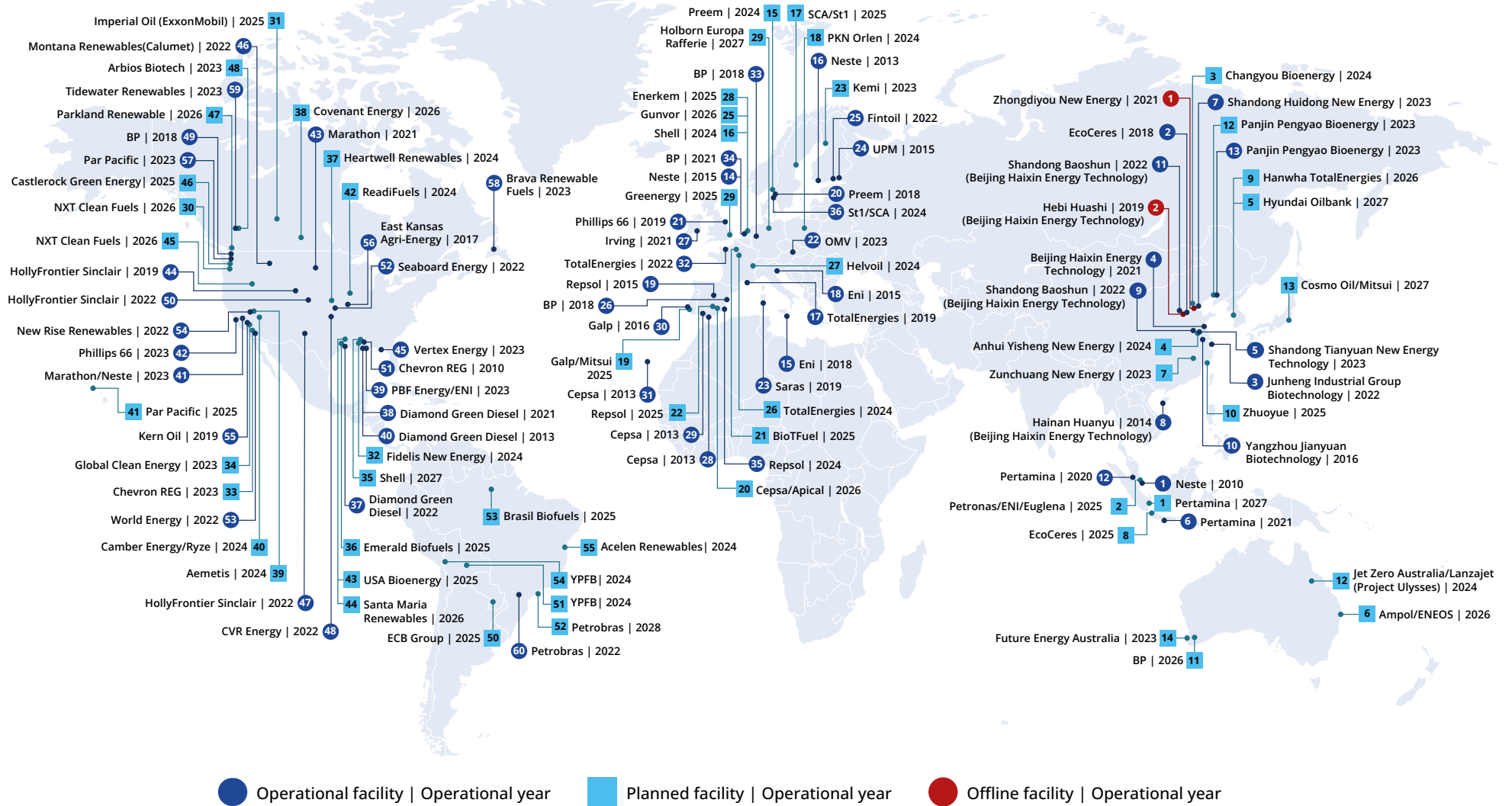


# HVO/Renewable Diesel Capacity Map

HVO and Renewable Diesel are one of the fastest-growing fuel markets in Europe and the US. Capacity is forecast to double by 2028 with demand likely to outstrip supply. In line with this rapid growth, a proper physical spot market is emerging. Argus captures the value of HVO/RD using bids, offers and trades made by market participants on the trade initiation platform, Argus Open Markets®, to underpin independent HVO price assessments.

