TABLE A7.5 IN-SUITE EFFICIENCY OFFERS COST-EFFECTIVENESS SUMMARY

The Esperant of the State of th	2020/21	2021/22	2022/23
Annual electric budget (\$)	\$204,000	\$253,000	\$303,000
Annual natural gas budget (\$)	\$38,000	\$58,000	\$79,000
Total program budget	\$242,000	\$311,000	\$382,000

		Electric	Natural gas
Program Administrator Cost Test results	Ratio	2.48	3.15
	Net Present Value (\$)	\$1.06 M	\$0.35 M
	Levelized Cost	3.14¢/kWh	6.68¢/m³

Note. Refer to *Attachment 3 - Technical Tables* for additional program cost-effectiveness details.

A7.4.1 OVERVIEW & OBJECTIVES

- 246 Efficiency Manitoba will provide a full-service direct installation offer for property
- 247 managers and owners of multi-unit residential buildings, including apartments,
- 248 townhouses, and condominiums. The objective of the offer is to encourage the
- installation of energy-efficient devices in the suites of multi-unit residential buildings.

A7.4.2 TECHNOLOGIES

- 250 Energy-efficient upgrades installed at no charge will include:
- up to two energy-efficient showerheads (5.7 LPM);
- up to two energy-efficient bathroom aerators (5.7 LPM); and
- up to nine LED bulbs.
- Energy-efficient upgrades eligible for incentives will include:
 - heat recovery ventilator (HRV) controls; and
- thermostats.

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A7.4.3 IMPLEMENTATION

- 257 In-Suite Efficiency Offers will be delivered by a contracted third-party who will be
- responsible for administering the program, supplying energy-efficient upgrades, and
- coordinating the installation of the devices.

A7.5 RENOVATION OFFERS

TABLE A7.6 RENOVATION OFFERS ENERGY & GREENHOUSE GAS EMISSIONS SAVINGS SUMMARY

	2020/21	2021/22	2022/23
No. of projects (electric)	1,800	1,700	1,600
Annual electric savings (GWh) (at generation)	110.73	103.06	95.51
Annual capacity savings (MW) (at generation)	33.06	31.10	28.94
No. of projects (natural gas)	160	170	180
Annual natural gas savings (million m³)	1.00	1.13	1.25
Annual GHG emission reductions (tonnes CO ₂ e)	1,900	2,200	2,400

Note. Refer to Attachment 3 - Technical Tables for additional program details.

TABLE A7.7 RENOVATION OFFERS COST-EFFECTIVENESS SUMMARY

	2020/21	2021/22	2022/23
Annual electric budget (\$)	\$17,425,000	\$16,710,000	\$15,961,000
Annual natural gas budget (\$)	\$2,102,000	\$2,151,000	\$2,387,000
Total program budget	\$19,527,000	\$18,861,000	\$18,348,000

		Electric	Natural gas
D	Ratio	4.97	1.60
Program Administrator Cost Test results	Net Present Value (\$)	\$187.96 M	\$3.77 M
Cost restresures	Levelized Cost	1.67¢/kWh	11.85¢/m³

Note. Refer to Attachment 3 - Technical Tables for additional program cost-effectiveness details.

A7.5.1 OVERVIEW & OBJECTIVES

Renovation Offers can be divided into two broad categories:

- commercial lighting technologies and controls; and
- commercial building envelope technologies.

Efficiency Manitoba will provide financial incentives and education to customers with existing commercial, industrial, and agricultural buildings that conduct energy-efficient renovations to their building envelope and lighting. To take part, customers will engage with a contractor or consultant of their choosing, discuss energy-efficient options, determine the requirements for the program, and apply for financial incentives. Customers may choose to upgrade one or more technologies or single measures at a time.

The primary objective of Renovation Offers is to provide technical assistance and financial incentives to influence the adoption of energy-efficient technologies and practices by reducing the cost of renovations. The offer will further educate customers on the important features and benefits of choosing cost-effective options for improving their building energy performance.

