



Centraal Orgaan Voorraadvoering Aardolieproducten
The Netherlands Petroleum Stockpiling Agency



Ensuring Energy Security: The Role of Emergency Oil Stocks

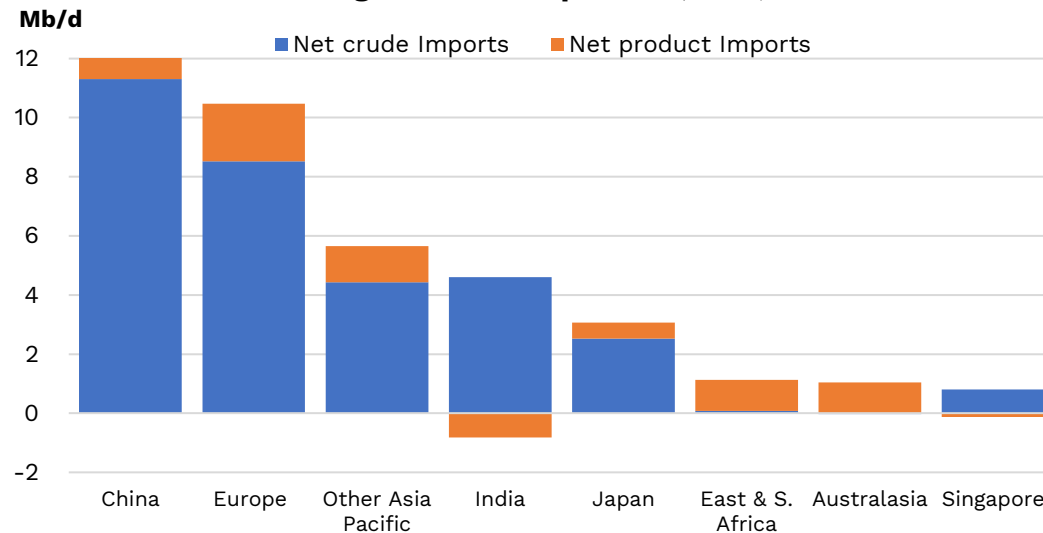
Energy Community

Oct 15th 2024

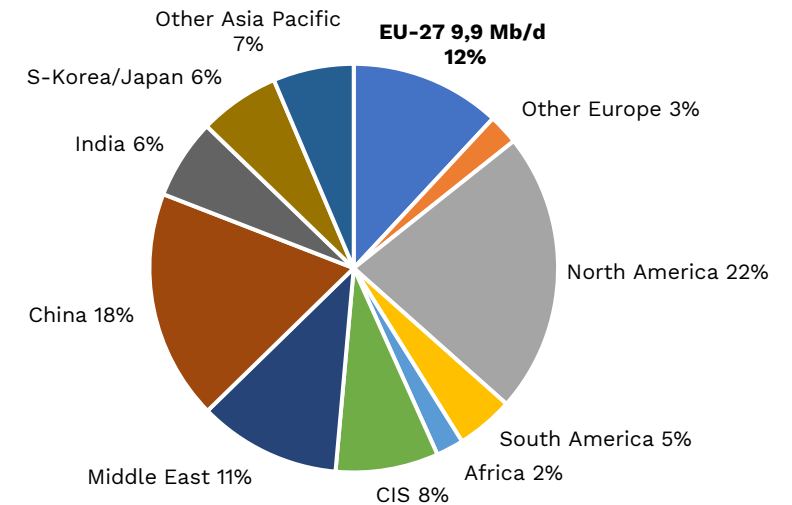
Characteristics European Oil market

- Europe as a region is the second largest importer of crude oil and oil products
 - The EU-27 imported 8.5 mln barrels of crude in 2023 or ~10% of global supply
 - EU-27's crude oil dependency from Russia decreased from 26.4% in 2021 to 19.8% in 2022 and 3.4% in 2023 and 2.4% in 2024 Ytd.
 - EU-27 was for 25% dependent on Russian diesel/gasoil imports in 2021, 18.8% in 2022, 3% in 2023 and 2.2% in 2024 Ytd (0% as from March 2024)
- EU-27 refining sector:
 - 70 refineries (>30Kb/d) with in total ~10 mln barrels of production (2023)
 - Europe is long on gasoline but short on diesel

Largest net oil importers (2023)



