

[21-GP1-103](#)- Requires electric heat pumps for all new commercial construction and retrofits and bans the use of natural gas for commercial space heating (HVACs).

[21-GP1-136](#) – Bans the use of natural gas for commercial water heating uses and requires the use of electric heat pump for water heating purposes.

Implementing these policies will be a *de facto* ban on natural gas in the commercial building sector for new and major retrofit buildings. The result will be to add considerable cost to the owners of commercial buildings and to their tenants. Depending on the type of business and building, the costs will vary but all will increase building operation costs and/or rent for tenants in those buildings and accomplish very little for the state. According to the state's emissions inventory, commercial natural gas only accounts for 4% of the state's inventory. Costs for many businesses will strain on our state's electrical grid at a time when power reliability is a major concern.

Below is some additional information on these proposals:

#### ***Space Heat Proposal***

- It eliminates the choice of highly efficient and cost-effective gas options and prescriptively mandates only one energy choice.
- It will add cost -- more expensive than other options.
- Allows exceptions to use electric resistance heating or back-up during cold weather and during peak demand when the marginal electric generation resources will most certainly be fossil fuel, effectively increasing rather than decreasing emissions.
- Heat pumps are NOT "emissions-free." This will be especially true during cold weather when back-up electric resistance heating is required.
- It would preclude the future use of innovative gas technologies that could provide energy savings and emissions reductions equal to or better than electric technologies. NEEA is collaborating with manufacturers and gas utilities across North America to bring higher-efficiency gas heat pumps to market.

#### ***Water Heat Proposal***

- It adds both installation and operating cost — life cycle cost increase of \$2.43/square foot.
- It requires considerably more space — the equipment is much larger.
- These higher capital and operating costs will disproportionately affect small business and low-income housing bringing into questions issues of social equity.
- It eliminates the choice of highly efficient and cost-effective gas water heating options and prescriptively mandates only one choice.
- Allows exceptions to use electric resistance water heating for back-up in certain circumstances, some during cold weather when the marginal electric generation resources will most certainly be fossil fuel, effectively increasing rather than decreasing emissions.
- There are too few manufacturers of commercial grade equipment – perhaps only one (Mitsubishi).
- Developers, architects, and engineers must have a variety of water heating options available—including high-efficiency gas water heating.
- Because it does not consider whether heat pump water heaters would be able to effectively handle higher hot water loads from certain market segments. This includes commercial laundry facilities, large multifamily, hotels and restaurants that will require additional use of supplemental electric resistance water heating. This also raises equity issues.