NP 2016/2017 General Rate Application

Information - #37

Filed: 2016-04-12 Box

Board Secretary: CB



Home

For Your Home

For Your Business

**Bright Business** 

Contact Us



# Make the Switch to Energy Efficiency Home Heating

Home heating is an unavoidable part of life in Nova Scotia. If you currently heat your home using electricity, you may be eligible to receive rebates OR low interest financing to help you install wood or pellet heating equipment, a heat pump\*, solar air heating or solar domestic water heating. Efficiency Nova Scotia considers a home to be electrically heated when the heating system provides all, or the majority, of the home's heating needs by electricity.

Assistance may be available for homes that:

- Have heating system(s) set up to provide all, or the majority, of the home's heating and hot water by electricity (electric baseboards, electric furnaces/boilers, electric thermal storage, and electric water heater),
   or
- Use, as the primary space heating equipment, a heat pump that has ceased functioning and must be replaced. A letter from a heat pump contractor must be submitted along with this application indicating what components of the current heat pump are damaged.

\*Only ductless mini split heat pumps on the Efficiency Nova Scotia Cold Climate Heat Pump list qualify. The list can be found here.

Please note: Rebates for heat pumps are not retroactive. Heat pumps purchased and/or installed prior to October 1, 2015 are not eligible for rebates or financing.

We offer rebates up to \$1,900 or low interest financing (2%) up to \$15,000 for five years to help cover the cost of new equipment and installation. Pre-approval is required prior to purchasing or installing new equipment. To learn more about financing, please check out our Green Heat Financing Checklist.

#### DID YOU KNOW?

You can increase your savings potential and receive higher rebates when you start with a Home Energy Assessment! For more information, visit our Home Energy Assessment page for more details.

## How it Works

· Get a general idea of your requirements and potential costs by talking with a heating contractor.

- . Submit a Green Heat Pre-Approval Form or apply toll-free over the phone at 1.877 999 6035. Please have your electric bill available when
- Efficiency and Bright Business, equi; Contact Us
   ete, submit the Green Heat Completion Form. This must be completed within six months (60 days for financing) from your pre-approval date. Be sure to include:
- · Photographs of the new equipment
- · Copies of all related receipts
- For installations of wood/pellet systems, identify the Wood Energy Technology Transfer (WETT) certified installer or inspector and their WETT number.
- You will receive your rebate within 6-8 weeks. If you chose financing, we will visit your home to verify the installation and your identification. Upon confirmation, we will pay your contractor directly within 6-8 weeks.

Equipment Type	Maximum Rebate Amount		
Hybrid Heat Pump Water Heater	\$150		
Ductless Mini-Split Heat Pump	\$300		
Solar Air	\$400		
Pellet Stove	\$500		
Wood Stove	\$500		
Solar Water Heating	\$1,000		
Air-to-Water Heat Pump	\$1,400		
Central Ducted Air Source Heat Pump	\$1,400		
Central Pellet Furnace or Boiler	\$1,400		
Central Wood Furnace or Boiler	\$1,400		
Geothermal Heat Pump	\$1,900		

## Overall Program Eligibility:

- Homes must be existing (at least six months past the occupancy permit), primary single-family homes, including detached homes, row
  houses, duplexes, and mini homes.
- . The home's heating system(s) must be set up to provide all, or the majority, of the home's heating by electricity.
- . The home's hot water system(s) must be set up to provide all, or the majority, of the home's water heating by electricity.
- Homes with heat pumps are only eligible if the existing heat pump has ceased to function and must be fully replaced. A letter from a heat pump contractor must be submitted along with this application indicating what components of the current heat pump are damaged.
- All rebates or financing must be pre-approved. If a system is purchased and/or installed before pre-approval is given, assistance will not be provided.
- Participants must install all equipment as well as all peripheral equipment required to operate the system (stove/insert, chimney, venting, required safety features, etc.). Installations must meet all applicable codes.
- Furnace ducts and hot water pipes being installed should be kept within the building envelope. If this is not an option, pipes and/or ducts
  must be properly sealed and insulated.
- Efficiency Nova Scotia reserves the right to decline rebates and/or financing where it is determined that the system will not meet performance potential.
- Equipment must be new, installed and in service, and all documents received, within six months of pre-approval, or within 60 days for
  financing. Legible copies of receipts and photos of exterior and interior of the system must be included with the final completion form.
- Applicant must be the owner of the home that is to receive heating upgrades, and must be willing to complete a survey or receive an
  inspection of the home, which may occur before, during or after the equipment is installed.
- Homeowners must allow Efficiency Nova Scotia to gain energy usage information from their utility.
- · Only 1 incentive is available per measure per lifetime.

