

# A Closer Look at the IEA Storage Releases

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## Instant Insight

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## About KAPSARC

KAPSARC is an advisory think tank within global energy economics and sustainability providing advisory services to entities and authorities in the Saudi energy sector to advance Saudi Arabia’s energy sector and inform global policies through evidence-based advice and applied research.

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The United States (U.S.) and its western allies have been increasing their pressure on Russia in response to the conflict in Ukraine. Undercutting Russian government finances is a priority for them. Energy exports are a key source of income for the Russian economy, and several different strategies have been employed (with varying degrees of success) to choke off the flow of petrodollars into Russia. Voluntary reductions by Western trading firms have been offset by increased purchases in the East by China and India. There are also more technical difficulties associated with payment vehicles and access to insurance for tankers that have created logistical obstacles.

The dilemma faced by members of the Western alliance, along with the wider market, is that energy security and affordability make it difficult to cut out one of the largest energy exporters without viable alternatives available. For locations with low reliance on Russian crude and products (e.g., the U.S. and Canada), it has been an easier task to swap imports, but for Europe the sheer volume of Russian energy exports has been a challenge to replace. Several concessions have been made so far with Hungary, the Czech Republic, and Slovakia (all landlocked countries), which have been allowed to continue receiving crude from Russia via the Druzhba pipeline. Meanwhile the drawdown of seaborne imports is set to be phased in over the coming six (crude oil) to eight (oil products) months.

Among the various strategies employed to grow alternative energy supplies and soften the supply/price impact of this transition was a coordinated release of crude and products from storage held by members of the International Energy Agency (IEA). The use of this 'buffer' effectively created a short-term substitute producer for the global market while other sources were developed. The question is whether this was enough, and if more releases are likely to occur.

## Measuring IEA Storage

The IEA sets a general target of 90 days of net-imports of crude and products to be held in storage by their members. This target, however, has many interesting aspects to consider:

1. Net exporters do not have any storage targets to meet
2. The net-import benchmark (annual imports-annual exports) is set by the volumes recorded in the prior calendar year
3. Crude and crude products are factored to determine equivalent volumes
  - a. Crude is factored by 96%, omitting a standard 4% naphtha cut
  - b. All products are factored by 106.5% to yield an equivalent in crude
  - c. Members may use alternative factors to adjust these values as necessary
  - d. 10% is omitted to account for difficult-to-produce tank bottoms
4. Both public and private storage is counted toward the total volumes available nationally
  - a. Public storage counts as part of the strategic petroleum reserve (SPR)
  - b. Private storage counts as a secondary SPR if a minimum storage level is required
  - c. Regular commercial storage technically counts toward the IEA numbers
5. Foreign holdings by both the public and private sector can count toward the total

This framework is subjective enough, with variable local laws across all participants making it difficult to perfectly recreate the [IEA oil stock data](#) numbers. However, a reasonable facsimile can be generated with IEA data.

## Non-Economic Considerations

This storage (especially the SPRs) is intended to offset disruptions in the market, but in an interesting twist it is being used to create/allow a disruption instead. The speed of the transition away from Russian crude and crude products is being partly fueled by the extra volumes provided by these releases, and there is/was a political element to them.

The coordinated release announcement was issued on April 1, preceding several elections. The first round of the French presidential election was April 10, with President Macron winning (by a less comfortable margin), followed by the legislative elections in June that fractured the National Assembly. The Hungarian parliamentary elections were held on April 3, leading to a significant win for Viktor Orbán and his party. Orbán's party has traditionally been friendly to Russia, but its participation in the release enabled it to continue receiving crude from Russia by pipeline. Australia's federal election was held on May 21. While participation in the release was a popular choice by the incumbents, Scott Morrison's conservative National Coalition lost its majority, along with the prime minister's seat, to Anthony Albanese and his Labor Party. Most importantly, the forthcoming U.S. midterm elections on November 9 will determine the composition of both houses of Congress, with the domestic petrol price a major factor in the outcome. Polling indicates that there may be a significant shift toward Republican control, which would likely prevent any future releases due to national security concerns. Beyond this, Eastern European members party to the release, either already members of NATO or interested in joining due to direct concerns about Russian aggression, had significant self-interest in participating.

## Estimated Results

Delays in reporting, and a reliance on the previous calendar year for calculating net imports means that we are still using 2020 values to determine days of net imports. Since 2020 was an atypical year for supply, demand, and storage behavior, there is a risk of significant shifts to the IEA values when they are updated to 2021 values in mid-July. For example, the U.S. may not technically qualify as a net exporter based on last year's data (the numbers are very close, and there is some flexibility in the interpretation of volumes).

With this in mind, and assuming consistent withdrawals as stated in the release plan, what do the November results look like?