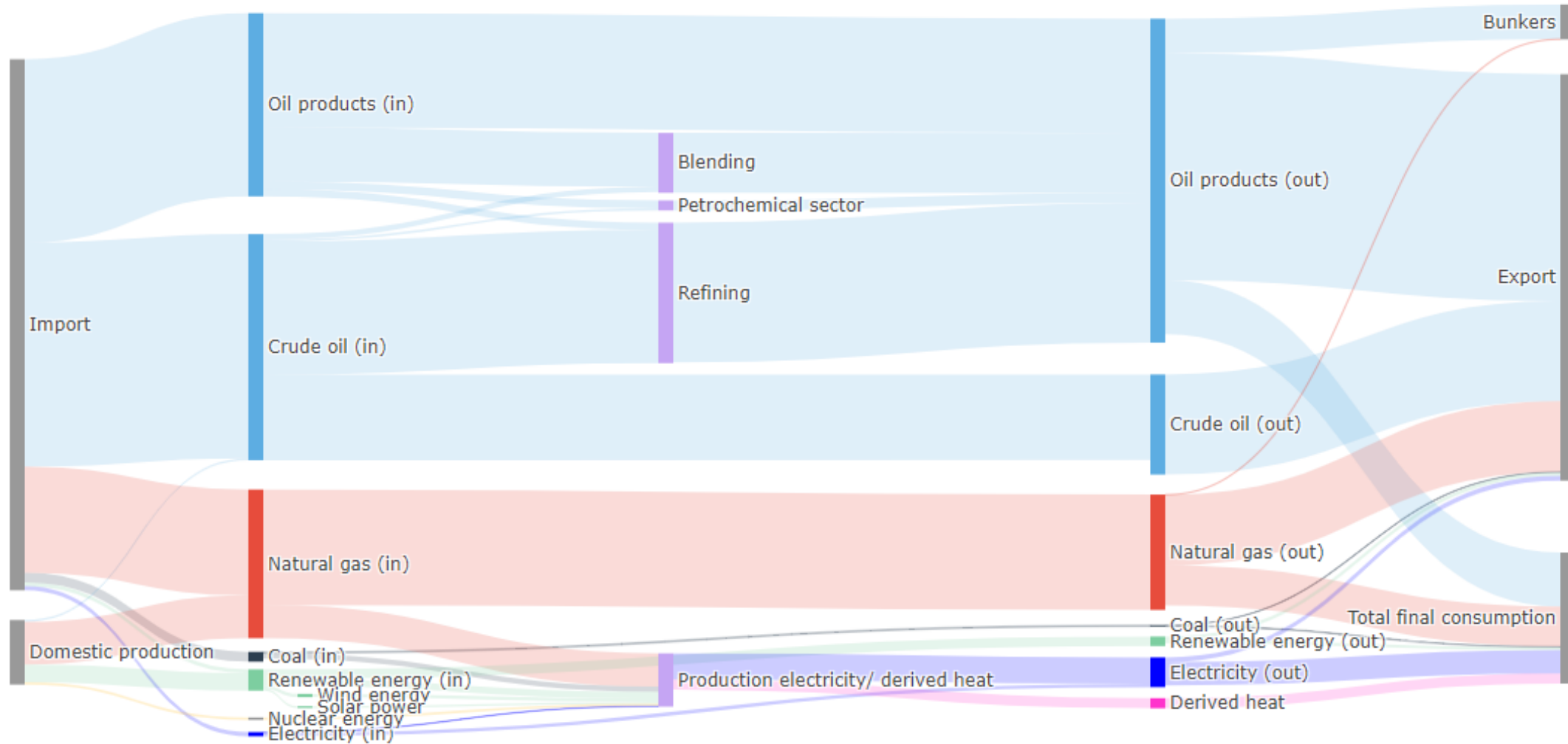
Refining throughput (2023)