Electrically Heated	Non-Electrically Heated			
100% electric heat 100% electric heat 100% electric space heating systems in the home).	fome For Your Business Bright Business Contact  100% non-electric heat (no electric space heating systems in the home).			
This include homes that only have electric baseboards, electric furnace, electric boiler, central heat pump with electric backup or any of these electric systems along with solar, electric thermal storage, and/or ductless mini-splits.	This includes homes with only a non-electric heating system (e.g. central furnace or boiler that supplies heat to the home using oil, natural gas, propane, wood or pellets).			
Home is set up to primarily use electric heating (any of the systems above), but also has one or more non-electric space heaters.	Home is set up to primarily use non-electric heating (any of the central systems above), but also has one or more electric space heaters.			
A non-electric space heater could be considered a wood / pellet stove, oil stove or space heater, gas fireplace or space heater, coal stove.	An electric space heater could be considered electric baseboards (e.g. in an addition on the home), electric in floor heating (e.g. in the bathroom) or other electric resistance heating that is not supplied to the majority of the home.			
Home has a central heat pump – regardless of back up.	Home has any type of central non-electric hoating and ductless mini-split(s)			

## Equipment Eligibility Criteria

#### Ductless Mini-split Heat Pumps

Must be on the Efficiency Nova Scotia Cold Climate Heat Pump list. All units on this list meet the following eligibility criteria:

- HSPF (Region 5) greater than or equal to 9
  ENERGY STAR (version 5.0 or newer) certified
- The coefficient of performance (COP) at -15°C must be greater than or equal to 1.75

Please note. Rebates for heat pumps are not retroactive. Heat pumps purchased and/or installed prior to October 1, 2015 are not eligible for rebates or financing.

#### Centrally Ducted Heat Pumps

Only ENERGY STAR (Version 5.0 or newer) certified heat pumps are eligible.

Please note: Rebates for heat pumps are not retroactive. Heat pumps purchased and/or installed prior to October 1, 2015 are not eligible for rebates or financing.

	SEER	EER	HSPF - US	HSPF - Canada Region V
Split System	≥15.0	≥12.5	≥8.5	≥7.4

#### Air to Mator Heat Pumps

Home For Your Home For Your Business Bright Business Contact Us appropriate the party tested to CSAC656-05 or ANSI/AHRI 210/240-1994 (EER) or equivalent.

\* Aur-to-water systems thust meet the following efficiency requirements:

Please note: Rebates for heat pumps are not retroactive. Heat pumps purchased and/or installed prior to October 1, 2015 are not eligible for rebates or financing.

	SEER	EER	HSPF-US	HSPF- Region V Canada
Split System	≥15.0	≥12.5	≥8.5	≥7.4

#### Ground Source Heat Pumps

The system must be installed and certified after installation by Canadian Geoexchange Coalition (CGC) qualified installer.

Please note: Rebates, for heat pumps are not retroactive. Heat pumps purchased and/or installed prior to October 1, 2015 are not eligib for rebates or financing.

