

The Maryland Geothermal Association is a non-profit trade organization formed in 2013 to promote the development and installation of highly efficient geothermal heating and cooling systems for both residential and commercial applications. We are fully dedicated to the promotion of efficient geothermal ground source energy throughout Maryland for the purpose of producing maximum economic and environmental benefits, as well as contributing to important public policy goals utilizing clean renewable energy.

- The average geothermal unit saves 27,278 kWh per year
  - Total # of installations for 2019 3,133 units
  - Total # of installations to date 88,000 units
- Installation of 1 system *creates* 1 week's worth of work for a crew of 5
- One (1) 4-ton residential system = 1.2 acres of reforestation
- Two (2) 4-ton residential systems equates to the removal of 1 car from the road
  - The average system is paid off through energy efficiency savings within 3-5 years
- Maryland systems collectively generate 27,278 kWh per unit x 58,670 operational units = 1,600,426,719.66 kWh/year

While solar and wind technologies have been particularly well-positioned to take advantage of the RPS, the RPS as it was originally written did not address the largest use of energy in Maryland homes and businesses: thermal-based heating and cooling systems. According to the Energy Information Administration's Residential Energy Consumption Survey, heating and cooling of ambient air and water account for 65.4% of an average home's energy use. Further, more than 40% of Maryland households rely on electric resistance for their home heating needs. This is one of the most expensive, least efficient, and carbon intensive methods of heating a home or business. A more encompassing approach towards incorporating thermal energy sources into the RPS will reduce costs to ratepayers, spur in-State economic development, and reduce dangerous greenhouse gas emissions.

Thermal energy is used to meet a substantial share of Maryland's total energy requirements, and contributes significantly to energy costs and greenhouse gas emissions. Like it has before with the original RPS, the General Assembly has an opportunity to foster development of a new industry that will target many of the State's policy goals such as lower energy costs, reduced greenhouse gas emissions, increased energy independence, and economic development. By creating a new mechanism to support newly constructed thermal or combined heat and power systems that use renewable fuels, Maryland can target an underdeveloped industry, create new jobs, and move forward towards a lower carbon energy future.

# **Association Members**

## Milby Company

Frederick, Westminster & Elkridge MD 43 Employees

## Allied Well Drilling

Laurel, MD 120 Employees

#### Ground Loop Heating and Air

Darlington, MD 26 Employees

### Preferred Pump

Finksburg, MD 557 Employees

#### **Waterfurnace International**

Fair Hill, MD 268 Employees

## Owens Comfort Systems

Davidsonville 30 Employees