Learn about our truly representative daily pricing that captures market-relevant content on supply, demand, feedstocks and more. Visit [argusmedia.com/HVO](https://argusmedia.com/HVO)

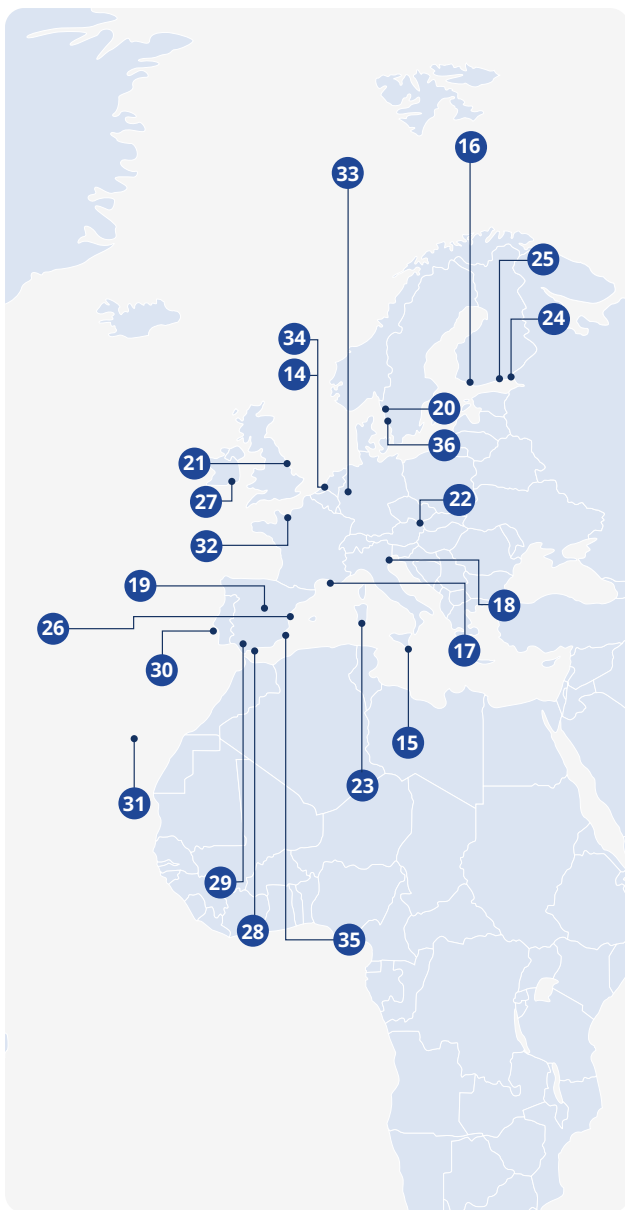


# Operational facilities | Asia-Pacific



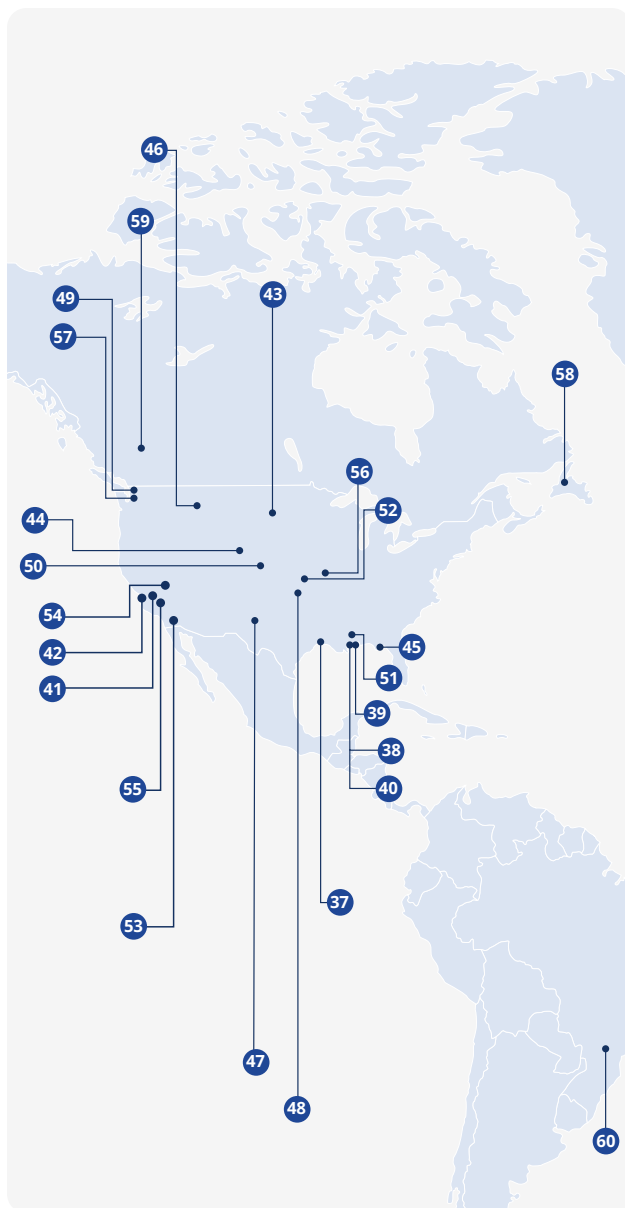
Country	Location	Company	Type of Facility	Capacity [mn USG/yr]	Capacity [MT/yr]	Operational Year
Singapore	Tuas	1 Neste	Standalone	440	0.81%	2010
China	Zhangjiagang, Jiangsu	2 EcoCeres	Standalone	38	112,000	2018
China	Puyang, Henan	3 Junheng Industrial Group Biotechnology	Standalone	34	100,000	2022
China	Shandong Rizhao	4 Beijing Haixin Energy Technology	Standalone	85	x%	2021
China	Linyi, Shandong	5 Shandong Tianyuan New Energy Technology	Standalone	68	200,000	2023
Indonesia	Cilacap	6 Pertamina	Standalone	46	130,000	2021
China	Dongying, Shandong	7 Shandong Huidong New Energy	Standalone	44	130,000	2023
China	Hainan	8 Hainan Huanyu (Beijing Haixin Energy Technology)	Standalone	34	100,000	2014
China	Heze, Shandong	9 Shandong Baoshun (Beijing Haixin Energy Technology)	Standalone	34	100,000	2022
China	Yangzhou, Jiangsu	10 Yangzhou Jianyuan Biotechnology	Standalone	34	100,000	2016
China	Anyang, Henan	11 Shandong Baoshun (Beijing Haixin Energy Technology)	Standalone	17	50,000	2022
Indonesia	Dumai	12 Pertamina	Standalone	15	45,000	2020
China	Liaoning	13 Panjin Pengyao Bioenergy	Standalone	17	50,000	2023