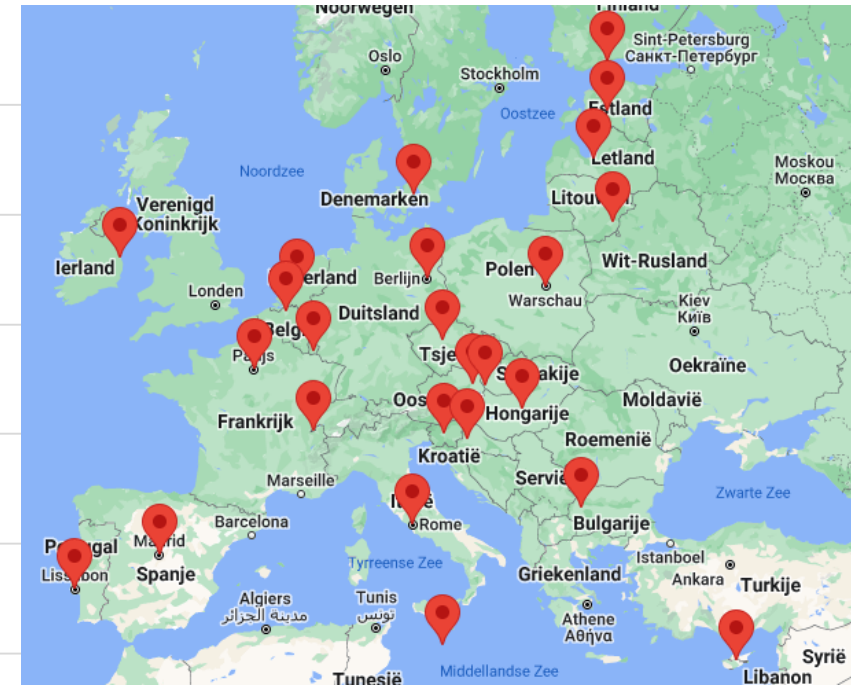
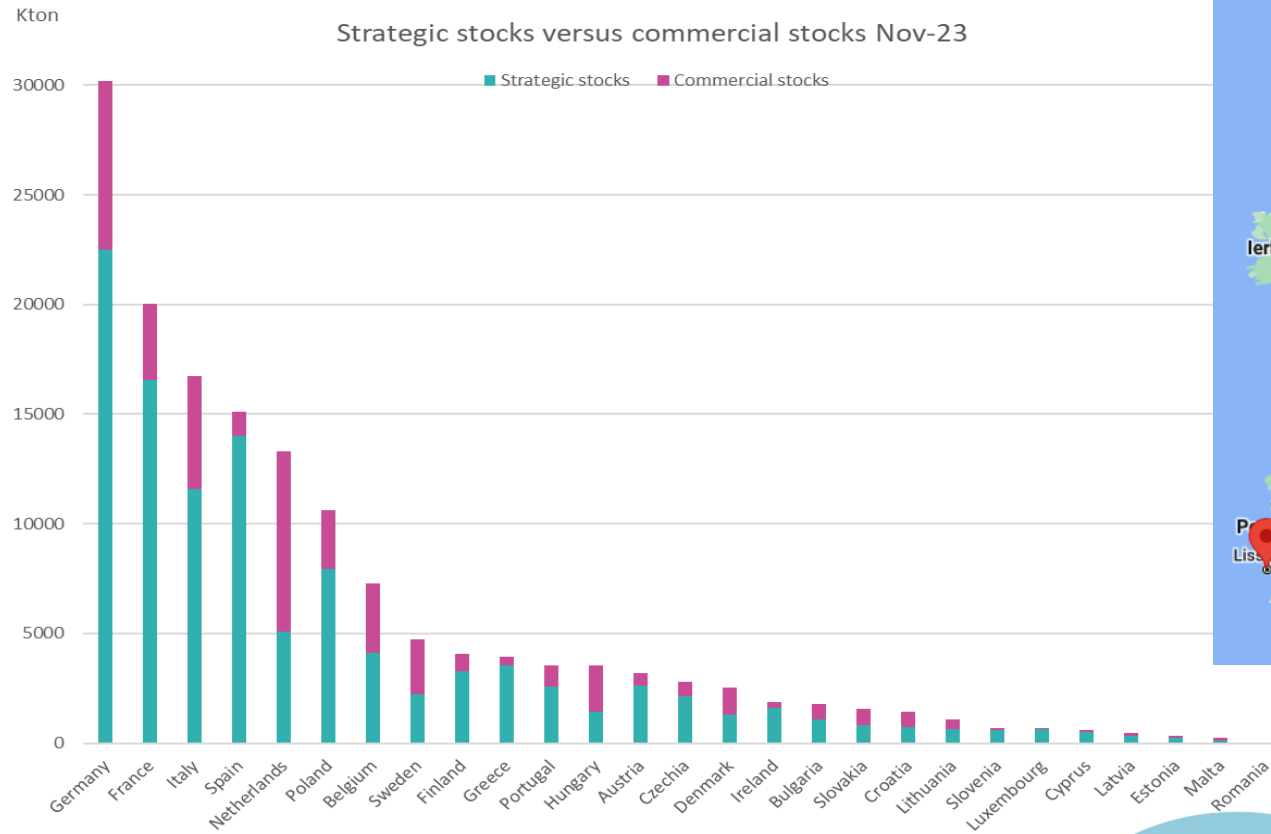
Source: [Eurostat](#) & [Energy Institute](#), *Statistical review of World Energy 2022*



