial Programs" category consists of the following programs:
				  • Process & Systems Upgrades
				  • Energy Manager
				  • Monitoring & Targeting
				  • Legacy extension industrial programs
				• The "Other" category consists of all remaining programs not listed in the table including
				  • Energy Audit Funding Program
				  • Existing Building Commissioning
				  • Certain legacy extension programs - (Aboriginal Conservation program, Program enabled savings)

	Heating & Cooling		53 MW	
	Home Assistance		4 MW	
	Residential New Construction		1.7 MW	
	Retrofit		191 MW	
	Small Business Lighting		9.5 MW	
	High Performance New Construction		18 MW	
	Industrial Programs		30 MW	
	Local Programs		0.2 MW	
	Pilot Programs		1.6 MW	
	Other		9.5 MW	

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Data as of June 2017

BUDGETS, TARGETS AND COST EFFECTIVENESS SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT

Spending by program	Coupons	Total spending by program (incentive and administrative) for 2015 through 2017 vs CDM Plan forecasts for 2015 through 2017 (values in $ millions)	$140 / $96 (146%)	• The Retrofit Program has the highest overall spending, but also the highest overall peak demand impact, and highest energy savings (previous two slides) of all programs
				• The “Industrial Programs” category consists of the following programs:
				  • Process & Systems Upgrades
				  • Energy Manager
				  • Monitoring & Targeting
				  • Legacy extension industrial programs
				• The “Other” category consists of all remaining programs not listed in the table including
				  • Energy Audit Funding Program
				  • Existing Building Commissioning
				  • Certain legacy extension programs - (Aboriginal Conservation program, Program enabled savings)
				• Central services are not included (however, Value Added Services are included)

	Heating & Cooling		$85 / $75 (114%)	
	Home Assistance		$18 / $22 (83%)	
	Residential New Construction		$6 / $6 (100%)	
	Retrofit		$234 / $320 (73%)	
	Small Business Lighting		$20 / $27 (73%)	
	High Performance New Construction		$14 / $24 (59%)	
	Industrial Programs		$31 / $86 (36%)	
	Local Programs		$33 / $50 (66%)	
	Pilot Programs		$1 / $4 % (23%)	
	Other		$13 / $44 (90%)	

Numerator values reflect verified and unverified data (as of December 2017). Denominators include CDM plan forecasts as of December 2017.

BUDGETS, TARGETS AND COST EFFECTIVENESS SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT
Other spending metrics	Central services ($)	The amount the central services budget spent in 2015 through 2017	$74 Million*	• CFF spending in 2015 and 2016, both for the framework and central services, is significantly lower than one-third of total budget • A contributing factor to this is relatively low first year spending for both the central services budget and CFF framework, $3 million and $25 million respectively • There is an upward trend in spending
	Central services (%)	The proportion of the total central services budget spent in 2015 through 2017	21%*	
	CFF framework to date ($)	The amount (in millions) that has been spent in the CFF framework in 2015 through 2017 (excluding central services)	$594 Million*	
	CFF framework to date (%)	The proportion of the 1.8 Billion dollar allocated CFF budget that has been spent over 2015 through 2017	32%*	
LDC Progress towards mid-term energy targets	# LDCs on track to mid-term target	The number of LDCs that achieved at least 50 percent of their target as per the 2017 unverified results (as of June 2017)	49*	• The 37 LDCs that have achieved at least 50 percent of their target represent 75 percent of the 7TWh target • 15 additional LDCs have met or exceeded mid-term target if pipeline is factored in

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*Data as of July 2017. *Updated CFF spending , Central Services Spending and LDC mid term target metrics as of December 2017, reflecting 12 months of unverified 2017 data*