# Operational facilities | Europe



Country	Location	Company	Type of Facility	Capacity [mn USG/yr]	Capacity [MT/yr]	Operational Year
Netherlands	Rotterdam	14 Neste	Standalone	474	1,400,000	2015
Italy	Gela	15 Eni	Standalone	203	600,000	2018
Finland	Porvoo	16 Neste	Standalone	102	300,000	2013
France	La Mede	17 TotalEnergies	Standalone	135	400,000	2019
Italy	Venice	18 Eni	Standalone	119	350,000	2015
Spain	Various refineries	19 Repsol	Co-processing	119	350,000	2015
Sweden	Gothenburg	20 Preem	Standalone	85	250,000	2018
United Kingdom	Humber	21 Phillips 66	Co-processing	91	270,000	2019
Austria	Schwechat	22 OMV	Co-processing	54	160,000	2023
Italy	Sarroch	23 Saras	Co-processing	51	150,000	2019
Finland	Lappeenranta	24 UPM	Standalone	44	130,000	2015
Finland	Haminakotka	25 Fintoil	Standalone	34	100,000	2022
Spain	Castellon	26 BP	Co-processing	27	80,000	2018
Republic of Ireland	Whitegate	27 Irving	Co-processing	15	45,000	2021
Spain	San Roque refinery	28 Cepsa	Co-processing	15	43,000	2013
Spain	La Rabida	29 Cepsa	Co-processing	15	43,000	2013
Portugal	Sines	30 Galp	Co-processing	10	30,000	2016
Spain	Tenerife	31 Cepsa	Co-processing	10	29,000	2013
France	Oudalle, Normandy	32 TotalEnergies	Co-processing	-	-	2022
Germany	Lingen	33 BP	Co-processing	-	-	2018
Netherlands	Rotterdam	34 BP	Co-processing	-	-	2021
Spain	Cartagena	35 Repsol	Standalone	56	166,500	2024
Sweden	Gothenburg	36 St1/SCA	Standalone	44	130,000	2024

