



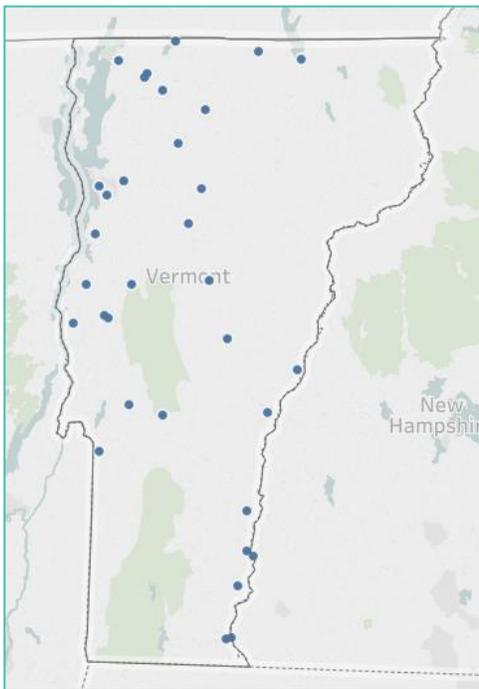
## Combined Heat and Power (CHP) Snapshots – Vermont

### New England CHP Technical Assistance Partnership (TAP) Quick Facts

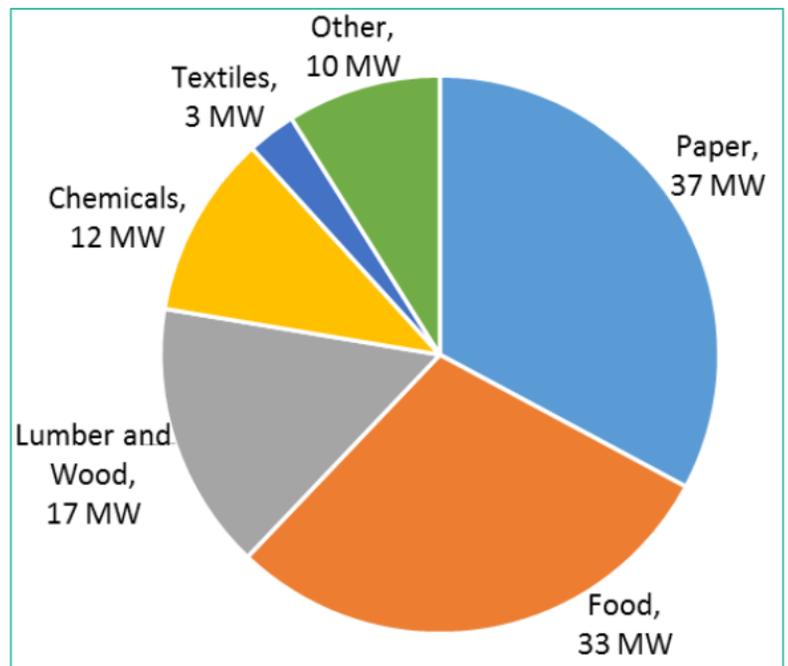
- The New England CHP TAP works with regional partners to promote and assist in transforming the market for CHP, waste heat to power, and district energy technologies throughout the northeastern region of the U.S.
- The New England CHP TAP serves the states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and **Vermont**.

State	Number of Current Sites	Total CHP Capacity (MW) Deployment	Number of Potential Sites	Total CHP Technical Potential (MW)	CHP TAP Activities (2014-2017)		
					Technical Assistance	End-User Education	Policymaker Education
Connecticut	188	740	3,443	1,323	14	7	4
Maine	38	933	1,385	494	1	3	4
Massachusetts	224	1701	6,659	3,434	120	15	3
New Hampshire	17	47	1,363	447	8	2	1
Rhode Island	28	133	1,114	616	2	2	2
<b>Vermont</b>	<b>34</b>	<b>20</b>	<b>657</b>	<b>228</b>	<b>7</b>	<b>2</b>	<b>1</b>
Total	529	3,574	14,621	6,542	152	31	15

### Vermont CHP Installations



### CHP Technical Potential by Industrial Sector





## Vermont CHP Project Snapshots

- ◆ **Essex Junction Wastewater Treatment Facility (Essex Junction, VT)** – In 2003, after a decade of consideration, the Essex Junction wastewater treatment facility installed a CHP system to take advantage of waste methane gas produced by an onsite anaerobic digester. After installing a 60 kW microturbine, the facility saw a 36% decline in energy costs compared to purchasing electricity from the utility.
- ◆ **Green Mountain Coffee Roasters (Waterbury, VT)** – Needing a continuous, reliable power source for its energy intensive roasting process, Green Mountain installed a 280 kW CHP system in 2003 to replace its previous system from 1991. Utilizing CHP allows the facility separate from the grid if an interruption is anticipated, lowering the risk of fire, which can be caused by an outage occurring during the high temperature process.

## Testimonials from CHP TAP Beneficiaries in New England

“We implemented all of [the New England CHP TAP] recommendations and all of them proved very helpful. The biomass CHP proved especially valuable during the period when #6 fuel oil rose above \$100 per barrel. This proved a death knell for many paper mills during that period but we rode through comfortably thanks to the steady and low cost of biomass. Thanks again for [CHP TAP’s] help.”

*George Jones, Owner  
Seaman Paper  
Otter River, MA*

“Dr. Dragoljub Kosanovic of the CHP TAP performed a feasibility study for a CHP plant at Hanscom Air Force Base in 2014. In addition, he attended a one-day in-house conference at Hanscom to help pitch to project to Hanscom tenants, engineers, and maintenance staff. As a result of Dr. Kosanovic's efforts, the groundbreaking for a 5 MW CHP plant at Hanscom is taking place in June 2017, expected to be completed by January 2018. Dr. Kosanovic was very helpful in overcoming preliminary objections to the CHP plant.”

*Kate DeWolf, Architect in NH & TX, LEED AP, CEM Resource Efficiency Manager  
US Army Garrison, Fort Devens, Hanscom Air Force Base  
Devens, MA*

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<sup>1</sup> U.S. DOE, December 2016, “Combined Heat and Power Installation Database” (<https://doe.icfwebservices.com/chpdb/>).

<sup>2</sup> U.S. DOE, March 2016, “Combined Heat and Power (CHP) Technical Potential in the United States” (<https://energy.gov/eere/amo/downloads/new-release-us-doe-analysis-combined-heat-and-power-chp-technical-potential>).