BUDGETS, TARGETS AND COST EFFECTIVENESS SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT		INSIGHT

			2015	2016	• Negative TRCs indicate negative incremental costs which are considered benefits
					• Most programs remain cost effective at the total resource cost level
					• Monitoring and targeting, had costs in both 2015 and 2016, but no benefits. This is reflected in the "Industrial Programs" category
					• The "Industrial Programs" category consists of the following programs:
					  • Process & Systems Upgrades
					  • Energy Manager
					  • Monitoring & Targeting
					  • Legacy extension industrial programs
					• The "Other" category consists of all remaining programs not listed in the table including
					  • Energy Audit Funding Program
					  • Existing Building Commissioning
					  • Certain legacy extension programs - (Aboriginal Conservation program, Program enabled savings)

Cost effectiveness by program (total resource cost, TRC)	Portfolio	Measures the net cost or benefit based on costs incurred societally (non-incentive and participant costs) and the avoided costs to the electricity system and avoided costs, includes non-energy benefits and costs and benefits associated with other fuels (i.e., natural gas)	1.3	2.1	
	Residential		3.6	5.0	
	Business		1.0	1.2	
	Coupons		11.7	17.2	
	Heating & Cooling		2.0	1.4	
	Residential New Construction		1.2	0.3	
	Retrofit		1.0	1.1	
	Small Business Lighting		0.8	1.5	
	High Performance New Construction		1.9	2.4	
	Industrial Programs		0.8	1.2	
	Local Programs		n/a	2.3	
	Other		0.9	1.7	

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Data as of November 2017. 2015 results have been adjusted to reflect additional data that became available in 2016, previously published results will differ

BUDGETS, TARGETS AND COST EFFECTIVENESS SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT		INSIGHT

			2015	2016	• Most program remain cost effective at the Program Administrator Cost level
					• Monitoring and targeting, had costs in both 2015 and 2016, but no benefits. This is reflected in the "industrial programs" category
					• The "industrial programs" category consists of the following programs:
					  • Process & Systems Upgrades
					  • Energy Manager
					  • Monitoring & Targeting
					  • Legacy extension industrial programs
					• The "Other" category consists of all remaining programs not listed in the table including
					  • Energy Audit Funding Program
					  • Existing Building Commissioning
					  • Certain legacy extension programs - (Aboriginal Conservation program, Program enabled savings)

Cost effectiveness by program (Program Administrator Cost, PAC)	Portfolio	Measures the net cost or benefit based on costs incurred by the program administrator (incentive and non-incentive costs) and the avoided costs to the electricity system	2.0	3.1	
	Residential		2.3	3.4	
	Business		2.3	2.9	
	Coupons		2.5	4.6	
	Heating & Cooling		2.2	2.0	
	Residential New Construction		1.9	0.6	
	Retrofit		2.7	3.0	
	Small Business Lighting		0.7	1.6	
	High Performance New Construction		2.2	3.5	
	Industrial Programs		1.3	2.6	
	Local Programs		n/a	1.76	
	Other		2.0	0.9	

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BUDGETS, TARGETS AND COST EFFECTIVENESS SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT		INSIGHT

			2015	2016	• Most programs saw a decrease in Levelized Unit Energy Cost from 2015 to 2016
					• Monitoring and targeting, had costs in both 2015 and 2016, but no benefits. This is reflected in the "industrial programs" category
					• The "industrial programs" category consists of the following programs:
					  • Process & Systems Upgrades
					  • Energy Manager
					  • Monitoring & Targeting
					  • Legacy extension industrial programs
					• The "Other" category consists of all remaining programs not listed in the table including
					  • Energy Audit Funding Program
					  • Existing Building Commissioning
					  • Certain legacy extension programs - (Aboriginal Conservation program, Program enabled savings)

Cost effectiveness by program (Levelized Unit Energy Cost)	Portfolio	A test that normalizes the costs incurred by the program administrator per unit of energy or demand reduced (incentive and non incentive costs divided by the net present value of the energy savings using a societal discount rate) – **All values in ¢/kWh**	3.3	2.1	
	Residential		3.4	2.0	
	Business		2.8	2.4	
	Coupons		2.3	1.2	
	Heating & Cooling		5.2	5.1	
	Residential New Construction		3.7	14.0	
	Retrofit		2.4	2.3	
	Small Business Lighting		10.7	4.9	
	High Performance New Construction		3.7	3.2	
	Industrial Programs		5.1	2.5	
	Local Programs		n/a	2.8	
	Other		3.3	8.0	