# Operational facilities | North & South America



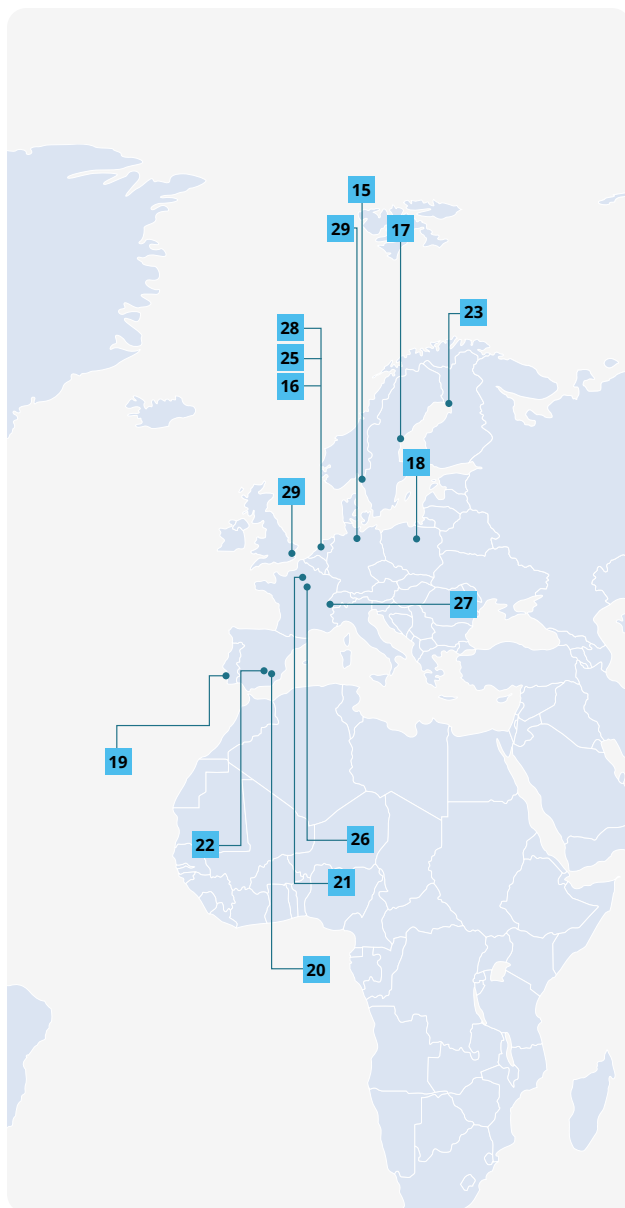
Country	Location	Company	Type of Facility	Capacity [mn USG/yr]	Capacity [MT/yr]	Operational Year
<b>North America</b>						
US	Port Arthur	37 Diamond Green Diesel	Standalone	470	1,387,741	2022
US	Norco	38 Diamond Green Diesel	Standalone	290	856,266	2013
US	Chalmette	39 PBF Energy/ENI	Standalone	306	903,508	2023
US	Norco	40 Diamond Green Diesel	Standalone	400	1,181,056	2021
US	Martinez	41 Marathon/Neste	Standalone	260	767,686	2023
US	Rodeo	42 Phillips 66	Standalone	185	546,238	2021
US	Dickinson	43 Marathon	Standalone	184	543,286	2021
US	Casper/Sinclair	44 HollyFrontier Sinclair	Standalone	153	451,754	2019
US	Mobile	45 Vertex Energy	Standalone	150	450,000	2023
US	Great Falls	46 Montana Renewables (Calumet)	Standalone	138	408,000	2022
US	Artesia	47 HollyFrontier Sinclair	Standalone	125	369,080	2022
US	Wynnewood	48 CVR Energy	Standalone	110	324,790	2022
US	Cherry Point	49 BP	Co-processing	109	321,838	2018
US	Cheyenne	50 HollyFrontier Sinclair	Standalone	90	265,738	2022
US	Geismar	51 Chevron REG	Standalone	90	265,738	2010
US	Hugoton	52 Seaboard Energy	Standalone	85	250,974	2022
US	Paramount	53 World Energy	Standalone	60	177,158	2022
US	Reno	54 New Rise Renewables	Standalone	44	129,916	2022
US	Bakersfield	55 Kern Oil	Co-processing	4	11,811	2019
US	Garnett	56 East Kansas Agri-Energy	Standalone	3	8,858	2017
US	Tacoma	57 Par Pacific	Co-processing	-	-	2023
Canada	Come by Chance	58 Braya Renewable Fuels	Standalone	276	815,000	2024
Canada	Prince George	59 Tidewater Renewables	Standalone	46	136,000	2023
<b>South America</b>						
Brazil	Araucaria	60 Petrobras	Co-processing	-	-	2022