#### Wood and Pellet Stoves and Furnaces

- Eligible wood/pellet equipment must meet either the CSA-B415.1-10 or the US EPA 40CFR Part 60 AAA standard. All wood/pellet stove
  must be EPA or CSA certified with emissions rating of less than or equal to 4.5 g/hr for total filterable particulate matter (TPM). All
  wood/pellet furnaces or boilers must be EPA or CSA certified with emissions rating of = 4.5 g/hr or less than or equal to 0.40g/MJ for
  TPM. For a list of potential equipment, click here.
- All wood/pellet systems must be installed by a Wood Energy Technology Transfer (WETT) certified professional that has either "Technician" or "Sweep" certification. Alternatively, an installation can occur by a non-WETT certified installer; however, the entire systemust be subsequently inspected and approved by a WETT certified inspector. To search for a certified installer, click here.
- Outdoor wood/pellet furnaces or boilers are not eligible for rebates or financing.

#### Hybrid Heat Pump Water Heaters

- The hybrid water heater must be ENERGY STAR certified.
- The equipment must replace an existing electric resistance water heater.
- The equipment must be in a room at least 1,000 ft3 in volume (roughly 12ft x 12ft).

#### Other considerations:

- Noise may be an issue do not place the unit near bedrooms or other noise-sensitive locations.
- Hybrid water heaters cool the surrounding space do not place the unit close to a thermostat, as this may result in improper heating o
  cooling of the home;
- Place the hybrid water heater in a location where the room's contents will not be adversely affected by the cold temperatures produce by the hybrid water heater.
- · Never place the unit near the kitchen. Oils from cooking can damage the unit.
- Energy savings from hybrid water heaters are more substantial when a heat pump is used for space heating, e.g. a minisplit heat pump, fully-ducted air-source heat pump, ground-source heat pump, etc.

#### Solar Systems

- All solar collectors (both Air and Domestic Hot Water) must be certified under one of the following CSA classes:
  - CSA Class 2831-06, 2831-07, 2831-30 or 2831-37 CSA Class 8854 (Previously CSA F378/F379)
- Qualified Solar Domestic Hot Water Systems can be found at NRCan's website Performance Directory of Solar Domestic Hot Water Systems.
- The Solar Domestic Hot Water System is designed for year-round operation for domestic water use (although other applications may be incorporated into system design e.g. space heat).

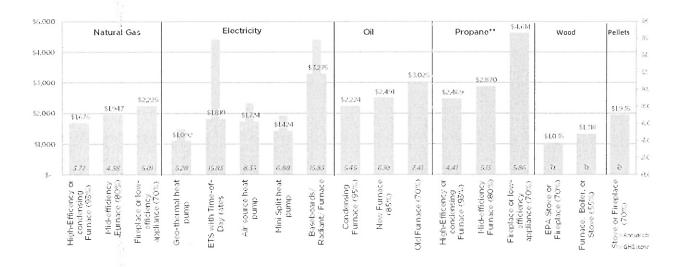
The equinment is installed according to industry best practice and manufacturer's instructions.

nsulation is installed on:
feet) of the cold and the full lenger Your Home, pipir For Your Business onne Bright Business vention and the last Useau.

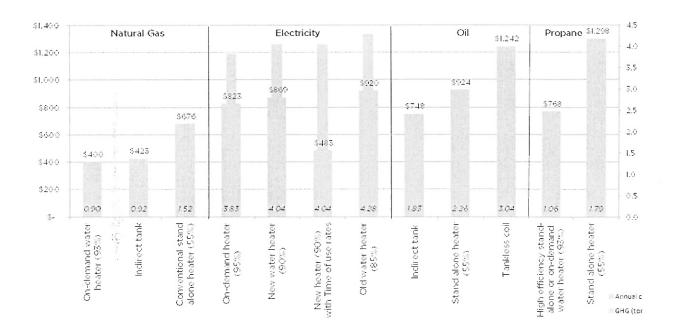
- All piping connecting the solar storage tank to the solar collector. - All piping connecting the solar storage tank to the conventional water heater.

## Graphs and Charts

#### Space Heating Chart



#### Water Heating Chart



### Space Heating and Water Heating Fuel Cost Comparison Chart

for space heating and water heating by reviewing this chart.

