# ENERGY WISE - FOR YOUR HOME

## Your guide to heating and cooling

### AIR SOURCE HEAT PUMP (ASHP)

- It's the best of both worlds. ASHPs provide home cooling and supplemental heating with 72% less electricity than conventional air conditioners and furnaces.
- ASHPs are measured by:
  - Heat Seasonal Performance Factor (HSPF). HSPF/ HSPF2 is the most commonly used measure of a heat pumps heating efficiency. The higher the HSPF/ HSPF2, the more efficient the heat pump.
  - 2) Seasonal Energy Efficiency Ratio (SEER). The SEER/ SEER2 rating most accurately reflects overall system cooling efficiency on a seasonal basis.
  - Energy Efficiency Ratio (EER). EER/EER2 reflects the system's cooling energy efficiency at peak day operations.
- You can switch between cooling and heating directly from the thermostat, putting you in complete control.
- To qualify for a rebate this equipment must be installed by a "quality installation" (QI) certified contractor. The rebate form is provided by the contractor.

### **CENTRAL AIR CONDITIONER (CAC)**

- If your air conditioner is more than 12 years old, replacing it with a rebate qualifying model could cut your cooling cost by 30%.
- To qualify for a rebate this equipment must be installed by a "quality installation" certified contractor



#### CAC AND ASHPTUNE UP

- The best way to ensure efficient operation of your cooling system is by having a tune-up every two years.
- A tune-up by a service expert can improve your unit's efficiency by as much as 20% and extends equipment life.
- To qualify for a rebate this equipment must be installed by a "quality installation" (QI) certified contractor. The rebate form is provided by the contractor.

### **DUCTLESS/MINI-SPLIT ASHP**

- Use 60% less energy than standard home electric resistance-based heating systems, because they transfer instead of generate heat.
- Use sophisticated compressors and fans that can adjust speeds to save energy. You can cut cooling costs by 30% compared to conventional room air conditioners.
- To qualify for a rebate this equipment must be installed by a "quality installation" (QI) certified contractor. The rebate form is provided by the contractor.

# ELECTRONICALLY COMMUTATED MOTOR (ECM) FOR YOUR FURNACE

- ECMs are standard in new construction. Rebates are available only for replacement.
- ECMs help save energy and money by running at the best speed, opposed to traditional motors that always run at top speed.
- Furnaces equipped with an ECM have lower annual operating costs and can save you \$40 to \$300 per year depending on how you use the furnace fan.

### **GROUND SOURCE HEAT PUMP**

- The most efficient residential heating and cooling system available today.
- Provide energy savings of 20-50%, which results in recouping your investment in only a few years.
- Heating efficiencies 50-70% higher than other heating systems and cooling efficiencies 20-40% higher than available air conditioners.

Choosing higher efficiency heating and cooling equipment can have a big impact on your comfort while helping you save money.

### **Heating and Cooling**

### **Rebate Application**

Name

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HA"		V -	1 - 1	IFO	4 B T L	'4 7 =		$\mathbf{U}$

A -l -l								
Address								
City State								
Member Type ☐ Homeowner ☐								
By signing this application, I certify the appliances for address listed above which represents a valid cooper	r which I am claiming a r rative account.	rebate are qualifying products and a	are installed at the					
Signature	ignature Today's date							
<b>EQUIPMENT INFORMATION – AS</b>	HPS AND CACS							
To qualify for an ASHP or CAC rebate this equipm	nent must be installed b	oy a "quality installation" (QI) cer	tified contractor.					
The rebate form is provided by the contractor.								
<b>EQUIPMENT – CONTRACTOR INF</b>	ORMATION - TU	JNE UPS, ECMS AND (	GSHPS					
Cooling Equipment Tune Up								
Equipment Brand	Model Number	Serial Number						
Approx. age of unit yrs.								
For Central Air or ASHP Tune Ups:								
I certify that I have completed the following on t	his unit.							
☐ clean condenser coil & check belt, if needed ☐ test all controls & blow out drain lines								
check coolant level & lube motor, if needed check indoor furnace filter & educate homeowner on system operation								
☐ check coolant pressure visually & inspect entire system								
Replacement furnace with ECM Motor qualifying	g criteria – must be EN	NERGY STAR listed						
Model Number	•							
	AHRI Number							
Manufacturer								
Ground Source Heat Pump (GSHP) qualifying cr								
Manufacturer			Tons					
Contractor Name								

