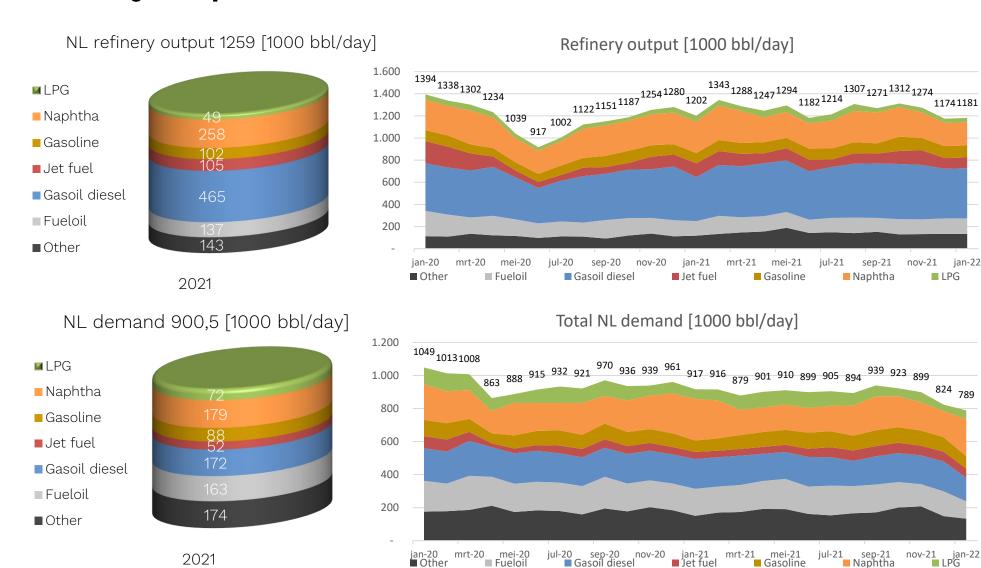




Oil security in The Netherlands

Presentation VNO - 25 March 2022

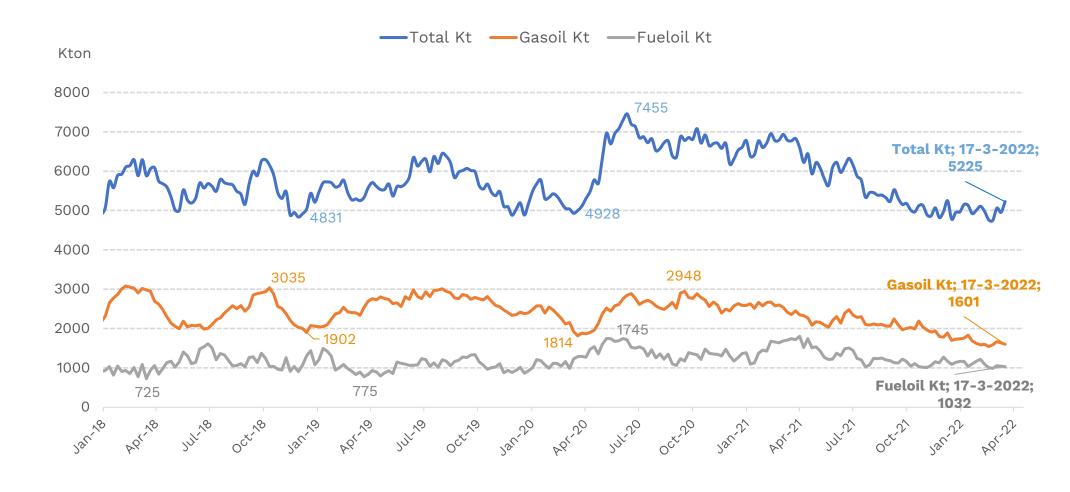
Refinery output vs. demand in the Netherlands







