



# Senate Committee on Finance

**H. 616 District Energy  
March 23, 2018**

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## What is District Energy?

- ❑ District energy is an “underground infrastructure asset where thermal energy is provided to multiple buildings from a central plant, or plants.” – International District Energy Association
- ❑ Benefits can include improved efficiency, reduced emissions, and fuel flexibility
- ❑ Very common on college campuses and in cities, examples in Vermont include Montpelier and UVM



## District Energy in Burlington

- ❑ The idea of using energy from the McNeil biomass plant to provide heating and/or process energy to customers has been studied multiple times over past several decades
- ❑ Active citizen-led effort – BURDES Committee - to support this in Burlington
- ❑ In 2016 BED issued RFP, and selected Corix Utilities to partner on bringing district energy to Burlington



## Current Status

- ❑ **Initial feasibility study** - showed district energy is technically feasible, and could be cost-competitive with business as usual scenario
- ❑ **Initial plan** - uses three energy sources: 1) “waste” heat from McNeil; 2) steam heat from McNeil turbine; 3) natural gas for peaking and backup
- ❑ Potential customers are currently reviewing individual economic assessments from Corix



# Potential Route

**CORIX**

**Scenario S1A - McNeil**



McNeil Proposed Central Energy Center Location

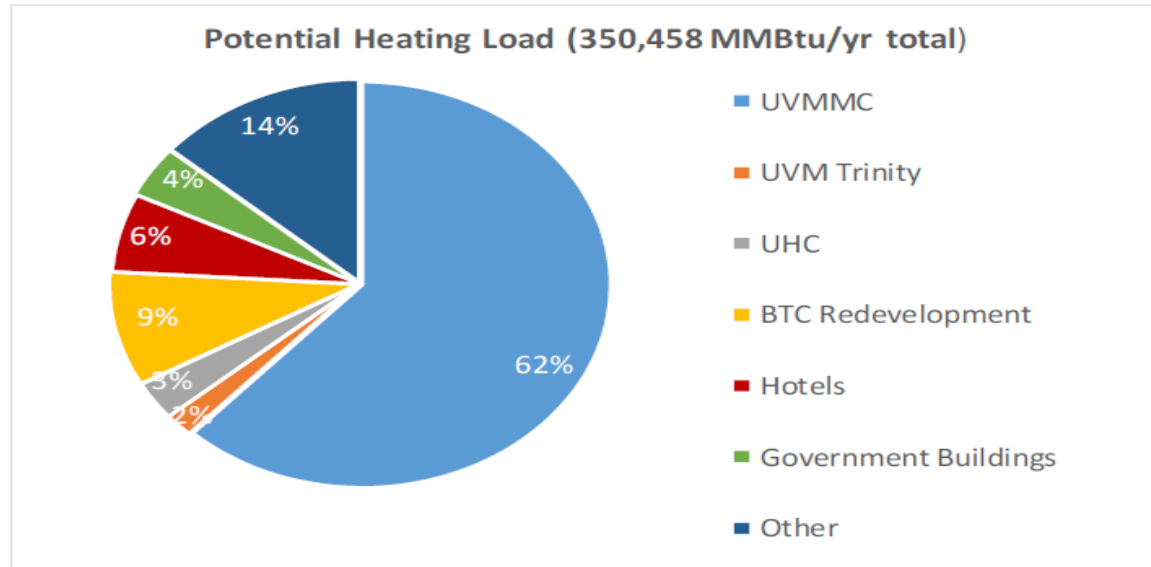




# Initial Study Results



## Potential Heating Load





## Potential Benefits

- ❑ **Emissions** – District Energy system offers approximately 13-15% greenhouse gas emissions reduction in heating sector in Burlington
- ❑ **Cost Effective** – The District Energy System offers the potential for fuel diversity and stable/predictable costs for customers
- ❑ **Flexible Platform** – The infrastructure can accommodate growth and new fuel sources, including from wastewater treatment facility
- ❑ **Support Forest Economy** – McNeil purchased from 56 different suppliers in FY 16, vast majority relatively small Vermont-based



## TEPF and H.616

- ❑ **TEPF** is Vermont's thermal efficiency fund, and BED as an Energy Efficiency Utility administers on behalf of our customers
- ❑ **3 Year TEPF Budget** - PUC order dated 1/11/2018 reserved BED approx. \$1.8 million, of which approx. \$1.2 million for district energy
- ❑ **30 V.S.A. § 209** - BED is seeking a statutory change via H. 616 to clarify authority to use TEPF for district energy, since district energy would serve natural gas customers and TEPF traditionally has focused on unregulated fuel customers