Account #

### **IMPORTANT:**

- Check with cooperative for qualifying rebate amounts.
- Product(s) must be installed within the cooperative's service territory.
- ASHP (Ducted and Ductless) and CAC installations require the QI form provided by a QI contractor. Incomplete forms will not be processed.
- Include a copy of the original dated sales receipt(s).
- Submit completed rebate form and a copy of the original sales receipt within 90 days of purchase date.
- To verify specific model efficiency ratings or ENERGY STAR certification status please visit the following resources
  - Ductless ASHPs https://www.ahridirectory.org/Search/SearchHome?ReturnUrl=%2f

Contractor signature Contractor company

- Replacement furnaces
  - o https://www.energystar.gov/productfinder/product/certified-furnaces/results
  - https://www.ahridirectory.org/Search/SearchHome?ReturnUrl=%2f
  - o GSHPs https://www.energystar.gov/productfinder/product/certified-geothermal-heat-pumps/results

Rebate program is subject to change or cancellation without notice. Call the cooperative to verify rebate program status

### Residential Quality Installation (QI) Program

### **Rebate Application**

MEMBER INFORMATION							
Name				Accour	nt #		
Address							
City							
Member Type	Renter	☐ La	ındlord	Builder	☐ Other		
<b>EQUIPMENT AND INSTALL</b>	TION INFO	RMATIO	NC				
Equipment SEER rating $\  \  \  \  \  \  \  \  \  \  \  \  \ $							
SPECIAL PROMOTIONAL RE	BATE INFO	RMATI	ON*				
*Promotional dates and promotional rebates va	ry by cooperative.	Please che	ck with cod	perative to confir	m dates as well as rebate amounts.		
Installation date Start	up/testing date _		* Follo	Outdoor temp* _ ow minimum as set	by manufacturer		
Manufacturer							
Condenser model number			Condense	er serial number			
Evaporator coil model number			Evaporato	or coil serial nun	nber		
Furnace model number (if new)	Furnace serial number						
EQUIPMENT VERIFICATION							
	h \						
A completed load calculation is on file (initia			a numhar		(initial hore)		
<ul> <li>The outdoor unit is matched to the appropriate indoor coil. AHRI reference number (initial here)</li> <li>Airflow is appropriate for the installation. (initial here)</li> </ul>							
Airflow depends on the manufacturer, and should no			ately 300 – 40	0 CFM per ton of cool	ling capacity.		
Refrigerant charge has been tested and found to be appropriate for the installation. (initial here)							
Total size of the system in tons. (initial here)							
CONTRACTOR INFORMATIO	N						
					l a sui al monale a un al anomo ditte the a		
NOTE: An invoice showing the purchase AHRI certificate must be submitted with		manuraci	urer, mod	iei numbers and	i serial numbers along with the		
Contractor Company Name							
Installation Technician				Phone			
HVACR Contractor ID #		OR	NATE Ce				
0 0'					D /		

I hereby certify that all information is accurate, including claims of efficiency, size and member information. By signing this application, I certify the installation met the Quality Installation program requirements and is installed at the address listed above which represents a valid cooperative account.

### **Heating and Cooling**

### 2024 Reference and Conversion Sheet

**Notice:** On January 1, 2023 the Department of Energy (DoE) began using a new testing procedure to rate the efficiency of air conditioners and air source heat pumps. These changes require new metrics (SEER2/EER2/HSPF2) that were derived from the DoE's new test procedure (M1) rather than the historical metrics (SEER/EER/HSPF) from the old test procedure (M).

The simple conversion table below will help you to identify air conditioning (AC) and air source heat pump (ASHP) equipment that qualifies for ENERGYWISE rebates in 2023 using the following steps.

**Step 1:** Determine what ratings system was used for the equipment model that you plan to purchase.

**Step 2:** Confirm that the efficiency ratings of the new equipment exceeds the requirements for the rebate measure you are applying for using the table below to convert between the old and new efficiency ratings when needed.

SEER	DUCTED SEER2	DUCTLESS SEER2
14.0	13.4	14.0
14.5	13.8	14.5
15.0	14.3	15.0
15.5	14.8	15.5
16.0	15.2	16.0
17.0	16.2	17.0
17.5	16.7	17.5
18.0	17.2	18.0
19.0	18.1	19.0
20.0	19.0	20.0

DUCTED EER2	DUCTLESS EER2
9.8	10.2
10.5	11.0
11.0	11.5
11.2	11.7
11.5	12.0
11.5	12.2
12.0	12.5
12.5	13.0
	9.8 10.5 11.0 11.2 11.5 11.5

HSPF	DUCTED SPLIT HSPF2	DUCTED PACKAGE HSPF2	DUCTLESS HSPF2
8.0	6.8	6.7	7.7
8.2	7.0	6.9	7.9
8.8	7.5	7.4	8.4
9.0	7.7	7.6	8.6
9.5	8.1	8.0	9.1
10.0	8.5	8.4	9.5
11.0	9.4	9.2	10.4

NOTE: The cross references for efficiency in the above tables should be noted as approximate.