Efficiency Manitoba will work with local and national industry associations and trade allies to drive awareness and stimulate successful long-term relationships. Trade allies will be involved with the Renovation Offers by promoting the offers, providing administrative support such as assisting customers with applications, and serving as leaders in energy-efficient building practices.

A7.6 HVAC & CONTROLS OFFERS

TABLE A7.8 HVAC & CONTROLS OFFERS ENERGY & GREENHOUSE GAS EMISSIONS SAVINGS SUMMARY

	2020/21	2021/22	2022/23
No. of systems (electric)	770	770	780
Annual electric savings (GWh) (at generation)	3.31	3.47	3.53
Annual capacity savings (MW) (at generation)	0.63	0.65	0.67
No. of systems (natural gas)	200	210	220
Annual natural gas savings (million m³)	0.79	0.76	0.72
Annual GHG emission reductions (tonnes CO ₂ e)	1,500	1,400	1,400

Note. Refer to Attachment 3 - Technical Tables for additional program details.

TABLE A7.9 HVAC & CONTROLS OFFERS COST-EFFECTIVENESS SUMMARY

	2020/21	2021/22	2022/23
Annual electric budget (\$)	\$1,006,000	\$1,083,000	\$1,142,000
Annual natural gas budget (\$)	\$797,000	\$841,000	\$886,000
Total program budget	\$1,803,000	\$1,924,000	\$2,028,000

		Electric	Natural gas
Program Administrator Cost Test results	Ratio	2.81	2.59
	Net Present Value (\$)	\$5.50 M	\$3.77 M
	Levelized Cost	2.30¢/kWh	7.35¢/m³

Note. Refer to Attachment 3 - Technical Tables for additional program cost-effectiveness details.

A7.6.1 OVERVIEW & OBJECTIVES

HVAC & CONTROLS

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- HVAC and Controls Offers will provide financial incentives for the purchase and
- installation of numerous higher efficiency technologies in various commercial,
- industrial, and agricultural applications. HVAC systems can be large energy users in

- commercial buildings and can make up a large portion of the energy consumption in many industrial and agricultural operations.
- These offers aim to influence contractors, installers, building owners, consultants, and other decision-making parties to adopt more efficient technologies during retrofit decisions, resulting in electric and/or natural gas savings and bill savings for customers.

A7.6.2 TECHNOLOGIES

- Technologies eligible under HVAC and Controls Offers include:
- condensing gas boilers;
- CO₂ sensors;
- HRVs / energy recovery ventilators;
- condensing gas water heaters;
- air cooled chillers;
- variable frequency drives;
- hotel occupancy sensors;
- hotel packaged terminal heat pumps (PTHPs);
- unit heaters;
- infrared heaters; and
- geothermal (ground-source heat pumps).

A7.6.3 IMPLEMENTATION

Industry sessions with trade allies and customer associations will be arranged to introduce the offers and application process.



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Amendment 13

December 2016

Registration and publication of Regulations amending Canada's Energy Efficiency Regulations

Amendment 13 to the Energy Efficiency Regulations was registered on December 9, 2016, published on December 28, 2016 and came into force on June 28, 2017.

Canada Gazette, Part II

Amendment 13 was published in the Canada Gazette, Part II*, on December 28, 2016.

Canada Gazette, Part I

Amendment 13 was pre-published on April 30, 2016 in the Canada Gazette, Part 1, and updates existing energy efficiency standards for 20 product categories to align with requirements in force or soon to be in force in the U.S.

For information on requirements in the Regulations for each product, consult Natural Resources Canada's Requirements for energy-using products.