**efficiency** 

Home

For Your Home

For Your Business

**Bright Business** 

Contact Us

© 2014-2015 EfficiencyNS. All Rights Reserved.

Privacy Policy

Disclaimer

Customer Service



#### Cold climate ductless mini-split heat pumps

in order to qualify for incentives in Efficiency Nova Scotia's Green Heat and Home Energy Assessment programs, your ductless mini-split heat pump system must be on the list below. All units on this list meet the following eligibility criteria:

- Single zone system heating seasonal performance factor (HSPF) for Region 5 ≥ 9.0

System is not on the list? If you think you are installing a qualified unit but it is not on our list, have your contractor contact heatpumps@efficiencyns.ca

Manufacturer	System Type	Outdoor Unit Model*	Indoor Unit Model	Heating Capacity (BTU/h)	HSPF (Region 5)	COP @ -15℃
Carrier Single-zoi		38GRQB09301	40GRQB09H301	9,000	9.0	1.98
	Single-zone	38GRQB18301	40GRQB18H301	19,000	9.0	2.85
		38GRQB12301	40GRQB12H301	13,000	9.0	2.76
Multi-zon Daikin Single-zor		2MXS18NMVJU 3MXS24NMVJU	Non-Ducted Indoor Units Non-Ducted Indoor Units	18,900 24,000	10.9 9.3	2.54
	Multi-zone	2MXL18QMVJU	Non-Ducted Indoor Units	18,900	9.0	2.03
		3MXL24QMVJU	Non-Ducted Indoor Units	24,000	10.9	2.17
		RXS09LVJU	FTXS09LVJU	12,000	10.9	3.03
		RXS12LVJU	FTXS12LVJU	14,400	10.9	2.94
		RXS15LVJU	FTXS15LVJU	18,000	10.1	2.71
		RXS18LVJU RXS24LVJU	FTXS18LVJU FTXS24LVJU	21,600 25,400	9.6 9.2	2.50
	Single-zone	RXL09QMVJU	FVXS09NVJU	10,100	10.2	2.15
		RXL15QMVJU	FVXS15NVJU	18,000	9.8	2.40
		RXL09QMVJU	FTX09NMVJU	10,900	10.9	1.97
		RXL12QMVJU	FTX12NMVJU	13,600	10.4	2.37
		RXL15QMVJU	FTX15NMVJU	18,300	10.9	2.27
		MR09Y3J	MW09Y3J	11,900	9.6	1.79
Friedrich Single-z	Single-zone	MR12Y3J	MW12Y3J	15,500	9.6	2.00
		MR24Y3J	MW24Y3J	27,200	9.6	1.80
		AOU18RLXFZH	Non-Ducted Indoor Units	22,000	9.0	1.85
	Multi-zone	AOU24RLXFZH	Non-Ducted Indoor Units	25,000	9.0	2.09
		AOU18RLXFZ AOU24RLXFZ	Non-Ducted Indoor Units Non-Ducted Indoor Units	22,000 24,000	8.1 8.3	1.98
		AOU9RLS3	ASU9RLS3	12,000	12.3	2.09
		AOU12RLS3	ASU12RLS3	16,000	12.2	2.30
		AOU15RLS3	ASU15RLS3	18,000	11.7	2.18
		AOU9RLS3H	ASU9RLS3	12,000	12.2	1.95
		AOU12RLS3H	ASU12RLS3	16,000	12.0	2.15
Forthern		AOU15RLS3H	ASU15RLS3	18,000	11.6	2.07
Fujitsu		AOU9RLFF	AGU9RLF AGU12RLF	12,000	11.0	1.95
	Single-zone	AOU12RLFF AOU15RLFF	AGU15RLF	16,000 18,000	10.1 9.7	1.86
	Girigio Zorio	AOU9RLFFH	AGU9RLF	12,000	10.8	1.82