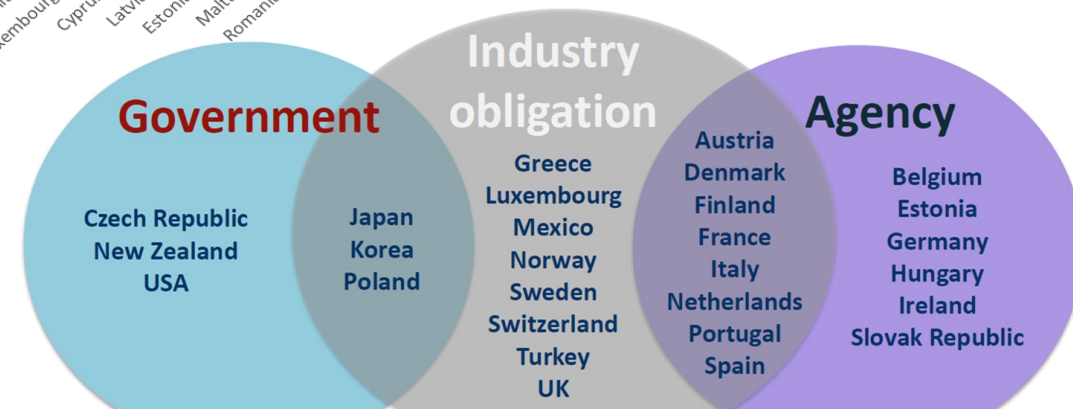
Energy transit and conversion in the Netherlands surpass domestic consumption, making it a key partner for global trade



Oil security across the OECD – The Netherlands has the highest commercial vs. strategic storage ratio of the EU



- Commercial stocks in the Netherlands are high compared to domestic demand, reflecting the bubble function for other countries.
- Most countries have higher significant higher strategic middle distillate stocks than commercial stocks

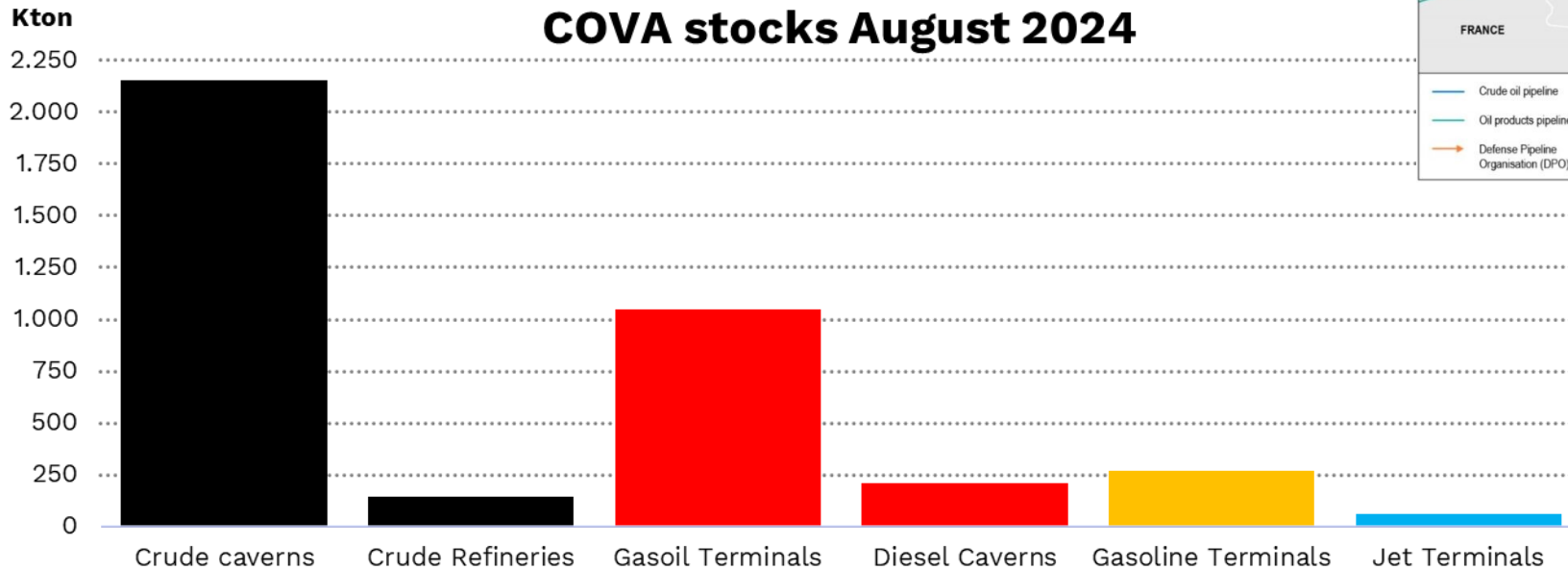
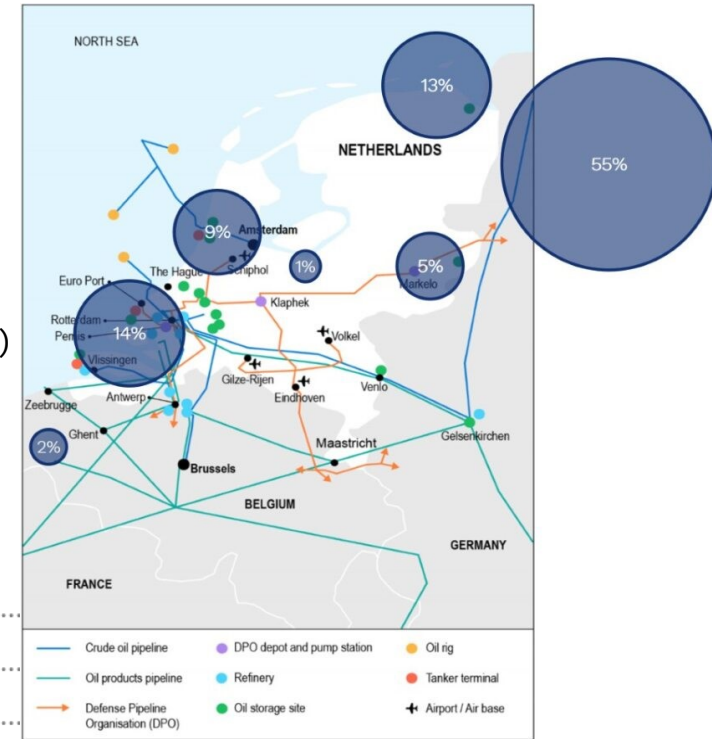


