


DOE Hydrogen Program Record		
Record: 23003	Date: June 2, 2023	
Title: Electrolyzer Installations in the United States		
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Item

Planned and existing polymer electrolyte membrane (PEM), solid oxide electrolyzer cell (SOEC), and alkaline electrolyzer installations in the United States (including firm announcements and those under construction) totaled approximately 3.7 GW as of May 2023. Most of this capacity is for PEM electrolyzers with a nominal amount (<10%) for SOEC and alkaline systems. This Record includes electrolyzer capacities of 120 kW or greater per site and does not include smaller units such as those used for laboratory research.

Table 1 lists locations and capacities of current and planned PEM, SOEC and alkaline electrolyzer installations in the United States. This information is based on input from electrolyzer manufacturers and publicly available information but listed without attribution to any individual electrolyzer company or to specific end users. While several additional plans may have been announced, this record focuses on plans that have been funded (e.g., DOE projects or other financing already in place).

Current installed capacity is approximately 67 MW, while planned, firm capacity (with construction under way) is approximately 3.6 GW. Capacity for electrolyzers installed ranges from 120 kW to 40 MW, while capacity for planned installations ranges from 120 kW to 1.25 GW. As installations and announcements are continuously being updated, this Record only documents information¹ available at the time of this posting (May 2023).

Table 1. Current or Planned Installations of Electrolyzers (PEM, SOEC, Alkaline) in the U.S. as of May 2023

Location	Power (kW)	Status
Corpus Christi, TX	1,250,000	Planned
LaSalle, IL	320,000	Planned
Amarillo, TX	240,000	Planned
Laramie County, WY	240,000	Planned
Lubbock County, TX	240,000	Planned
Pueblo County, CO	240,000	Planned
Delta, UT	220,000	Planned

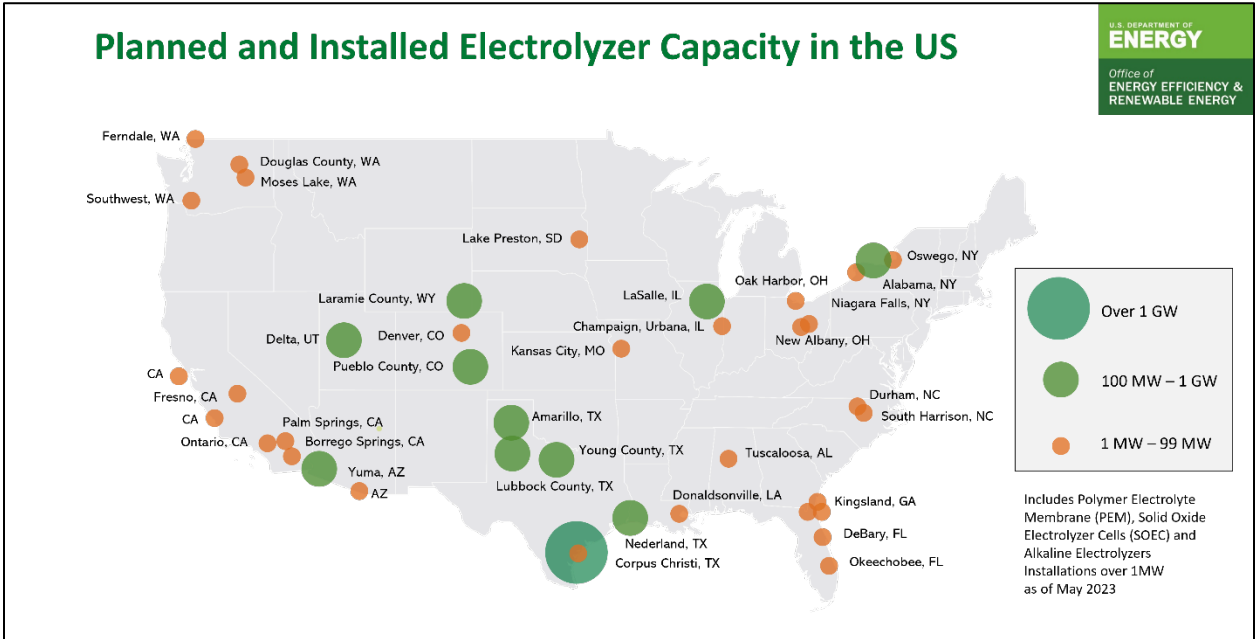
¹ In some cases the specific city within a state was not reported or publicly available