IEA members	SPR release Kb	IEA net-import days					Gross import days			Participation notes	This was written in June
		Feb	Apr	Nov	Feb/nov delta	>90?	Days	>90?	Public days		
AUSTRALIA	1,608	75	66	64	(11)	(26)	49	(41)	-	Release was from U.S. stocks	Unlikely, below target levels
AUSTRIA	-	124	119	119	(5)	29	80	(10)	55	History of neutrality	Unlikely unless supply improves
BELGIUM	-	190	167	167	(23)	77	70	(20)	33	History of neutrality	Unlikely unless supply improves
CANADA	-	-	-	-	-	-	247	157	-	Net exporter, no need to participate	Increase production instead
CHILE	-	41	36	36	(5)	(54)	31	(59)	-	Below IEA 90-day requirement	Unlikely, below target levels
CZECH	-	140	129	129	(11)	39	106	16	71	Exempted from embargo by pipeline	Unlikely, due to exemption
DENMARK	-	473	423	423	(50)	333	136	46	51	History of neutrality	Possible, as politics are evolving
ESTONIA	74	-	-	-	-	-	118	28	-	Direct concern about Russia	Increase production instead
FINLAND	369	200	259	257	57	167	114	24	60	Direct concern about Russia	Likely if another release occurs
FRANCE	6,047	131	123	118	(13)	28	94	4	69	Presidential election was underway	Likely if another release occurs
GERMANY	6,480	129	133	130	1	40	121	31	92	"Leader of Europe"	Highest capacity to release more
GREECE	624	176	167	164	(12)	74	42	(48)	-	Greece to benefit from tanker rates	Likely if another release occurs
HUNGARY	531	203	188	184	(19)	94	137	47	68	Exempted from embargo by pipeline	Unlikely, due to exemption
IRELAND	451	104	99	95	(9)	5	64	(26)	56	Follows U.S./U.K.	Unlikely, close to IEA 90-day limit
ITALY	5,000	148	126	121	(27)	31	81	(9)	11	Compensating for prior pro-Russian stance	Possible, depends on support
JAPAN	15,000	211	208	201	(10)	111	148	58	94	Concern over China, U.S. relations	Highest capacity to release more
KOREA	7,230	187	171	164	(23)	74	51	(39)	29	Concern over China, U.S. relations	Likely if another release occurs
LATVIA	-	58	57	57	(1)	(33)	46	(44)	-	Below IEA 90-day requirement	Below IEA 90-day requirement
LITHUANIA	180	176	174	170	(6)	80	47	(43)	9	Direct concern about Russia	Likely if another release occurs
LUXEMBOURG	-	98	94	94	(4)	4	97	7	-	History of neutrality	Unlikely to participate
MEXICO	-	-	-	-	-	-	39	(51)	-	Net exporter, no need to participate	Increase production instead
NETHLAND	1,600	838	916	905	67	815	51	(39)	17	Very high industrial storage capacity	Likely if another release occurs
NORWAY	-	-	-	-	-	-	223	133	-	Net exporter, no need to participate	Increase production instead
NZ	483	87	88	85	(2)	(5)	67	(23)	25	Release was from intl. tickets	Unlikely, below target levels
POLAND	2,298	125	117	113	(12)	23	111	21	31	Direct concern about Russia	Likely if another release occurs
PORTUGAL	-	120	121	98	(22)	8	61	(29)	24	Relatively small capacity	Unlikely, close to IEA 90-day limit
SLOVAKIA	-	178	168	168	(10)	78	95	5	58	Exempted from embargo by pipeline	Unlikely, due to exemption
SLOVENIA	-	120	113	113	(7)	23	67	(23)	-	Small net capacity	Unlikely, with small net capacity
SPAIN	4,000	123	114	110	(13)	20	69	(21)	28	Core EU member, must participate	Less likely, now closer to 90-day limit
SWEDEN	-	130	126	126	(4)	36	64	(26)	6	History of neutrality	NATO membership may make it possible
SWITZERLAND	-	184	185	185	1	95	180	90	-	History of neutrality	Unlikely to participate
TURKEY	3,060	98	89	86	(12)	(4)	94	4	-	Divided loyalties	Unlikely, close to IEA 90-day limit
U.K.	4,408	888	286	268	(620)	178	48	(42)	-	Very high industrial storage capacity	Likely if another release occurs
U.S.	180,000	-	1,584	1,423	1,423	1,333	199	109	66	Upcoming elections in November	Highest capacity to release more

Source: IEA, KAPSARC Analysis.

Note: Kb = thousand barrels.

## Future Insights

The likelihood of an additional coordinated release like the one in April is low, with U.S. politics shifting more conservative and less internationally cooperative (midterm elections, discussion of export bans, etc.), many previous participants running low on spare storage volumes, concerns about overall supply availability, and reduced political urgency (the next major electoral cycle is mid-2023). Any further releases from storage are likely to balance local, not market-wide, disruptions.

The level of Russian sanctions we see today are only as strong as they are because of the SPR releases. Without them, we would probably see a more gradual movement away from Russian liquids as the Western alliance waits for alternative sources to come online. Until now, Russian volumes have proved more resilient than expected, and this has kept global supplies at reasonable levels. If increased sanctions become more effective before alternative sources are ready, the market could become much tighter.

Alternative sources that can be leveraged include OPEC production growth (schedule already accelerated), exports from Venezuela (Eni and Repsol have permission to export), increasing shale production (drilling is slowly increasing), and temporarily turning a blind eye to Iran's exports. Beyond this, more extreme options include energy rationing (Germany is preparing now), sending United Nations peacekeepers into regions with disrupted production (Libya, Ecuador, etc.), or even confiscating Russian tankers. None of these last options are desirable, but they may be necessary if measures against Russian energy become 'too successful.'



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