# Planned facilities | Asia-Pacific



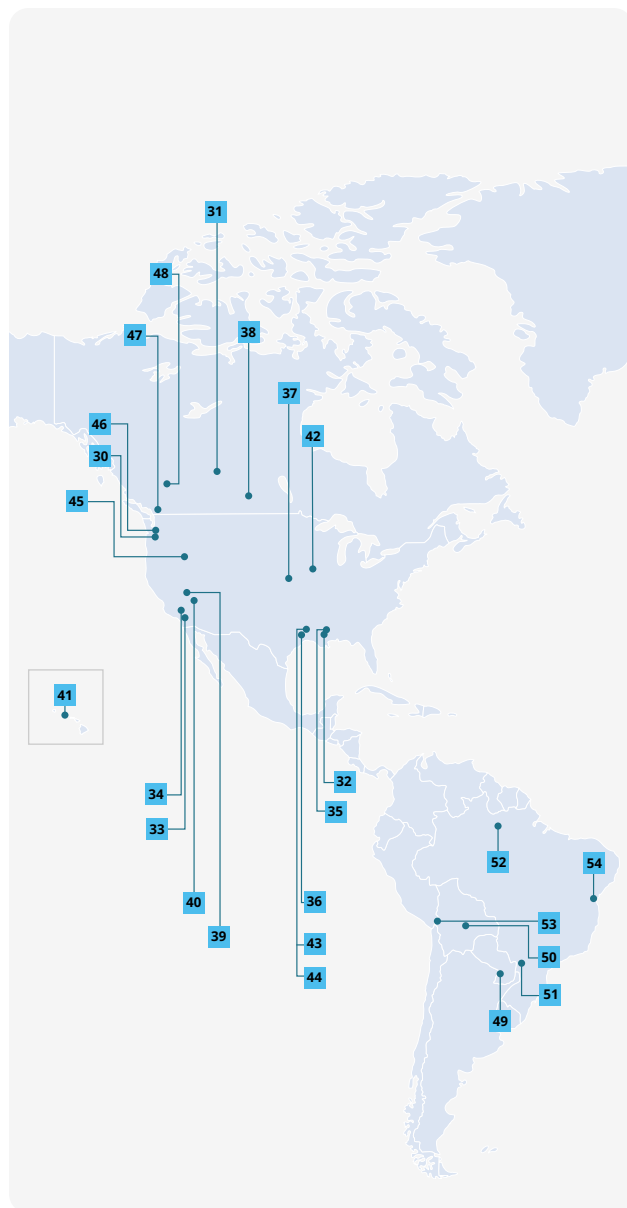
Country	Location		Company	Type of Facility	Capacity [mn USG/yr]	Capacity [MT/yr]	Operational Year
Indonesia	Plaju	1	Pertamina	Standalone	307	905,000	2027
Malaysia	Penerang	2	Petronas/ENI/Euglena	Standalone	95	280,000	2025
China	Cangzhou	3	Changyou Bioenergy	Standalone	68	200,000	2024
China	Chuzhou	4	Anhui Yisheng New Energy	Standalone	68	200,000	2024
South Korea	Daesan	5	Hyundai Oilbank	Standalone	68	200,000	2027
Australia	Brisbane	6	Ampol/ENEOS	Standalone	66	195,000	2026
China	Dexing	7	Zunchuang New Energy	Standalone	59	175,000	2024
Malaysia	Pasir Gudang	8	EcoCeres	Standalone	47	140,000	2025
South Korea	Daesan	9	Hanwha TotalEnergies	Standalone	46	135,000	2026
China		10	Zhuoyue	Standalone	34	100,000	2025
Australia	Kwinana	11	BP	Standalone	28	84,000	2026
Australia		12	Jet Zero Australia/Lanzajet (Project Ulysses)	Standalone	3	9,000	2024
Japan		13	Cosmo Oil/Mitsui	Standalone	5	16,000	2027
Australia	Narrogin	14	Future Energy Australia	Standalone	5	14,000	2023