Affected products

Residential

- clothes dryers (Division 1, subdivision A)
- clothes washers (two U.S. standards: 2015 and 2018) (Division 1, subdivision B)
- integrated washer-dryers (Division 1, subdivision C)
- dishwashers (Division 1, subdivision D)
- refrigerators (Division 1, subdivision E)
- freezers (Division 1, subdivision F)
- room air conditioners (Division 2, subdivision A)

- central air conditioners and heat pumps (Division 2, subdivision D and F. Division 3, subdivision E and G)
- · gas-fired storage water heaters (align all sizes of tanks in Canada with the standard in the U.S. that applies only to tanks with rated storage volumes less than 208 litres) (Division 6, subdivision B)
- oil-fired storage water heaters (Division 6, subdivision C)

Commercial and industrial

- residential-style commercial clothes washers (two U.S. standards: 2013 and 2018) (Division 1, subdivision B)
- packaged terminal air conditioners and heat pumps (Division 2, subdivision C)
- chillers (Division 2, subdivision H)
- commercial refrigeration (self-contained) (Division 10, subdivision A)
- refrigerated beverage vending machines (Division 10, subdivision B)
- commercial ice-makers (Division 10, subdivision C)
- electric motors (Division 12)

Lighting

- general service incandescent reflector lamps (Division 7, subdivision D)
- general service fluorescent lamps (two U.S. standards: 2012 and 2018) (Division 7, subdivision E)
- fluorescent lamp ballasts (Division 7, subdivision F)

Other

- repeal regulated requirements for digital television adapters
- make minor updates to scope, reporting and compliance requirements for 8 currently regulated product categories to reflect updated requirements both in the U.S. and Canada:
 - electric ranges (Division 1, subdivision G)
 - large commercial air conditioners (Division 2, subdivision B) and heat pumps (Division 3, subdivision C)
 - gas furnaces (Division 4, subdivision A)
 - gas fireplaces (Division 4, subdivision C)
 - general service lamps (Division 7, subdivision B and C)
 - exit signs (Division 8, subdivision D)
 - · televisions (Division 9, subdivision C)
 - external power supplies (Division 9, subdivision D)

- repeal and replace the *Regulations* with a new format that organizes products by divisions and subdivisions.
- · update some standards that are incorporated by reference
- * Interested parties seeking more details on the cost-benefit analysis of the Regulatory Impact Analysis Statement can request a copy, <u>Energy Efficiency Regulations</u>, <u>2016</u>: <u>A Cost-Benefit Analysis</u>.

Archived bulletins relating to this amendment are no longer available on our web site. To obtain a copy, please <u>contact us by e-mail</u>.

Date Modified:

2017-07-25



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→ Amendment 14 to the Energy Efficiency Regulations

Amendment 14 to the Energy Efficiency Regulations

October 2018

Publication in the Canada Gazette, Part II

Amendment 14 to the Energy Efficiency Regulations was published in the Canada Gazette, Part II on October 31, 2018. Some provisions offering flexibility to dealers. including revised import reporting provisions will come into force upon publication, while the balance of the Amendment will come into force on April 30, 2019. Interested parties should consult the regulations directly or Natural Resources Canada's Guide to the Regulations for more information.

Affected products

Residential

- · microwave ovens
- · gas furnaces
- oil-fired furnaces
- external power supplies
- dehumidifiers
- battery chargers

Commercial and industrial

- large air conditioners
- large heat pumps
- packaged terminal air conditioners and heat pumps
- commercial refrigerator, commercial refrigerator-freezer, commercial freezer
- walk-in freezer and walk-in cooler components
- dry-type transformers
- small electric motors
- commercial pre-rinse spray valves

Lighting

- fluorescent lamp ballasts
- ceiling fans light kits
- metal halide lamp ballasts

Pre-publication in the Canada Gazette, Part I

Amendment 14 was pre-published on March 31, 2018 in the Canada Gazette, Part I, and updates existing energy efficiency standards for 17 product categories to align with requirements in force or soon to be in force in the U.S.

Pre-consultation in advance of pre-publication in Canada Gazette (Spring to Winter 2016)

Technical bulletins and webinars were released to initiate the consultation process and to collect stakeholder views on the requirements under consideration.

Archived bulletins relating to this amendment are no longer available on our web site. To obtain a copy, please contact us by e-mail.

Notice of Intent (April 30, 2016)

A Notice of Intent was published in the Canada Gazette Part I on April 30, 2016 indicating Natural Resources Canada's intent to proceed with the development of Amendment 14.

Date Modified:

2018-11-13