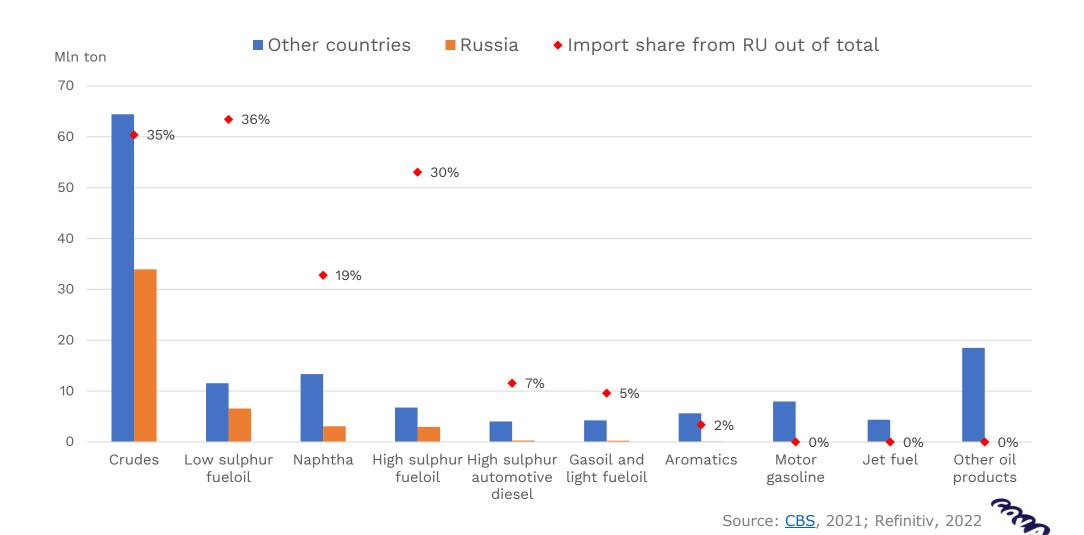
Amsterdam Rotterdam Antwerp independent storage levels (excludes refining storage)







Imports of crude oil and oil products to NL in 2021



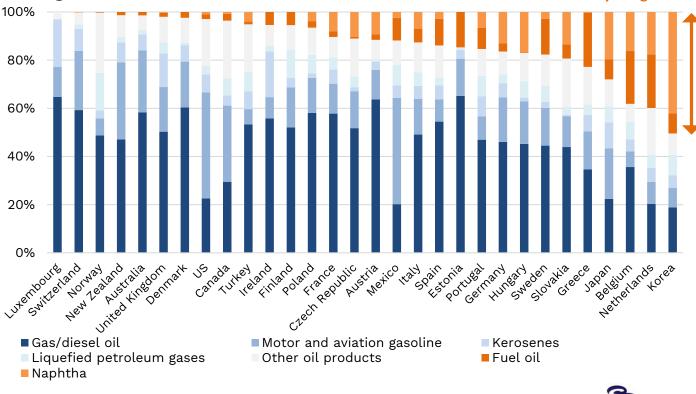


Oil security: international perspective

- Since 1974 OECD countries have strategic oil reserves, under supervision of the IEA (IEP agreement)
- 90 days net import and for EU countries an additional minimum-level of 61 days of inland consumption for oil producing countries

 Strategic oil stocks do not cover fuel oil marine bunkers and naphtha for petrochemical sector and blending

- Most IEA countries have stockholding agencies
- Strategic stocks in the EU consist out of minimum of 1/3rd oil products
- Stocks are released in case:
 - IEA members decide there is a supply crisis
 - Individual countries have the right to issue stocks for local crisis