# Planned facilities | Europe



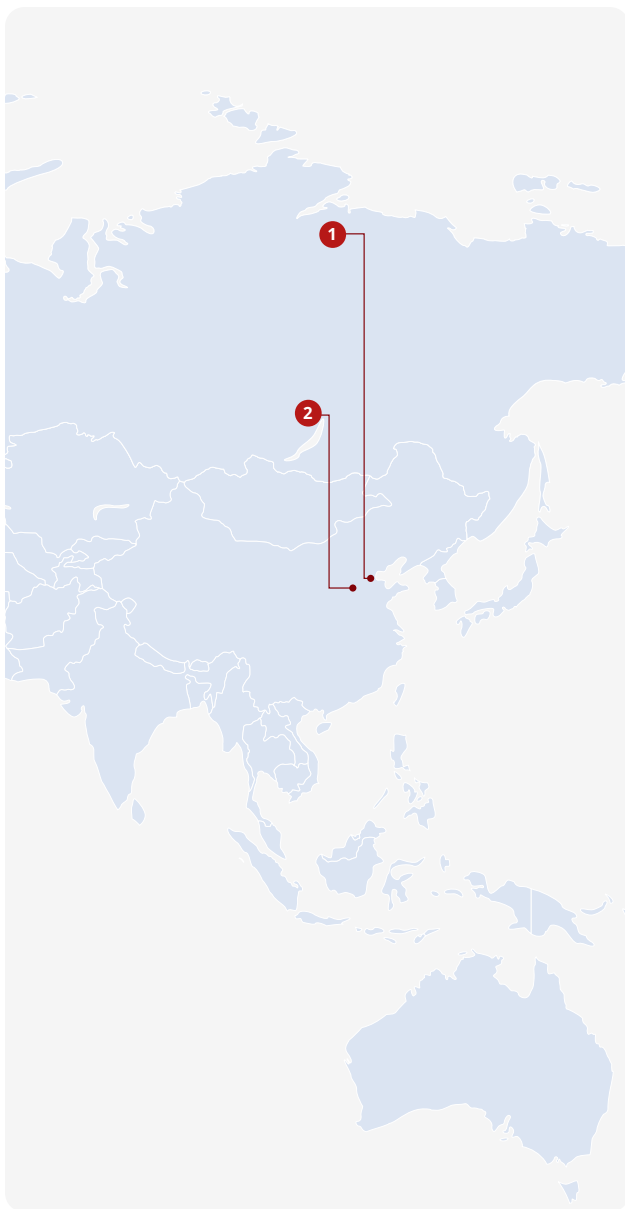
Country	Location	Company	Type of Facility	Capacity [mn USG/yr]	Capacity [MT/yr]	Operational Year
Sweden	Lysekil	15 Preem	Co-processing	264	780,000	2024
Netherlands	Rotterdam	16 Shell	Standalone	148	436,000	2026
Sweden	Ostrand, Timra	17 SCA/St1	Standalone	102	300,000	2025
Poland	Plock	18 PKN Orlen	Standalone	102	300,000	2024
Portugal	Sines	19 Galp/Mitsui	Standalone	91	270,000	2025
Spain	Andalucia	20 Cepsa/Apical	Standalone	85	250,000	2026
France	Venette	21 BioTFuel	Standalone	68	200,000	2025
Spain	Puertollano	22 Repsol	Standalone	81	240,000	2025
Finland	Kemi	23 Kemi	Standalone	51	150,000	2023
Netherlands	Rotterdam	24 Gunvor	Standalone	41	122,500	2026
France	Grandpuits	25 TotalEnergies	Standalone	41	120,000	2024
Switzerland	Monthey, Valais	26 Helvoil	Standalone	34	100,000	2026
Netherlands	Rotterdam	27 Enkern	Standalone	7	20,000	2025
United Kingdom	Thames Enterprise Park	28 Greenergy	Standalone	4	11,000	2025
Germany	Hamburg	29 Holborn Europa Rafferie	Standalone	37	110,000	2027