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Data as of November 2017. 2015 results have been adjusted to reflect additional data that became available in 2016, previously published results will differ

INDUSTRIAL ACCELERATOR PROGRAM (IAP)

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BUDGETS, TARGETS AND COST EFFECTIVENESS SCORECARD

METRIC	DESCRIPTION	RESULT	TREND	GOAL	INSIGHT
Energy savings-to-date	• Metric: Net verified incremental first year energy savings. Separated by year. • Goal: IAP forecast	2015 49 GWh 2016 125 GWh	↑	2015 114 GWh 2016 416 GWh	• IAP underperformed in both 2015 and 2016, but significantly improved over those two years • Results represent projects that are verified and in-service and do not include projects that are under contract, but not yet implemented • Performance below forecast is driven by long project lead times and influenced by other initiatives (e.g., Industrial Conservation Initiative, Industrial Electricity Incentive Program, Cap & Trade)
Persisting energy savings	• Metric: Savings from 2015 and 2016 IAP projects persisting to the end of the framework, 2020. • Goal: IAP target	174 GWh	↑	1,700 GWh	• Persisting savings are approximately 10% of the IAP target

LEGEND					
TREND	↔ Minimal (less than 5 percentage points year over year) change in the metric relative to prior years	↑ Increase in the metric relative to prior years		↓ Decrease in the metric relative to prior years	
RESULT	Meeting/exceeding goal	Progress towards goal/monitor for concerns		Low progress relative to goal/potential action required	

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Data as of September 2017

BUDGETS, TARGETS AND COST EFFECTIVENESS SCORECARD

METRIC	DESCRIPTION	RESULT	TREND	GOAL	INSIGHT
Cost effectiveness	• Total Resource Cost Metric: A test that measures the net cost of CDM based on the total costs of the program including both participants' and utility's costs. • Goal: IAP forecast	2015: 0.80 (red) 2016: 4.45 (green)	↑	1.4	• The TRC indicator shows that the program is not cost-effective; however, this indicator provides a skewed perspective because the calculation includes all the program costs, but do not fully account for the benefits that result from the program
	• Program Administrator Cost Metric: measures the net cost of CDM based on costs incurred by the program administrator, including incentive costs and excluding net costs incurred by the participant. • Goal: IAP forecast	2015: 3.77 (green) 2016: 6.98 (green)	↑		• The PAC benefit/cost ratio has improved from 2015 to 2016
	• Levelized Unit Energy Cost Metric: a test that normalizes the costs incurred by the program administrator per unit of energy or demand reduced. Represented in ¢/kWh • Goal: IAP forecast	2015: 4.7 (red) 2016: 2.0 (green)	↑	4.0	• The LUEC benefit/cost ratio has improved from 2015 to 2016

LEGEND

TREND	↔ Minimal (less than 5 percentage points year over year) change in the metric relative to prior years	↑ Increase in the metric relative to prior years	↓ Decrease in the metric relative to prior years	
RESULT	Meeting/exceeding goal	Progress towards goal/monitor for concerns	Low progress relative to goal/potential action required	

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Data as of September 2017

CUSTOMER AND MARKET ENGAGEMENT AND SATISFACTION SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT[1]	INSIGHT
Brand	Awareness		N/A	• Metrics not tracked for Industrial Accelerator Program; market research will inform the metric
	Trustworthiness		N/A	
Customer Satisfaction			N/A	
Market Share	# of participating customers	% of eligible customers that have participated	85%	• High degree of participation from the 56 eligible customers
	Number of projects	Increase in # of projects from 2015 to 2016	31	
Energy Managers	Customers with energy managers	% of eligible customers with IESO funded energy managers	25%	• Program recently became available to transmission connected customers