Source: COVA Analysis, Eurostat



COVA contributes to Dutch and international energy security by holding and managing strategic oil stocks

- Legal basis Dutch Stockpiling act
- Law stipulates that Industry and COVA should hold strategic oil stocks
- Annual stock obligation for industry and COVA by minister
- COVA established in 1978, based in Rotterdam
- Funded by stockholding fee: €8 per 1000L diesel, gasoline, LPG
- Stock draws: Gulf war (1991), Hurricane Catrina (2005), Libya (2011), Ukraine (2022)
 - 2022 Ukraine (1st) release was a reduction of the Industry obligation with 20%
 - 2022 Ukraine (2nd) release is 1.6mln bbl (or 215 Kton) of COVA diesel stock



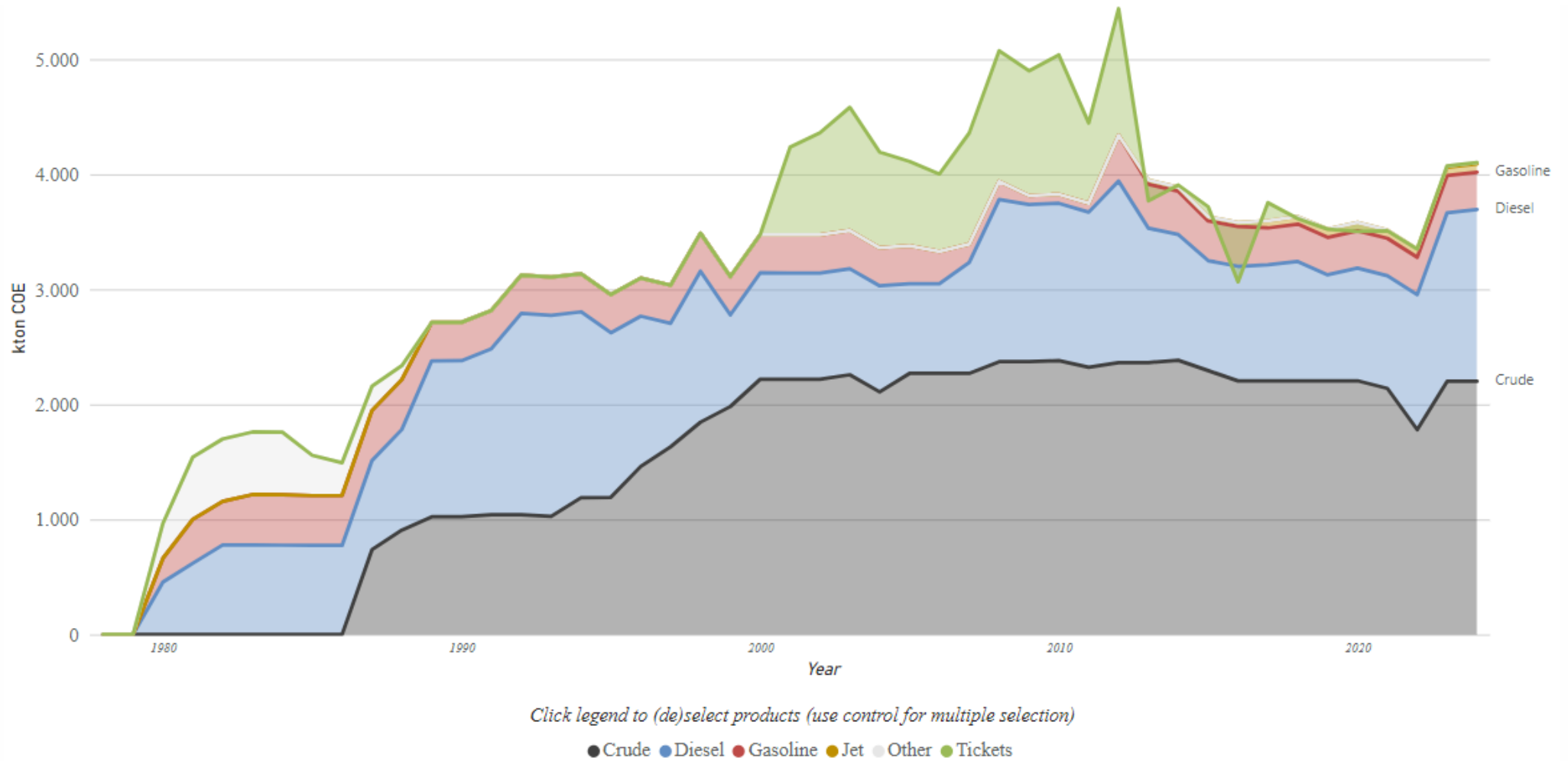
Source: [COVA](#)