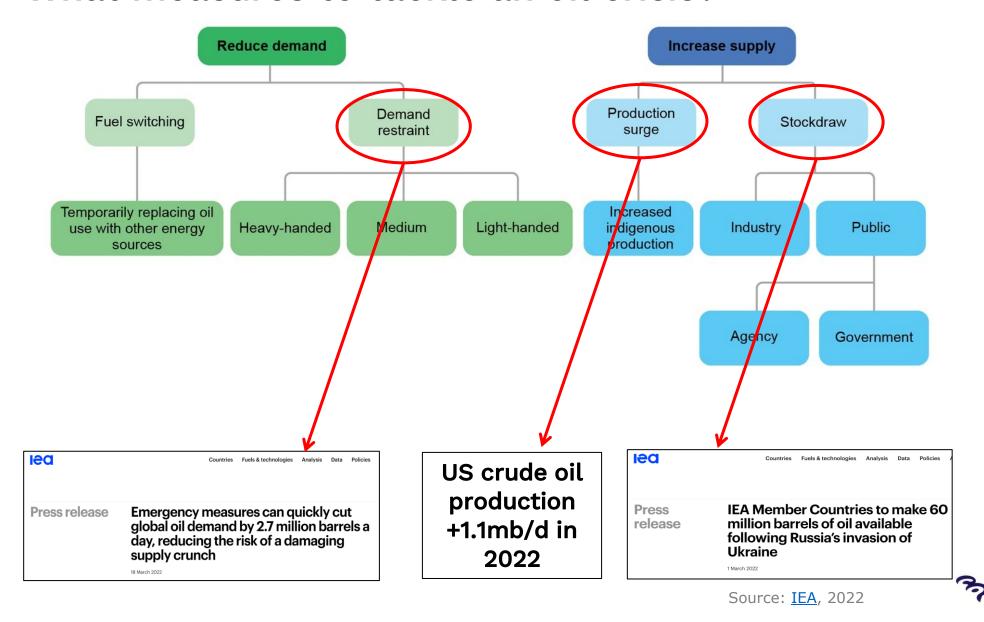


Source: JODI, 2021

Not included in the

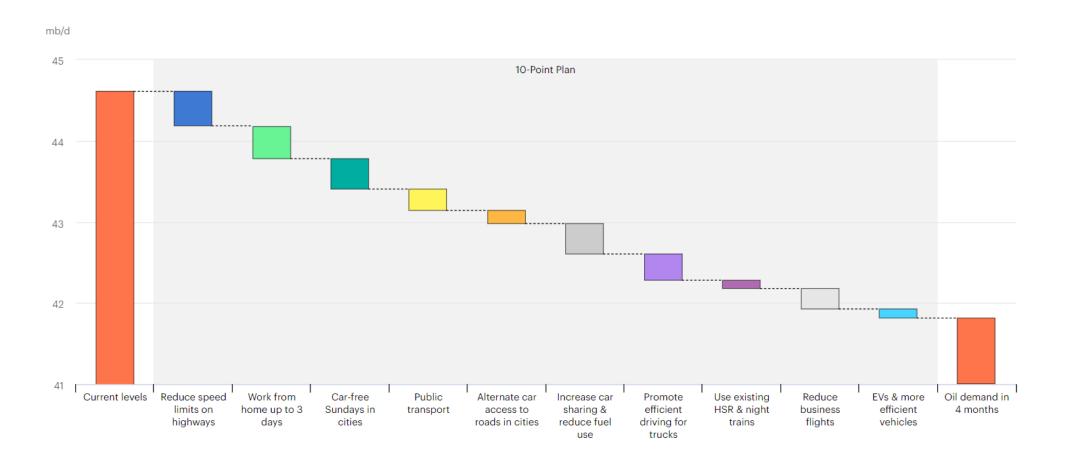
90 day obligation

What measures to tackle an oil crisis?





IEA demand restraint action plan - March 2022







IEA collective action - March 2022 stock release

(thousand barrels)

(
	Total	Public	Industry	Crude oil	Refined products
United States	30 000	30 000	0	30 000	0
Total IEA N. America	30 000	30 000	0	30 000	0
Australia	1 692	1 692	0	1 692	0
Japan	7 500	0	7 500	3 147 *	4 353 *
Korea	4 420	4 420	0	4 420	0
New Zealand	369	369	0	369	0
Total IEA Pacific	13 981	6 481	7 500	9 628	4 353
Austria	387	387	0	387	0
Belgium	253	253	0	0	253
Estonia	37	37	0	0	37
Finland	377	377	0	377	0
France	1833	1833	0	0	1833
Germany	3 199	3 199	0	2 130	1069
Greece	303	0	303	0	3/3
Hungary	265	265	0	265	0
Ireland	222	222	0	0	222
Italy	2 044	0	2 044	1 177	867
Lithuania	115	0	115	58 *	58 *
Luxembourg	109	0	109	109	0
Netherlands	823	0	823	411 *	411 *
Norway	400	0	400	0	400
Poland	1709	0	1 709	737	972
Spain	2000	0	2 000	0	2 000
Sweden	551	0	551	0	551
Switzerland	350	0	350	0	350
Turkey	1505	0	1505	0	1505
United Kingdom	2 200	0	2 200	446	1754
Total IEA Europe	19 682	6 573	12 109	6 097	12 585
Total IEA**	62 662	43 054	19 609	45 724	16 938

^{*} The breakdown in crude and product has been estimated; overall stockholding obligations on industry, which include both crude and refined products, have been lowered in these countries.