		AOU12RLFFH	AGU12RLF	16,000	9.8	1.89
		AOU15RLFFH	AGU15RLF	18,000	9.6	1.77
		AOU9RLS2	ASU9RLS2	12,000	10.9	2.19
		AOU12RLS2	ASU12RLS2	16,000	10.4	2.34
		AOU15RLS2	ASU15RLS2	18,000	10.4	2.42
		AOU9RLFW1 AOU12RLFW1	ASU9RLF1 ASU12RLF1	12,000 16,000	9.6 9.6	2.82
		1U12ES2VHA	AW12ES2VHA	16,000	9.6	2.46
Haler	Single-zone	1U09ES2VHA	AW09ES2VHA	10,000	10.4	2.48
		1U18ES2VHA	AW18ES2VHA	22,000	9.6	2.08
		LMU18CHV	Non-Ducted Indoor Units	22,000	8.4	2.03
		LMU24CHV	Non-Ducted Indoor Units	24,000	9.2	2.03
	Multi-zone	LMU30CHV	Non-Ducted Indoor Units	32,000	8.7	2.05
		LMU36CHV	Non-Ducted Indoor Units	36,000	8.7	2.01
	DIAMETER SE	LMU480HV LAU090HYV1	Non-Ducted Indoor Units LAN090HYV1	48,000 11,000	8.7 10.4	3.00 2.88
LG	Single year	LAU120HYV	LAN120HYV	13,600	10.4	2.74
		LAU180HYV1	LAN180HYV1	19,300	10.9	2.37
		LAU240HYV1	LAN240HYV1	23,240	10.4	2.27
	Single-zone	LSU090HSV4	LSN090HSV4	10,800	9.4	2.80
		LSU090HSV4	LAN090HSV4	10,800	9.4	2.80
		LSU120HSV4	LAN120HSV4	13,300	9.6	2.43
ALCOHOL:		LSU120HSV4	LSN120HSV4	13,300	9.6	2.43
SURFACE CO.		MXZ-2C20NAHZ	Non-Ducted Indoor Units	22,000	8.5	2.07
	Multi-zone	MXZ-3C24NAHZ	Non-Ducted Indoor Units	25,000	8.7	1.92
Mitsubishi		MXZ-3C30NAHZ MXZ-4C36NAHZ	Non-Ducted Indoor Units Non-Ducted Indoor Units	28,600 45,000	9.6 9.8	1.75
		MXZ-5C42NAHZ	Non-Ducted Indoor Units	48,000	9.6	2.51
		MXZ-8C48NAHZ	Non-Ducted Indoor Units	54,000	9.6	2.29
	Single-zone	MUZ-FE12NA	MSZ-FE12NA	13,600	9.1	2.46
		MUZ-FE18NA	MSZ-FE18NA	21,600	9.0	2.03
		MUZ-FH09NA	MSZ-FH09NA	10,900	11.7	2.32
		MUZ-FH12NA	MSZ-FH12NA	13,600	10.9	2.21
		MUZ-FH15NA	MSZ-FH15NA	18,000	10.4	1.79
CONTRACTOR AND A STATE OF THE S	ESPECIAL	MUZ-FH18NA	MSZ-FH18NA	20,200	10.4	2.01
Panasonic	Single-zone	CU-E9RKUA CU-E12RKUA	CS-E9RKUAW	12,000	9.6	1.92
CALIFORNIA PROGRAMA		AR09JSFDHWKX	CS-E12RKUAW AR09JSFDHWKN	13,800 12,600	9.6 10.4	1.83
Samsung	Single-zone	AR12JSFDHWKX	AR12JSFDHWKN	13,600	10.4	2.41
Junioung	5g.6-25116	AR09HSFSJWKX	AR09HSFSJWKN	12,000	9.1	1.91
	The second secon		1001 101 00111111	12,000	V. I	1.01

\*Please note, some models may have a drain pan heater installed. Model numbers are often appended with an "H' to denote this, Models with a drain pan heater installed that do not meet eligibility criteria will qualify if the base model meets the eligibility criteria, i.e. the model without a drain pan heater included.

Last updated on: March 18, 2016