### Residential Quality Installation (QI) Program

#### **QI Certified Contractors:**

A QI certified contractor has passed a QI assessment and/or is North American Technician Excellence (NATE) installation certified and have agreed to following industry best practices regarding the proper installation of equipment. This program validates four components of the installation: proper sizing, airflow, refrigerant charge and duct leakage.

Equipment purchased from and installed by non-QI certified contractors is not eligible for the rebate.

A list of QI certified contractors can be found at <a href="https://hvacree.net/gre/public\_search.cfm">https://hvacree.net/gre/public\_search.cfm</a>. Information on how to be a certified contractor or ordering forms can be found at <a href="https://greatriverenergy.com/smart-energy-use/installations/">https://greatriverenergy.com/smart-energy-use/installations/</a>.

#### **Rebate Details:**

Rebate amounts vary depending on the efficiency rating, the type of equipment and whether there is a special promotion going. Contact your electric cooperative for specific rebate details and availability. This rebate program is subject to change without notice.

### **Qualifying Members:**

Members applying for the rebate must be a member of and receive residential electric service from one of Great River Energy's participating cooperatives.

Members are responsible for meeting all of the program requirements, and for complying with any government or third-party requirements, including applicable codes, ordinances, rules or regulations regarding the installation of the equipment.

#### **Qualifying Equipment:**

Equipment must be a new, high efficient central air conditioner or air source heat pump with an efficiency of 14.5 SEER/13.8 SEER2 or higher. The system must be matched meaning the outdoor condenser unit and the indoor evaporator coil were designed by the manufacturer to work together. No commercial, mini-split (ductless), reconditioned, or ground source heat pumps qualify for the QI rebate program.

Only equipment listed on the Air-Conditioning, Heating & Refrigeration Institute (AHRI) website (www.ahridirectory. org-residential) will qualify. The AHRI list is dynamic and changes frequently, therefore AHRI certificates that are printed within two weeks of the installation date will be honored and must be submitted with the rebate form.

The use of the furnace's variable speed fan to increase the SEER/SEER2 rating above the nominal rating will be allowed for determining rebate eligibility provided the furnace was installed within one year prior to the central air equipment purchase.

#### **Application Details:**

Rebate form must be completed, signed by contractor and submitted to the electric cooperative along with the following:

- Equipment invoice, all information on the invoice must precisely match the information on the rebate application or the application will not be processed
- AHRI certificate for installed equipment

An application that is denied due to equipment ineligibility will not be accepted with changed model numbers.

If conditions do not allow for proper testing (see equipment testing section below), the member will be eligible for the rebates as long as testing is completed and application submitted by July 31 of the following year.

It is the member's responsibility to ensure that the electric cooperative receive the rebate application materials. The electric cooperative is not responsible for any lost, late, stolen, ineligible, illegible, misdirected, or "postage due" mail. All completed submissions become the property of the electric cooperative and will not be returned. Warning: Fraudulent submission of the form may result in prosecution for mail fraud pursuant to Title 18 US Code sections 1341 and 1342.

### **Testing the Equipment:**

The contractor must activate the system and perform the appropriate tests for airflow and refrigerant charge. These tests can only be conducted when the outdoor (ambient) temperature meets the manufacturer's specifications. Rebate applications may not be submitted until testing is complete.

### Liability:

By participating in this program, the member agrees that the electric cooperative has no liability concerning the quality, safety and/or installation of the equipment, estimated energy savings, workmanship of any third parties, or use of any equipment. The electric cooperative shall not be liable for the work performed by the members engineer, contractor or vendor. Participation by a contractor in this program does not constitute an endorsement by the electric cooperative of the contractor, or a guarantee of the quality of the work.

The electric cooperative is not responsible if the heating and cooling contractor, retailer, builder or any other party provides the member with inaccurate information about the amount or qualifications of the actual rebate. The electric cooperative will not rebate equipment that has been mislabeled or misrepresented.