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1. 2016 data

Data as of February 2017

COLLABORATION SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT
IESO Collaboration: Cross-fuel Collaboration	# of collaboration activities	# of collaboration activities (planned within the next quarter or complete) between IESO and natural gas utilities	11	• Quality metrics (e.g., quantitative impact to customers or costs) and goals with respect to cross-fuel collaboration are not clearly defined and as such are not collected

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Data as of April 2017

GOVERNANCE AND OPERATIONS SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT
Indicators	IESO review time for projects	Turnaround time in calendar days between application receival by IESO and release of contract to customer – Process and Systems	80 days	• Review time could be representative of the intricacies of the applications and size of the incentive, market research and potentially evaluation reports will provide additional insights • Processes are supported by a third party
		Turnaround time calendar days between application receival by IESO and release of contract to customer – Preliminary Engineering Studies / Detailed Engineering Studies	55 days	
		Turnaround time calendar days between application receival by IESO and release of contract to customer – Retrofit	30 days	
		Turnaround time calendar days between application receival by IESO and release of contract to customer – Energy Manager	18 days	
	% non-incentive vs. incentives in program costs	Actual spent non-incentive costs as a percentage of incentive + non-incentive costs	18%	• Non-incentive costs were budgeted to represent 9% of total delivery costs (administration + incentives) • Non-incentive costs are 28% at the IESO portfolio level (2015 & 2016, Conservation First Framework + Industrial Accelerator Program) • Non-incentive costs were 29% for the 2011-2014 portfolio

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Data as of May 2017

PLANNING INTEGRATION SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT
Supporting integration metrics	Average effective useful life of measure by initiative	The average effective useful life for the measures of all completed incentive projects in the industrial accelerator program, weighted by energy savings	17	• Industrial Accelerator Program measures have a comparable effective useful life to business measures • The majority of Industrial Accelerator Program CDM projects impact peak demand due to the high operating hours of most industrial facilities
	Ratio of energy Savings to demand savings	Net energy savings divided by net demand savings for completed incentive projects	8,000 MWh/MW	

**MWh/MW numbers have been rounded to nearest hundred and useful life numbers have been rounded to nearest year*

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Data as of June 2017

CLIMATE CHANGE SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT
GHG metrics	GHG reduction per MWh saved (tonnes GHG avoided/MWh)	Avoided tonnes GHG calculated by IESO for 2015 verified results divided by the net verified energy savings achieved in 2015	0.039	• Avoided GHG is calculated net of any increases in GHG emissions due to natural gas CHP projects • Administrative costs are higher in 2015 for IAP (first year of the program) and are expected to level out as more projects come into service
	$ spent per GHG reductions ($/tonnes GHG avoided)	The incentive plus non-incentive spending in 2015 divided by avoided tonnes GHG calculated by IESO for 2015 verified results	2,815	
CDM Plan Metrics	% of achievement allocated to natural gas behind the meter generation (BMG)	Gross unverified first year energy savings for generation projects that have received a project incentive between 2012 and 2017	49%	• 8 projects, 4 of which were implemented in 2016

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Data as of June 2017

BUDGETS, TARGETS AND COST EFFECTIVENESS SNAPSHOT

AREA	METRIC	DESCRIPTION	RESULT	INSIGHT
Demand savings	Peak demand savings	Verified peak demand savings resulting from IAP programs	2015 0.6 MW 2016 74 MW	• Peak demand savings increased significantly from 2015 to 2016
Spending	Spent as % of total	The proportion of the $500 million IAP budget that was spent in 2015 and 2016	1%	• A very small amount of IAP budget has been reported spent to date • Spending includes studies that enable projects, but do not deliver savings
	Allocated to date	The total amount of incentive and non-incentive spending on IAP programs in 2015 and 2016	$4.1 Million	

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Data as of September 2017