# Planned facilities | North & South America



Country	Location	Company	Type of Facility	Capacity [mn USG/yr]	Capacity [MT/yr]	Operational Year
US	Port Westward	30 NXT Clean Fuels	Standalone	575	1,697,768	2026
Canada	Edmonton	31 Imperial Oil (ExxonMobil)	Standalone	286	844,455	2025
US	Baton Rouge	32 Fidelis New Energy	Standalone	278	820,834	2024
US	El Segundo	33 Chevron REG	Standalone	153	453,000	2023
US	Bakersfield	34 Global Clean Energy	Standalone	210	620,054	2024
US	Convent	35 Shell	Standalone	139	410,000	2027
US	Port Arthur	36 Emerald Biofuels	Standalone	110	324,790	2025
US	Hastings	37 Heartwell Renewables	Standalone	80	236,211	2024
Canada	Lloydminster	38 Covenant Energy	Standalone	46	135,000	2026
US	Riverbank	39 Aemetis	Standalone	45	132,869	2024
US	Las Vegas	40 Camber Energy/Ryze	Standalone	43	126,964	2024
US	Kapolei, Oahu	41 Par Pacific	Standalone	24	70,863	2025
US	Sioux Center	42 Readifuels	Standalone	36	106,295	2024
US	Bon Weir	43 USA Bioenergy	Standalone	34	100,390	2025
US	East Texas (specifics tbd)	44 Santa Maria Renewables	Standalone	23	68,000	2026
US	Lakeview	45 NXT Clean Fuels	Standalone	31	91,000	2026
US	Shelton	46 Castlerock Green Energy	Standalone	20	58,000	2025
Canada	Burnaby	47 Parkland Renewable	Co-processing	12	35,000	2026
Canada	Prince George, BC	48 Arbios Biotech	Standalone	2	6,200	2024
Paraguay	Villeta	49 ECB Group	Standalone	135	400,000	2025
Bolivia	Elder Bell	50 YPFB	Standalone	23	68,000	2024
Brazil	Cubatao	51 Petrobras	Standalone	91	270,000	2028
Brazil	Manaus	52 Brasil Biofuels	Standalone	66	195,000	2025
Bolivia	Senkata	53 YPFB	Standalone	23	68,000	2024
Brazil	Mataripe	54 Acelen Renewables	Standalone	153	453,000	2026

# Offline facilities | Asia-Pacific



Country	Location	Company	Type of Facility	Capacity [mn USG/yr]	Capacity [MT/yr]	Operational Year
China	Binzhou	1 Zhongdiyou New Energy	Standalone	135	400,000	2021
China	Hebi	2 Hebi Huashi (Beijing Haixin Energy Technology)	Standalone	34	100,000	2019