DOE Hydrogen Progra	RIMENT OF EA	
Record: 24003	Date: May 1, 2024	
Title: Hydrogen Liquefaction Capacit		
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Item

Existing and planned hydrogen liquefaction capacity in the United States total approximately 794 mtpd (metric tons per day) as of May 2024. Current total operating capacity is estimated as 304 mtpd from 14 plants with capacities of 5–32 mtpd. Additional capacity from 10–90 mtpd plants could total 490 mtpd, with 4 plants under construction and 9 plants in varying stages of planning and development. DOE continues to monitor projects that are in early development. Plant locations¹ are illustrated in Figure 1. As installations and announcements are continuously being updated, this Record only documents information available at the time of this posting (May 2024).

Figure 1. Existing and Planned Hydrogen Liquefaction Capacity in the U.S. as of May 2024²



¹ In some cases, the specific city within a state was not identified or publicly available.

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

Table 1 lists the locations and capacities of current and anticipated hydrogen liquefaction plants. This is based on publicly available information and industry input, but is listed without attribution to any individual company or end user. Some locations include multiple liquefaction plants. This list does not include small-scale (<1 mtpd) liquefaction capabilities.

Table 1. Operational and Planned Hydrogen Liquefaction Plants in the U.S. as of May 2024

Location	Capacity (Short tpd)	Capacity (Metric tpd)	Status
New Orleans, LA	35	31.8	Operating
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Las Vegas, NV	33.1	30	Operating
McIntosh, AL	30	27.2	Operating
Ontario, CA	30	27.2	Operating
East Chicago, IN	30	27.2	Operating
La Porte, TX	30	27.2	Operating
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Niagara Falls, NY	20	18.2	Operating
Niagara Falls, NY	20	18.2	Operating
Woodbine, GA	16.5	15	Operating
Calvert City, KY	10	9.1	Operating
Charleston, TN	10	9.1	Operating
Sacramento, CA	5.5	5	Operating
Total Operating	335.1	304.2	
Alabama, NY	82.7	75	Under Construction
Young County, TX	49.6	45	Under Construction
St. Gabriel, LA	16.5	15	Under Construction
Casa Grande, AZ	11	10	Under Construction
Total Under Construction	159.8	145.0	
LaSalle, IL	99.2	90	Planned
Lancaster, CA	60.6	55	Planned
Massena, NY	38.6	35	Planned
Eastern Iowa	33.1	30	Planned
Buckeye, AZ	33.1	30	Planned
Northern Oregon	33.1	30	Planned
Houston, TX	33.1	30	Planned
Northern West Virginia	33.1	30	Planned
Woodbine, GA	16.5	15	Planned
Total Planned	380.4	345.0	
Grand Total	875.3	794.2	