



Renewable thermal technologies offer a clean, efficient, and increasingly cost-competitive option for reducing greenhouse gas emissions and conventional energy demand from heating and cooling.

## THE THERMAL ENERGY OPPORTUNITY

Energy used for heating and cooling comprises a significant portion of the U.S. and global energy footprint. The demand for heat is an important contributor to greenhouse gas (GHG) emissions and, in 2014, accounted for around 12.4 gigatonnes of carbon dioxide (CO2) globally, or 39 percent of annual energy-related emissions.

Despite its large energy and carbon footprint and its significant potential to reduce carbon emissions, the use of renewable thermal technologies for heating and cooling applications, including biomass, biogas, geothermal, landfill gas, and solar thermal, has received relatively little attention compared with renewable electricity.



## **50% OF GLOBAL**

final energy is comprised of energy used for heating and cooling.



## \$270 BILLION

amount heating and cooling cost in the United States annually.



## **39% OF GHG**

emissions from energyrelated sources can be attributed to heating and cooling. The Renewable Thermal Collaborative (RTC) serves as the leading coalition for manufacturers, state and local governments, and environmental organizations to increase options for access to sustainable, cost-competitive renewable thermal energy. The RTC is an initiative of the World Wildlife Fund, the Center for Climate and Energy Solutions, and David Gardiner and Associates. The founding members of the RTC include Cargill, General Motors, Kimberly Clark, Mars, P&G, and the City of Philadelphia.



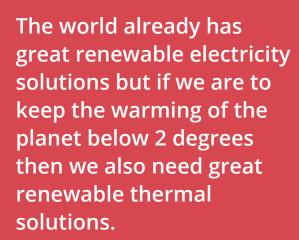


**Wimberly-Clark** 









Barry Parkin, Chief Sustainability and Health & Wellbeing Officer, Mars

The Renewable Thermal Collaborative is an example of industry and local governments working together to address sustainable, efficient and renewable solutions to a large slice of emissions from heating and cooling that remain largely unaddressed.

Lou Leonard, Senior Vice President, Climate Change and Energy, World Wildlife Fund



As a coalition, the RTC offers value to members by providing "power in numbers." The RTC is the only place to focus on renewable heat and where manufacturers, state and local governments, and environmental organizations come together collaboratively to understand the problems in the market, learn from each other, and overcome these barriers to renewable heating and cooling.

The RTC offers an implementation-focused, collaborative platform operating under the umbrella of the Renewable Energy Buyers Alliance (REBA) to advance the needs of manufacturers and state and local governments to tackle barriers to renewable thermal energy. REBA has become the central platform coordinating efforts to expand large buyers' access to renewable energy options.