

Combined Heat and Power (CHP) Snapshots - Illinois

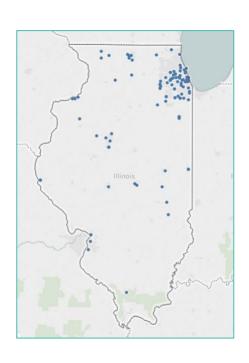
Midwest CHP Technical Assistance Partnership (TAP) Quick Facts

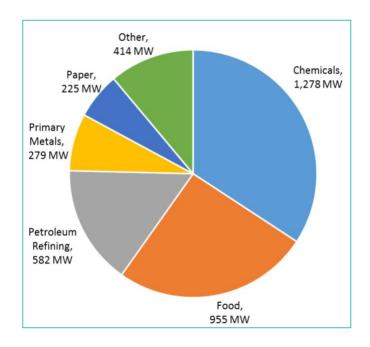
- The Midwest CHP TAP works with regional partners to promote and assist in transforming the market for CHP, waste heat to power, and district energy technologies throughout the midwestern region of the U.S.
- The Midwest CHP TAP serves the states of Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.

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
Illinois	125	1,232	13,717	7,464	73	55	23
Indiana	37	2,457	7,273	4,610	13	14	7
Michigan	87	3,382	10,370	4,987	19	16	9
Minnesota	56	1,003	6,326	4,310	30	18	17
Ohio	65	532	13,194	7,288	31	20	13
Wisconsin	98	1,619	7,008	3,474	9	7	2
Total	468	10,225	57,888	32,133	175	130	71

Illinois CHP Installations

CHP Technical Potential by Industrial Sector







Illinois CHP Project Snapshots

- University of Illinois at Chicago West Campus (Chicago, IL) The 21 MW, natural gasfueled combustion turbine CHP system at the University of Illinois at Chicago provides power, building heat, cooling, and hot water to various buildings on campus. The increased efficiency of the CHP system has allowed the UIC West Campus to the save between 5 and \$7 million per year on energy costs.
- Danville Sanitary District (DSD) (Danville, IL) The Danville Sanitary District installed a 150 kW CHP system in 2013. By using treated anaerobic digester gas produced onsite, the CHP system can provide roughly 20% of the facility's electric needs and 100% of the heat for the wastewater treatment plant. By reusing the waste sewage from its 33,000 customers, the CHP system saves the facility roughly \$230,000 per year, while also increasing overall facility reliability.

Testimonials from CHP TAP Beneficiaries in Illinois

"Please know that [Midwest CHP TAP] services have benefited our organization. In 2005 and 2008, Hunter Haven Farms installed two 130 kW biogas fueled reciprocating engines with heat recovery, with a total generating capacity of 260 kW. The energy savings from these two CHP units enabled us to reinvest back into our business, expand our operations from 600 cows to 1,100 cows, produce more milk, build another building for our livestock, and grow our business."

Doug Block Hunter Haven Farms Pearl City, IL

"[The Midwest CHP TAP] helped the Department develop a pilot CHP incentive program for public entities, and to-date three CHP projects have been implemented as a result of that program. These projects are in three different subsectors of the public market (i.e., K-12 school, wastewater treatment plant, and research lab/federal facility) and are of varying sizes, so they will serve as diverse models for future State projects."

Molly Lunn, Deputy Director of Energy and Recycling Office Illinois Department of Commerce and Economic Opportunity Springfield, IL

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U.S. DOE, December 2016, "Combined Heat and Power Installation Database" (https://doe.icfwebservices.com/chpdb/).
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).