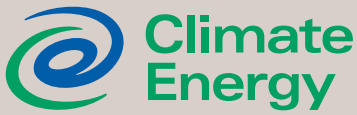


freewatt™

The Future of Home Energy Has Arrived



POWERED by
HONDA™



freewatt™

POWERED by **HONDA™**

Home Hybrid Technology

The Climate Energy **freewatt** System combines two technologies, an advanced home heating system and a natural gas engine-generator. This hybrid



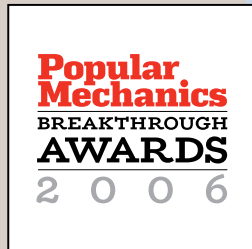
heat and power generation package yields benefits far surpassing what each system can provide alone.

By recycling the heat

from the engine-generator back into the heating system homeowners are able

to use the fuel twice, first to produce power and then to heat their homes. Following in the tracks of today's

hybrid automobiles, this hybrid for the home lowers fuel consumption, reduces electric utility bills, saves money and helps protect our environment.



Climate Energy freewatt System Benefits

Slash Your Electric Bill

While providing heat to the home, the **freewatt** system generates bonus electricity. Utilizing the concept of net metering, any electricity not immediately used in the home will spin the electric meter backwards for a credit towards your electric bill. Homeowners will significantly reduce their monthly electric bill during the heating season. Over the year many homeowners see their electric costs cut in half.

Reduce Your Carbon Footprint

The big environmental benefit of the **freewatt** System is that the fuel normally used to heat your home is used twice, first to make electricity and then to heat the home. Making electricity in this way drastically reduces the emissions of greenhouse gases. In fact, the **freewatt** can achieve most of the environmental benefits of renewable energy systems at a small fraction of the cost. The Climate Energy **freewatt** System is the practical and effective way to reduce your carbon footprint.

Energy Efficiency + Ultra-Low Emissions = **Green Power**

Improved Comfort

The system provides enhanced thermal comfort during the heating season by delivering continuous, low level heat to the dwelling. This approach to heating reduces temperature swings and the cycling normally experienced with typical home heating appliances. In the warm air version, constant operation also draws more air through the air filtration system and helps provide improved indoor air quality.

Quiet Operation

Mention the words “Power Generation” and most people would think “noise”. Welcome to power generation in the 21st Century. The Climate Energy **freewatt** System generates electricity and heat with less noise than a typical warm air furnace – only 47 dB(A) at 3 feet to be exact. This sound level is as quiet or quieter than a new refrigerator.

Internet Enhanced Security

The system controller is connected to the Internet for remote monitoring, control, troubleshooting, diagnostics and streamlined maintenance. The homeowners can check on their power savings and program their own thermostat by logging onto their **freewatt** web page. The end user, the installing contractor, the utility, and Climate Energy are all able to communicate with the **freewatt** system in accordance with their programmed security levels.

The freewatt System

What the freewatt Does

Working with the electric grid, Climate Energy's **freewatt** System generates electric power as a by-product of the normal operation of the home heating system. Whenever there is a heat demand the engine runs producing 1.2 kilowatts of high-quality electric power as well as base level heating for the home. When heating demand is high the engine's heat output is augmented by operating the **freewatt** System's furnace or boiler.

The Climate Energy **freewatt** System combines an advanced Honda MCHP engine-generator module with an Internet-enabled residential heating system. This combination provides unrivaled total energy efficiency in combined heat and power delivery to the home.

Warm Air freewatt System

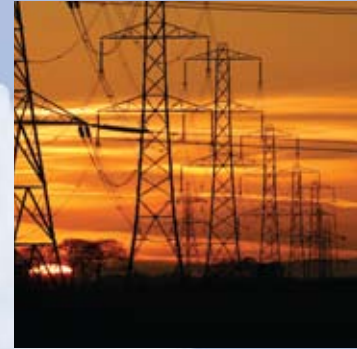
The Climate Energy Warm Air **freewatt** System employs a 93% AFUE gas condensing furnace with an ECM blower motor. This combination allows the **freewatt** to deliver much of the building's heat supply at significantly reduced fan power. The Warm Air HI Module includes our Internet enabled control system and the heat exchangers for transferring heat from the MCHP to the furnace.

Hydronic freewatt System

The Climate Energy Hydronic **freewatt** System uses our Hydronic HI Module and Control Module to integrate the Honda MCHP with our super-efficient residential boiler. This modulating cast aluminum boiler captures 95% of the available energy.

Honda MCHP Module

The Honda MCHP module incorporated into the **freewatt** System is a remarkably quiet and efficient generator of electricity and heat. This unit uses a natural gas engine and modern inverter based power conversion technology to supply high quality power to the home and grid. There are over 50,000 of these MCHP units operating in Japan.



Warm Air freewatt System



Boiler for Hydronic freewatt System

System Specifications



Component	Input (MBH)	Heating Capacity (MBH)	Net Power (kW)	Overall Efficiency (%)
Honda MCHP Module	18.5	12.0	1.2	85+
freewatt Furnace*	60, 80, 100	56, 74, 93	-	93
freewatt Boiler*	80 - 200 †	76 - 190 †	-	95

† Modulating Boiler.

* As an Energy Star partner, Climate Energy has determined that the furnace and boiler included as part of the **freewatt** System meets the Energy Star guidelines for energy efficiency.

- US Patent 7,040,544. Specifications are subject to change without notice.

Why freewatt Makes Sense

A typical power plant must burn 285 Watts of fuel to deliver 100 Watts of electricity to your home. An amazing 65% of the fuel energy is wasted, dissipated into the environment. Using **freewatt**, homeowners generate their own electricity right in their home and make good use of all that “waste” heat to satisfy their space or water heating requirements.

It's that simple. With **freewatt**, the fuel that you buy to heat your home is used twice – first to make electricity and then heat your home. Think of it as energy recycling. No wonder the **freewatt** saves so much on your electric bills.

Go Green with freewatt

The **freewatt** System cuts greenhouse gas emissions by 2/3 because it reduces the fuel burned to produce electricity by 2/3. That's why **freewatt** is the most practical way for homeowners to reduce their carbon footprint while maintaining a comfortable and secure home.

Fuel to Deliver 100 Watts of Electricity to Your Home

Fuel Used by Power Plant



Fuel Used by **freewatt**



freewatt Uses 60% Less Fuel than Power Plants

Emissions to Deliver 100 Watts of Electricity to Your Home

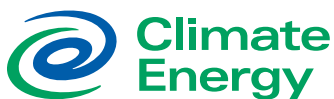
CO₂ Emissions from Power Plant



CO₂ Emissions from **freewatt**



Power Plants produce three times more CO₂ than **freewatt**



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