DOE Hydrogen Program Record

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Title: PEM Electrolyzer Capacity Installations in the United

States

Originator: Vanessa Arjona

Peer Reviewed by: Kathy Ayers (NEL), Michel Archambault (Cummins),

Corky Mittelsteadt (Plug Power)

Approved by: Ned Stetson (DOE), Date: June 6, 2022

Sunita Satyapal (DOE)



Item

Proton exchange membrane (PEM) electrolyzer installations in the United States (including firm announcements and those under construction) totaled approximately 621 MW as of May 2022. This capacity is only for those units of 120 kW or greater per site and do not include smaller units such as those used for laboratory research.

Table 1 lists locations and capacities of current and planned PEM 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 18.5 MW while planned, firm capacity (with construction under way) is approximately 602.6 MW. Capacity for electrolyzers installed ranges from 120 kW to 5 MW, while capacity for planned installations ranges from 120 kW to 120 MW. As installations and announcements are continuously being updated, this Record only documents public information available at the time of this posting (May 2022).

Table 1. Current or Planned Installations of PEM Electrolyzers in the U.S. as of May 2022

Location	Power (kW)	Status
Alabama, NY	120,000	Planned/Under Construction
Alabama, NY	80,000	Planned/Under Construction
Arvada, CO	1,250	Installed
Austin, TX	180	Installed
Austin, TX	180	Installed
Boston, MA	120	Installed
Braintree, MA	120	Installed
CA	120	Installed
CA	180	Planned/Under Construction

CA	120	Planned/Under Construction
CA	180	Planned/Under Construction
CA	900	Planned/Under Construction
CA	180	Planned/Under Construction
CA	1,000	Planned/Under Construction
Canandaigua, NY	120	Installed
Champaign, Urbana, IL	1,000	Installed
Columbus, IN	180	Installed
Columbus, OH	180	Installed
Costa Mesa, CA	180	Installed
Denver, CO	1,000	Installed
Douglas County, WA	5,000	Planned/Under Construction
Emeryville, CA	180	Installed
Escondido, CA	1,250	Planned/Under Construction
Fresno, CA	120,000	Planned/Under Construction
GA	180	Installed; Awaiting Commission
Hertford Cty, NC	120	Installed
HI	180	Installed
HI	180	Installed
HI	180	Installed
Kansas City, MO	1,000	Installed
Kingsland GA	120,000	Planned/Under Construction
Kingsland, GA	5,000	Installed
KY	120	Installed
KY	120	Installed
Leesport, PA	180	Installed
Lexington, MA	180	Installed
Lincoln, RI	120	Installed
MA	120	Installed
Mahwah, NJ	180	Installed
NC	120	Planned/Under Construction
NJ	180	Installed
NJ	1,000	Planned/Under Construction
NY	120	Planned/Under Construction
NY	120	Planned/Under Construction
Oak Harbor, OH	2,000	Planned/Under Construction
Oakland, CA	180	Installed
OH	120	Installed
Okeechobee, FL	25,000	Planned/Under Construction
Orlando, FL	500	Planned/Under Construction
Oswego, NY	1,250	Planned/Under Construction

PA	120	Installed
Palm Springs, CA	2,000	Installed
Prairie Island, MN	500	Planned/Under Construction
San Carlos, CA	120	Installed
San Carlos, CA	120	Installed
San Francisco, CA	180	Installed; Awaiting Commission
San Francisco, CA	180	Planned/Under Construction
San Francisco, CA	180	Planned/Under Construction
San Francisco, CA	1,250	Planned/Under Construction
San Jose, CA	180	Installed
San Jose, CA	180	Installed
Santa Clara, CA	180	Installed
Sonoma, CA	500	Installed
Southwest WA	1,500	Installed
Sugar Land, TX	120	Installed
Tempe, AZ	180	Installed
Tuscaloosa, AL	1,000	Planned/Under Construction
TX (East Central)	120,000	Planned/Under Construction
Total	621,100	

Figure 1. Map of Current or Planned Installations of PEM Electrolyzers in the U.S. as of May 2022

