

Strategic Petroleum Reserve Crude Oil Sales: Buyers and Exports

February 16, 2023

In January 2023, the U.S. Department of Energy (DOE) concluded the largest emergency drawdown of crude oil from the Strategic Petroleum Reserve (SPR): approximately 180 million barrels directed by the President under authorities provided by Section 161 of the Energy Policy and Conversation Act of 1975 (P.L. 94-163, as amended at [42 U.S.C. §6241](#)). Entities controlled by U.S. and non-U.S. parent organizations purchased crude oil sold under SPR emergency drawdown authority. Additionally, media [reports](#) indicated that buyers delivered SPR crude oil to foreign destinations. Purchases by China-affiliated entities, along with reported deliveries to refineries located in China, raised concerns among some Members of Congress about SPR crude oil buyers and destinations. Subsequently, the House of Representatives passed H.R. 22 on January 12, 2023, that would prohibit the sale of SPR petroleum products (e.g., crude oil) to China-affiliated entities and the export of SPR crude oil to China.

CRS analysis of successful award [reports](#) for SPR crude oil sales during the period of fiscal year (FY) 2017 to present indicates that entities linked to U.S. oil refining operations are generally the largest, by award volume, SPR crude oil buyers. Other entities, many with parent organizations located in foreign countries, also purchase SPR crude oil. SPR crude oil export volumes and destinations are uncertain.

Background

As required by 42 U.S.C. §6241(e), SPR petroleum products must be sold “to the highest qualified bidder” following a public notice of sale (NoS) approved by the Secretary of Energy. Oil sales adhere to regulations set forth at [10 C.F.R. Part 625](#), including SPR Standard Sales Provisions ([SSPs](#)), as supplemented and amended in each price-competitive [NoS](#). Bidder qualification criteria typically include (1) registering with the SPR’s online [Crude Oil Sales Offer](#) system, (2) certifying that the entity does not engage in activities prohibited by export control laws, sanctions, and related regulations, and (3) providing an offer guarantee and a bank-certified Letter of Credit that ensures payment and performance should a contract be awarded.

Since FY2017, and as of the date of this Insight, DOE completed 18 SPR crude oil sales resulting in contract awards of approximately 296 million barrels. Generally, these sales fall into one of three categories: mandatory sales, SPR modernization sales, and emergency sales. For additional SPR

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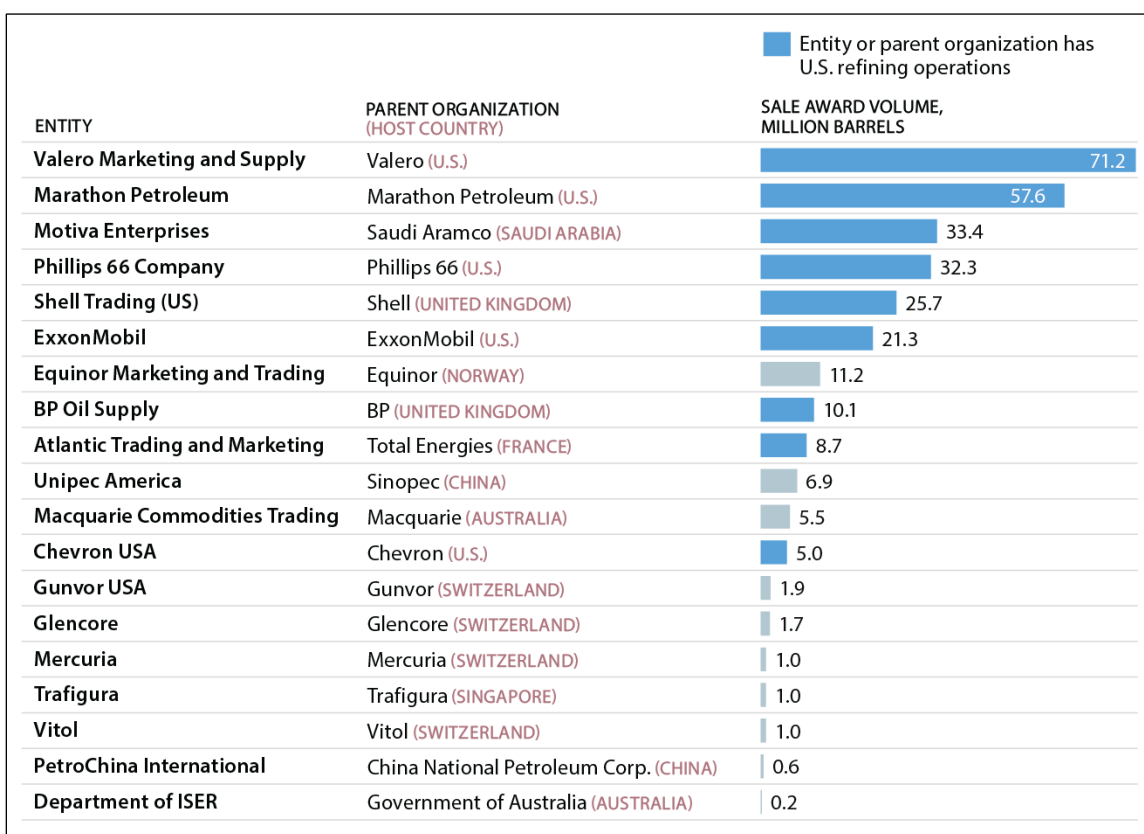
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background, including information about sale categories, see CRS Insight IN11916, *Strategic Petroleum Reserve Oil Releases: October 2021 Through October 2022*, by Phillip Brown.

