MASSACHUSETTS CLEAN ENERGY CENTER

Clean Heating and Cooling for Commercial & Industrial

Why Clean Heating and Cooling?

Clean heating and cooling technologies can provide a **cost-effective and energy-efficient** alternative to traditional heating, cooling, water-heating, and process-heat systems at commercial and industrial (C&I) buildings. MassCEC provides financial incentives to support development of projects at commercial buildings, farms, municipal buildings, and industrial facilities, with more substantial rebates for public-entities, non-profits, and affordable housing facilities.

Biomass Boilers

Biomass boilers are fully automated and use **wood pellets or wood chips** to produce heat, much in the same way traditional boilers and furnaces use oil, propane, or natural gas. Wood chip and pellet delivery is available in most parts of the Commonwealth.

Biomass heating systems reduce dependence on fossil fuels by using a renewable energy source. Organic materials can often produce the **same amount of heat for less than the cost of heating with electric heat, oil, or propane**. Incentives of up to $250,000 are available for qualifying biomass heating systems.

Ground-Source Heat Pumps

Ground-source heat pumps use the nearly-constant temperature underground to derive energy to heat and cool a building and are generally considered **the most efficient type of heat pump**.

While the up-front costs are higher than traditional systems, they offer very low operating costs and long system lifetimes. Ground-source heat pumps require a trench or well to operate. Incentives of up to $250,000 are available for qualifying projects.

Solar Hot Water

A solar hot water system **captures heat from sunlight** and circulates the thermal energy to a water tank. Solar hot water systems reduce the usage of traditional water heating fuels, such as oil, electricity, or natural gas, saving consumers money on their energy bills.

These systems can provide up to 80% of domestic hot water needs. Solar hot water systems can also offset process hot water needs or pre-heat boiler resupply water. Incentives of up to $100,000 are available for qualifying projects.

Air-Source Heat Pumps

Recent advancements in technology have made cold-climate air-source heat pumps an **efficient source of heating and cooling in cold climates like Massachusetts**. Models on the market today can operate efficiently even when it is below zero degrees Fahrenheit.

Commercial scale mini-splits and variable refrigerant flow (VRF) heat pumps can **reduce heating costs by over 60 percent** over conventional electric heat and typically offer more efficient air conditioning. Rebates of up to $250,000 are available for eligible technologies.

For More Information and Next Steps

*For more information on these technologies, please call MassCEC at **617-315-9357** or visit:*
www.masscec.com/business/clean-heating-and-cooling

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