Alabama, NY	200,000	Planned/Under Construction
Nederland, TX	120,000	Planned/Under Construction
Young County, TX	120,000	Planned/Under Construction
Yuma, AZ	120,000	Planned
Fresno, CA	80,000	Planned
AZ	40,000	Planned
Kingsland, GA	40,000	Installed
Kingsland, GA	40,000	Planned/Under Construction
Niagara Falls, NY	35,000	Planned
Okeechobee, FL	25,000	Planned/Under Construction
Donaldsonville, LA	20,000	Planned/Under Construction
Lake Preston, SD	20,000	Planned
New Albany, OH	10,000	Planned/Under Construction
New Albany, OH	10,000	Planned/Under Construction
Corpus Christi, TX	5,000	Planned/Under Construction
Douglas County, WA	5,000	Planned/Under Construction
Ferndale, WA	5,000	Planned/Under Construction
Kingsland, GA	5,000	Installed/Operational
Ontario, CA	5,000	Planned/Under Construction
Mountain View, CA	4,000	Installed/Operational
DeBary, FL	2,000	Planned/Under Construction
Durham, NC	2,000	Planned/Under Construction
Oak Harbor, OH	2,000	Planned/Under Construction
Palm Springs, CA	2,000	Installed/Operational
Southwest WA	1,500	Installed/Operational
Arvada, CO	1,250	Installed/Commissioning
Oswego, NY	1,250	Installed/Operational
CA	1,250	Planned/Under Construction
Borrego Springs, CA	1,000	Planned/Under Construction
Champaign, Urbana, IL	1,000	Installed/Operational
Denver, CO	1,000	Installed/Operational
Kansas City, MO	1,000	Installed/Operational
Moses Lake, WA	1,000	Planned/Under Construction
South Harrison, NC	1,000	Planned/Under Construction
Tuscaloosa, AL	1,000	Installed/Operational
CA	900	Planned/Under Construction
Orlando, FL	500	Planned/Under Construction
Prairie Island, MN	500	Planned/Under Construction
Sonoma, CA	500	Installed
CA	250	Installed/Commissioning
Idaho Falls, ID	250	Installed/Operational

Red Wing, MN	250	Planned/Under Construction
Austin, TX	180	Installed
Austin, TX	180	Installed
Boston, MA	180	Planned/Under Construction
CA	180	Installed
CA	180	Installed
CA	180	Installed
CA	180	Installed
CA	180	Installed
CA	180	Installed
Columbus, IN	180	Installed
Columbus, OH	180	Installed
Costa Mesa, CA	180	Installed
Emeryville, CA	180	Installed
GA	180	Installed
GA	180	Planned/Under Construction
HI	180	Installed
HI	180	Installed
HI	180	Installed
Leesport, PA	180	Installed
Lexington, MA	180	Installed
MA	180	Planned/Under Construction
Mahwah, NJ	180	Installed
NJ	180	Installed
Oakland, CA	180	Installed
San Francisco, CA	180	Installed
San Francisco, CA	180	Installed
San Francisco, CA	180	Installed
San Jose, CA	180	Installed
San Jose, CA	180	Installed
Santa Clara, CA	180	Installed
SC	180	Planned/Under Construction
Tempe, AZ	180	Installed
WA	180	Planned/Under Construction
Braintree, MA	120	Installed
CA	120	Planned/Under Construction
CA	120	Installed
CA	120	Installed
Canandaigua, NY	120	Installed
Hertford Cty, NC	120	Installed
KY	120	Installed

KY	120	Installed
Lincoln, RI	120	Installed
MA	120	Installed
NC	120	Installed
NY	120	Installed
NY	120	Installed
NY	120	Planned/Under Construction
OH	120	Installed
PA	120	Installed
San Carlos, CA	120	Installed
San Carlos, CA	120	Installed
Sugar Land, TX	120	Installed
UT	120	Planned/Under Construction
Total	3,690,740	

Figure 1. Current or Planned Installations of Electrolyzers (PEM, SOEC, Alkaline) over 1 MW in the U.S. as of May 2023²



² Bubbles not drawn to scale and are for illustrative purposes only