SPR Crude Oil Buyers

From FY2017 to present, DOE awarded SPR sale contracts to 19 entities (see **Figure 1**). By number, most entities are subsidiaries of parent organizations located in foreign countries, including Saudi Arabia, the United Kingdom, France, China, Australia, and Switzerland. Entities linked—through either direct or indirect ownership—to U.S. refining operations secured contracts for the largest volume of SPR crude oil (see blue bars in **Figure 1**). U.S. companies secured approximately 63% of sale award volumes.

Figure 1. SPR Sale Awards by Entity, Including Parent Organization and Host Country
FY2017 to Present



ENTITY	PARENT ORGANIZATION (HOST COUNTRY)	SALE AWARD VOLUME, MILLION BARRELS
Valero Marketing and Supply	Valero (U.S.)	71.2
Marathon Petroleum	Marathon Petroleum (U.S.)	57.6
Motiva Enterprises	Saudi Aramco (SAUDI ARABIA)	33.4
Phillips 66 Company	Phillips 66 (U.S.)	32.3
Shell Trading (US)	Shell (UNITED KINGDOM)	25.7
ExxonMobil	ExxonMobil (U.S.)	21.3
Equinor Marketing and Trading	Equinor (NORWAY)	11.2
BP Oil Supply	BP (UNITED KINGDOM)	10.1
Atlantic Trading and Marketing	Total Energies (FRANCE)	8.7
Unipet America	Sinopec (CHINA)	6.9
Macquarie Commodities Trading	Macquarie (AUSTRALIA)	5.5
Chevron USA	Chevron (U.S.)	5.0
Gunvor USA	Gunvor (SWITZERLAND)	1.9
Glencore	Glencore (SWITZERLAND)	1.7
Mercuria	Mercuria (SWITZERLAND)	1.0
Trafigura	Trafigura (SINGAPORE)	1.0
Vitol	Vitol (SWITZERLAND)	1.0
PetroChina International	China National Petroleum Corp. (CHINA)	0.6
Department of ISER	Government of Australia (AUSTRALIA)	0.2

Source: CRS analysis of SPR Successful Award reports, available at <https://www.spr.doe.gov/doeec/ArchiveDocs.htm?type=oil%20sale>. Refining operations reflect data as of January 1, 2022. For additional information about U.S. refineries, see U.S. Energy Information Administration, “Refinery Capacity Report,” June 21, 2022, at <https://www.eia.gov/petroleum/refinerycapacity/>.

Notes: ISER = Industry Science Energy Resources. Some entity names are truncated for brevity. Complete entity names are included in SPR Successful Award reports. Award volumes may not sum due to rounding. Actual sale volumes, computed once deliveries occur, can vary from contract award volumes. The U.S. Department of Energy (DOE) does not report delivered volumes by entity. CRS has compiled a tabulated summary of all 18 SPR crude oil sales, by entity, fiscal year, award volume and sale type. This tabulated summary is available to congressional clients upon request to [Phillip Brown](#).

SPR Crude Oil Exports

The federal government does not track and report export destinations for SPR crude oil following sale awards. Generally, DOE delivers SPR crude oil to one of seven sale points within the SPR distribution system. At the sale point, ownership title transfers from the federal government to the buyer, at which time the delivery becomes U.S.-origin crude oil. Subject to federal transportation (i.e., the [Jones Act](#)) and any applicable trade restrictions, the buyer can then further transport SPR crude oil by either pipeline or marine vessel. Buyers can deliver SPR crude oil to domestic refineries, storage facilities, or export terminals. With opportunities for blending SPR crude oil with other crude oils in storage facilities and marine vessels throughout the supply chain, accurately quantifying SPR crude oil export volumes could be a challenging endeavor.

Generally, SPR crude oil was subject to broader U.S. crude oil export restrictions in effect until December 2015. Enactment of P.L. 114-113 ([Div. O, Title I](#), available at [42 U.S.C. §6212a](#)) effectively repealed the export restrictions. Since then, U.S. [crude oil exports](#) have reached record levels. During [calendar year 2021](#), [China](#) was the fifth-largest export destination for U.S. crude oil.

Given the SPR's proximity to oil export infrastructure in the U.S. Gulf Coast region, it is possible that buyers exported some SPR crude oil. However, the Gulf Coast also has the highest concentration of domestic oil refining capacity. An accurate and comprehensive accounting of SPR oil export volumes and destinations is not publicly available.

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