COVA has a diversified storage portfolio



History of COVA storage portfolio development

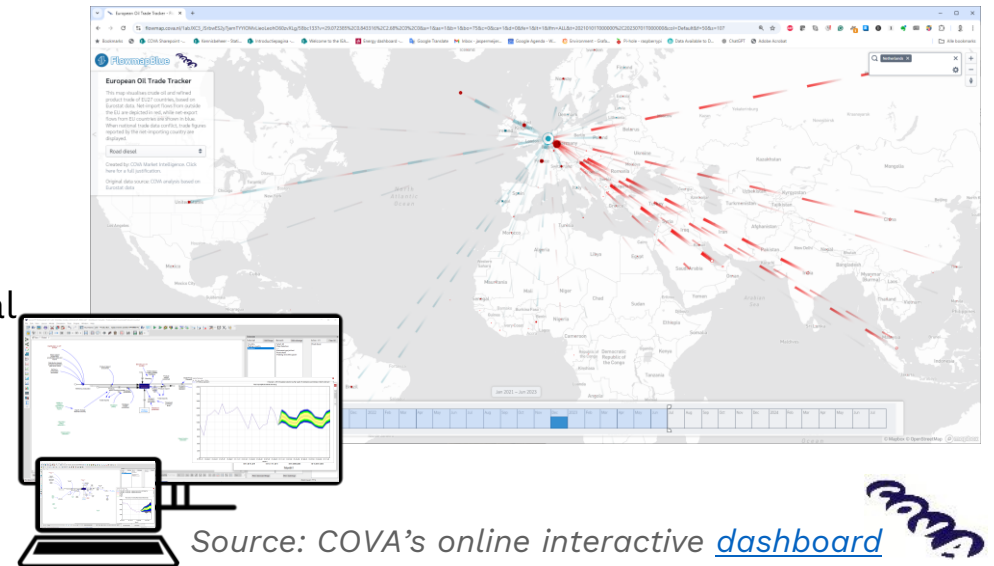
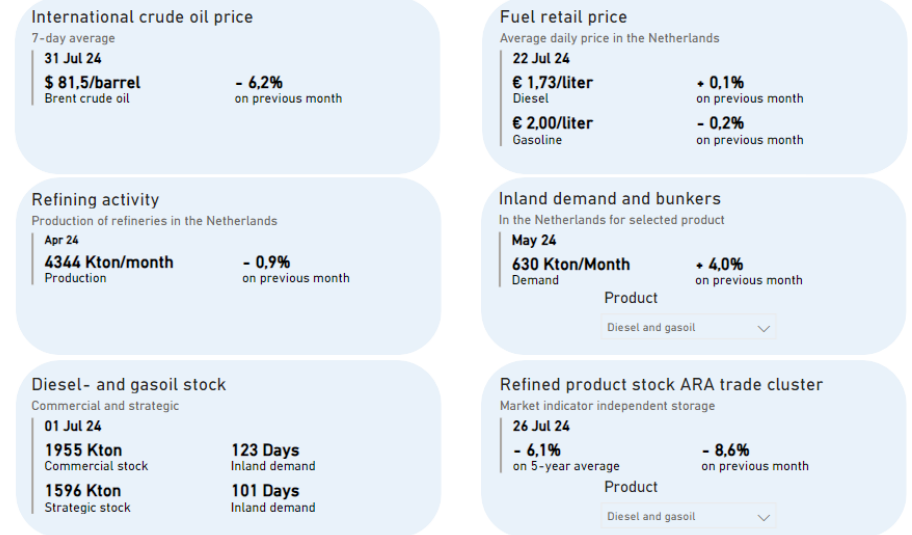


