A fact sheet from THE PEW CHARITABLE TRUSTS | June 2015

Industrial Energy Efficiency in **Nevada**

Overview

Combined heat and power, or CHP, technologies provide reliable electricity, mechanical power, or thermal energy by capturing heat that is wasted during electricity generation. District energy takes heat from a CHP system to heat or cool entire complexes such as a university campus, office park, or downtown area. More recently, a process called waste heat to power, or WHP, has been used to capture heat released during industrial processes that convert raw materials into products. These onsite technologies allow businesses to achieve energy efficiencies of up to 80 percent. Technologies like CHP and WHP represent tremendous potential to reduce energy consumption in Nevada's industrial sector, saving manufacturers money and creating energy businesses and jobs.

State and regional statistics

Manufacturing makes up only 3.5 percent of the nonfarm workforce in Nevada, and the manufacturing sector makes up 89.8 percent of the state's exports.

Source: National Association of Manufacturers

In 2012, Nevada ranked 40th in the nation in industrial energy use with 161 trillion British thermal units, and the industrial sector consumed 25.3 percent of the total energy statewide.

Sources: U.S. Energy Information Administration State Energy Data System Rankings and U.S. Energy Information Administration Nevada Profile

Nevada has 13 CHP sites, with a total generating capacity of 365.6 megawatts.

Source: U.S. Department of Energy

Nevada ranked 34th in the nation in new CHP sites between 2005 and 2010. The state added only two CHP sites during those years with a combined generating capacity of 4.6 megawatts.

Source: American Council for an Energy-Efficient Economy

State policies on industrial energy efficiency

Nevada has one of the country's lowest success rates for meeting energy savings targets.

In 1997, Nevada established a renewable portfolio standard, or RPS, that requires a certain percentage of energy to be generated from renewable sources. In 2005, it was raised to 20 percent by 2015 and revised to include efficiency from utilities. In 2009, the RPS was increased again to 25 percent by 2025.

Under Nevada's current RPS, energy efficiency measures qualify if they are subsidized by the electric utility, reduce demand (as opposed to shifting peak demand to off-peak hours), and are implemented or sited at a retail customer's location. Energy efficiency can constitute as much as 25 percent per year, or 6.25 percent of the total savings by 2025.

Source: American Council for an Energy-Efficient Economy

Cumulative Electricity Savings of State Energy Efficiency Resource Standard Policies

State	Cumulative 2020 target	State	Cumulative 2020 target
Vermont*	27.0%	**Wisconsin***	13.5%
Maryland*	26.7%	**Maine***	13.4%
New York*	26.5%	**Connecticut***	13.1%
Massachusetts	26.1%	**California***	12.9%
Rhode Island*	25.3%	**Ohio**	12.1%
Arizona	22.0%	**Michigan**	10.6%
Illinois	18.0%	**Oregon***	10.4%
Hawaii*	18.0%	**Pennsylvania***	10.0%
Washington	17.2%	**New Mexico**	8.1%
Minnesota	16.5%	**Arkansas***	6.8%
Iowa*	16.1%	**Texas**	4.6%
Delaware	15.0%	**Florida**	4.1%
Colorado	14.9%	**Nevada**	3.8%
Indiana	13.8%	**North Carolina**	2.9%

*Savings beginning in 2009 extrapolated out to 2020 based on final year of annual savings required.

Source: American Council for an Energy-Efficiency Economy

Business benefits from industrial energy efficiency

MGM Resorts International built the Las Vegas Strip's first CHP facility on-site at CityCenter. The 8.2-megawatt project reduced greenhouse gas emissions by about one-third. The energy savings are equivalent to taking 3,000 U.S. homes off the grid. The reduced energy use has produced great operational cost savings for the company.

Source: MGM Resorts International

CHP improves energy security

Reducing strain on the electrical grid with energy-efficient technologies increases power reliability during electrical outages.

In 2014, Nevada experienced 58 power outages that affected 164,580 residents. In June of 2013, strong winds caused a power outage in Carson City that affected 3,200 people.

Source: Blackout Tracker

Examples of Newly Installed CHP and WHP Facilities in Nevada

City	Facility	Application	Year operational	Capacity (kW)	Fuel type
Las Vegas	DCP Energy	Solid waste facilities	2012	11,000	Biomass
Goodsprings	NV Energies	Utilities	2010	5,500	Waste heat recovery
Las Vegas	MGM Grand/Mirage	Hotels	2010	9,200	Combustion turbine
Las Vegas	CityCenter Land LLC	Hotels	2010	9,000	Combustion turbine

Source: U.S. Department of Energy

For further information, please visit:

pewtrusts.org/industrialefficiency

Contact: Jessica Lubetsky, officer, clean energy
Email: jlubetsky@pewtrusts.org **Phone:** 202-540-6356
Project website: pewtrusts.org/industrialefficiency