

February 22, 2024

HB0397 Thermal Energy Network Systems (WARMTH Act) **Alex Pavlak, FWA**

Amendment #1 – State a purpose, a program objective as:

- Gather data to quantify direct and indirect cost of Neighborhood Geothermal Heat Pump Networks. The direct cost is the turnkey installation. The indirect is any additional and incidental costs such stubborn neighbors or thermal insulation.
- Compare this concept with existing and proposed to zero carbon alternatives such as SMR nuclear district heating, micro reactors, biofuel combustion, air source heat pumps ...

In a rational world, it is premature to set the purpose as to decarbonize neighborhoods because we do not know enough about costs and alternatives. While the concept is theoretically feasible, it has not been demonstrated, not proven to be cost effective. The next step is to gather data. In engineering we call this stage full-scale development.

Amendment #2 – Set the scope of the program:

- Two modest systems: one for new construction, one for existing construction
- Contingent on most of the funding coming from federal sources.

Amendment #3 - Compete Maryland utilities for the two systems.