Source: COVA [website](#)



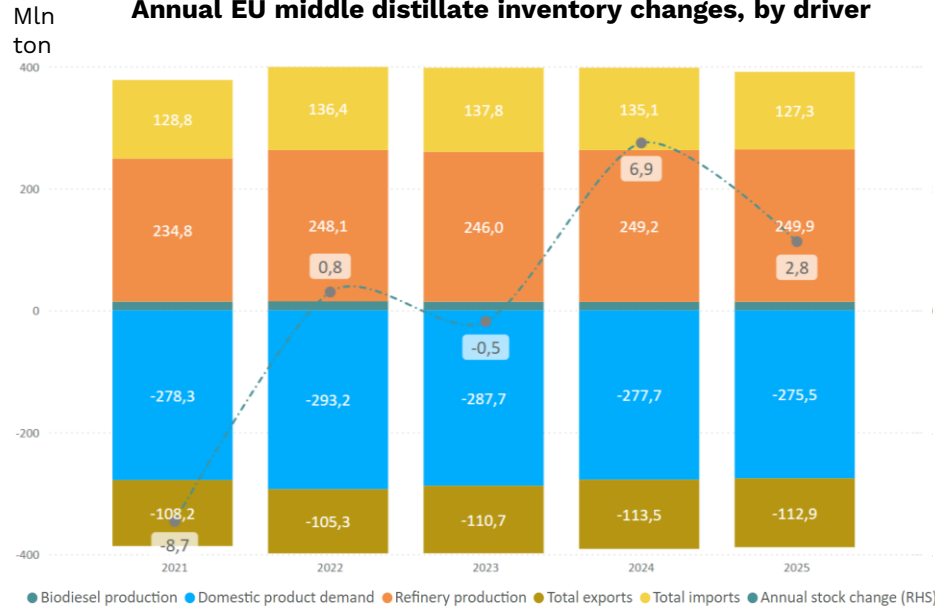
COVA also contributes to SoS by providing energy analyses

- At the request of the Dutch Ministry of Climate and Green Growth, COVA developed three quantitative tools:
 - I. A periodic scenario outlook to assess SoS risks in the middle distillate market.
 - II. A public dashboard to visualize oil data for broader public engagement.
 - III. An internal dashboard to monitor and signal the need for escalation during crisis phases.
- The scenario outlook is based on an in-house model designed to evaluate medium-term SoS risks and test the robustness of emergency response measures.
- The public dashboard provides a wider audience with insights into developments in the oil market and amongst others includes an interactive map to explore import dependence.
- The internal dashboard offers policy makers structured information about market tightness and triggers for escalation during crises.
- These tools were developed with the belief that strengthening market foresight is, by itself, a critical component of risk mitigation.

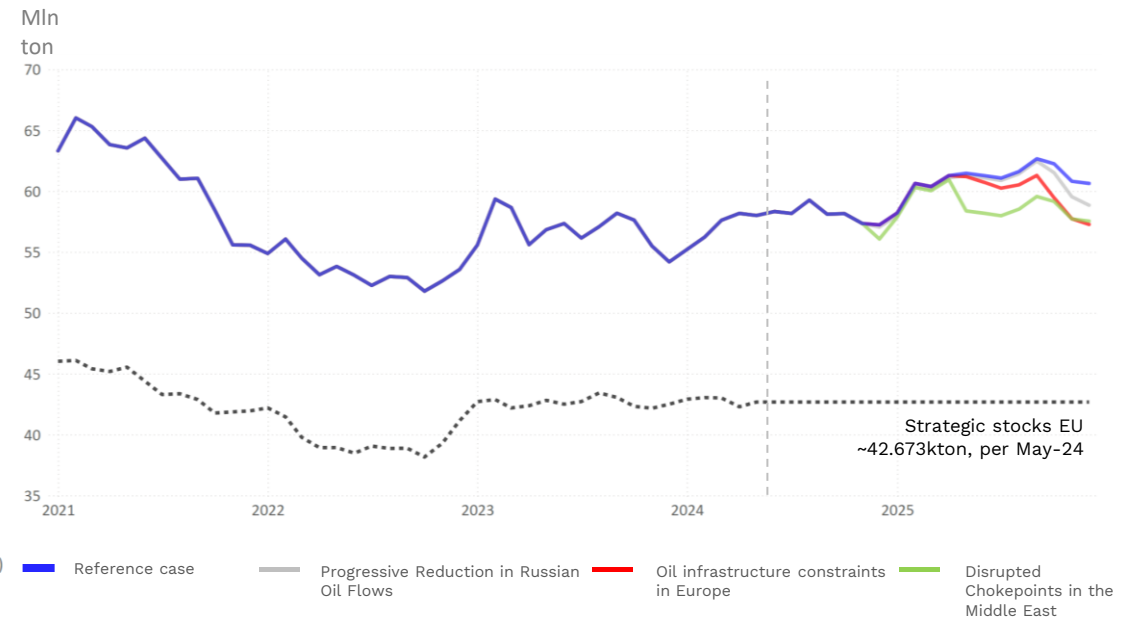


The middle distillate scenario outlook assess the impact of external shocks and tests robustness of emergency response measures