Release of **62.6 mln barrels** in **7** the initial period of 30 days

62.6 / 30 = **+2.09** Mb/d in March Additional supply

1500 mln barrels in public emergency reserves and about 575 million barrels under obligations with industry

Initial release represents **just 3%** of total emergency reserves

Source: IEA, 2022

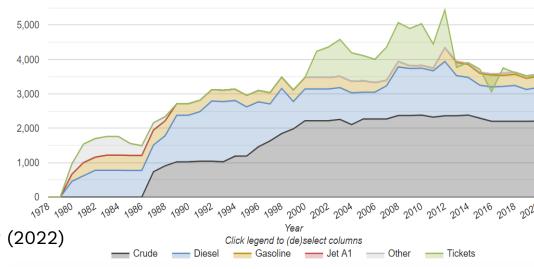


^{**} The total stock release of 62.7 mb is greater than the originally announced 61.7 mb as both France and Poland contributed larger volumes than initially pledged.



Oil security organisation in The Netherlands

- Legal basis: "Wet voorraadvorming aardolieproducten 2012"
- Stockholding obligation: higher of 90-days net import or 61 days of inland oil consumption
- Law stipulates that Industry (~20%) and COVA (~80%) should hold strategic oil stocks
- Annual stock obligation for industry and COVA by minister for Climate and Energy
- COVA established in 1978, based in Rotterdam
 - Holding of oil stocks at lowest possible costs
 - Funded by stockholding fee: €8 per 1000L diesel, gasoline, LPG
 - · Institute with legal task, non-profit foundation
 - Independent supervisory board appointed by the Minister
 - · Stocks management by managing director and staff (7)
- Stock withdrawals so far: Gulf war (1991),
 Hurricane Catrina (2005), Libya (2011), Ukraine war (2022)
- Releases by COVA done with tenders
- 2022 Ukraine (1st) release was a reduction of the Industry obligation with 20%



COVA stockholding portfolio [Kton c.o.e.]

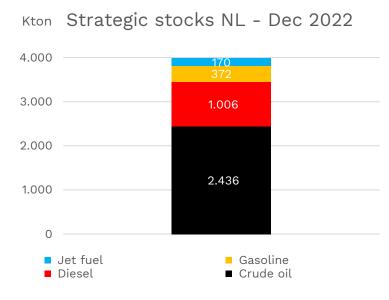
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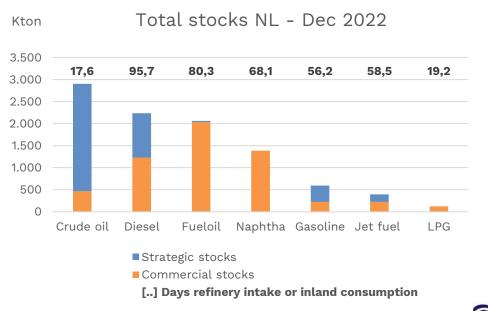
Source: COVA



Strategic stocks in The Netherlands

- Strategic stock levels end 2021 cover well over 90-days of total inland consumption (diesel, gasoline and jet fuel); more than 1/3rd consists of oil products
- The Netherlands is a large exporter to neighbouring countries: Amsterdam is the largest gasoline export hub and Rotterdam is 3rd largest hub for marine bunkers in the world. The oil infrastructure is larger than required for inland consumption. The strategic stock obligation does not cover for exports, bunker and naphtha.





Source: CBS (stocks) and Eurostat (demand)



Centraal Orgaan Voorraadvorming Aardolieproducten The Netherlands Petroleum Stockpiling Agency

