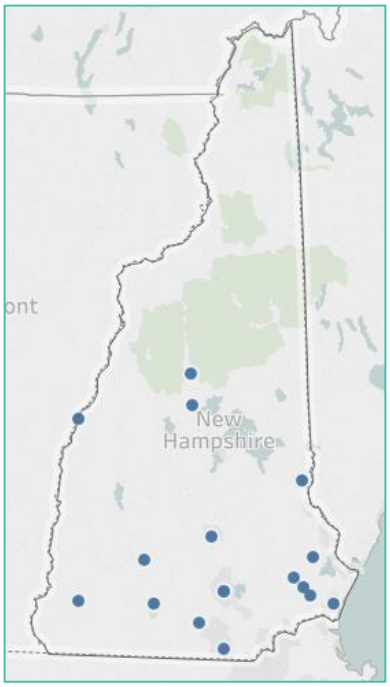
Combined Heat and Power (CHP) Snapshots – New Hampshire

New England CHP Technical Assistance Partnership (TAP) Quick Facts

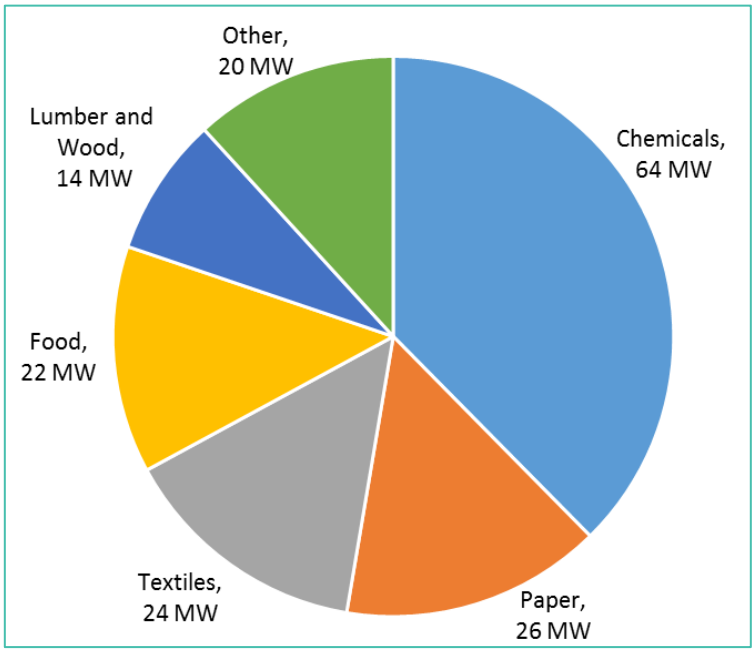
- The New England CHP TAP works with regional partners to promote and assist in transforming the market for CHP, waste heat to power, and district energy technologies throughout the northeastern region of the U.S.
- The New England CHP TAP serves the states of Connecticut, Maine, Massachusetts, **New 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
Vermont	34	20	657	228	7	2	1
Total	529	3,574	14,621	6,542	152	31	15

New Hampshire CHP Installations



CHP Technical Potential by Industrial Sector



New Hampshire CHP Project Snapshots

- **University of New Hampshire (Durham, NH)** – In 2006, the University of New Hampshire installed a 12.5 MW CHP system on campus. Utilizing biogas from a nearby landfill, carried over 12 miles by the EcoLine pipeline, the CHP installation provides electricity and space heating to campus buildings. The CHP system stabilized energy costs for the campus and helped the school system achieve its sustainability goals.
- **Sullivan County District Energy (Unity, NH) –** After years of contemplation and studies, Sullivan County, NH, installed a 40 kW CHP system in 2013 to provide electricity and space heating to the local nursing home and prison complex. The boiler/steam turbine system uses locally sourced, renewable wood chips to provide power to the two facilities. The benefits quickly materialized, as the system replaced 95% of fuel oil purchases and 10% of electricity purchases.

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. Thank you again for [the 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 Hansom 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
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[1] U.S. DOE, December 2016, "Combined Heat and Power Installation Database" (https://doe.icfwebservices.com/chpdb/).
[2] 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).