Annual EU middle distillate inventory changes, by driver



EU middle distillate inventories, by scenario



- The EU's reliance on middle distillate imports (jet fuel, diesel, and gasoil) has shifted from Russia to the Middle East, India, and the U.S. A large share of these imports flow through - or are produced in - the ARA hub.
- To assess SoS risks in this market, where Europe is particularly vulnerable to disruptions, COVA provides a periodic scenario outlook based on an in-house model.
- COVA's 2024 assessment concludes that a well supplied market substantially improves short term SoS. Particularly, falling demand and robust refinery production suggest that Europe's import recruitment for middle distillates might be falling this and coming year. This is good news for Security of Supply. Nevertheless, the continue to be areas where vigilance remains essential. Most notably this is the dependency on Druzhba in central Europe.

COVA



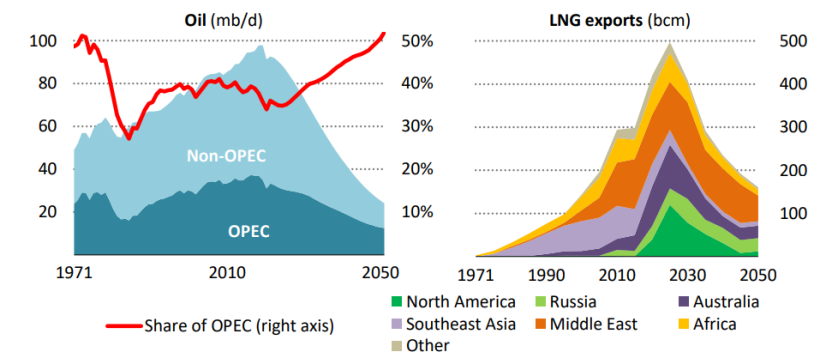
Will energy transition lead to improved energy security?

- In many cases the energy transition will eventually lead to improved energy security by diversifying fuel sources and suppliers
- Yet as the transition progresses and consumers diversify away from fossil fuels, new vulnerabilities and threats to energy security will arise
- For example, the share of OPEC members in oil production rises from 35% in 2021 to 43% in 2050 in the Announced Pledges Scenario, and to 52% in the Net Zero Emission scenario, comparable to the level in the 1970s
- **Global oil demand will be in decline, but a disruption could have a much bigger impact when production and transportation are concentrated in one specific region of the world**

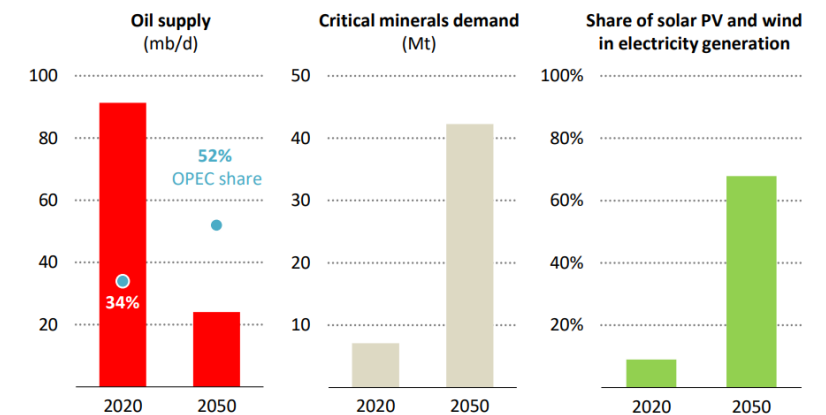
So yes - in many cases - but the transition also brings new vulnerabilities

SoS knowledge is available at CSE level and could be used to develop stockpiling of future energy carriers responsibly, amongst others, by exploring low carbon fuels stockpiling but also by increasing market transparency

Global oil supply and LNG exports by region in the NZE



Global energy security indicators in the net zero pathway





Centraal Orgaan Voorraadvorming Aardolieproducten
The Netherlands Petroleum Stockpiling Agency

Gertjan ten Broeke
Managing Director COVA

Mob. +31-6-27 32 94 03
E-mail tenbroeke@cova.nl

Thank you!

Questions? Please reach out to us.

COVA
Willemswerf, Boompjes 40
3011 XB Rotterdam
Tel: +31-10-413 4740

Visit us at COVA.NL