



Europe Dependency on Russian Gas

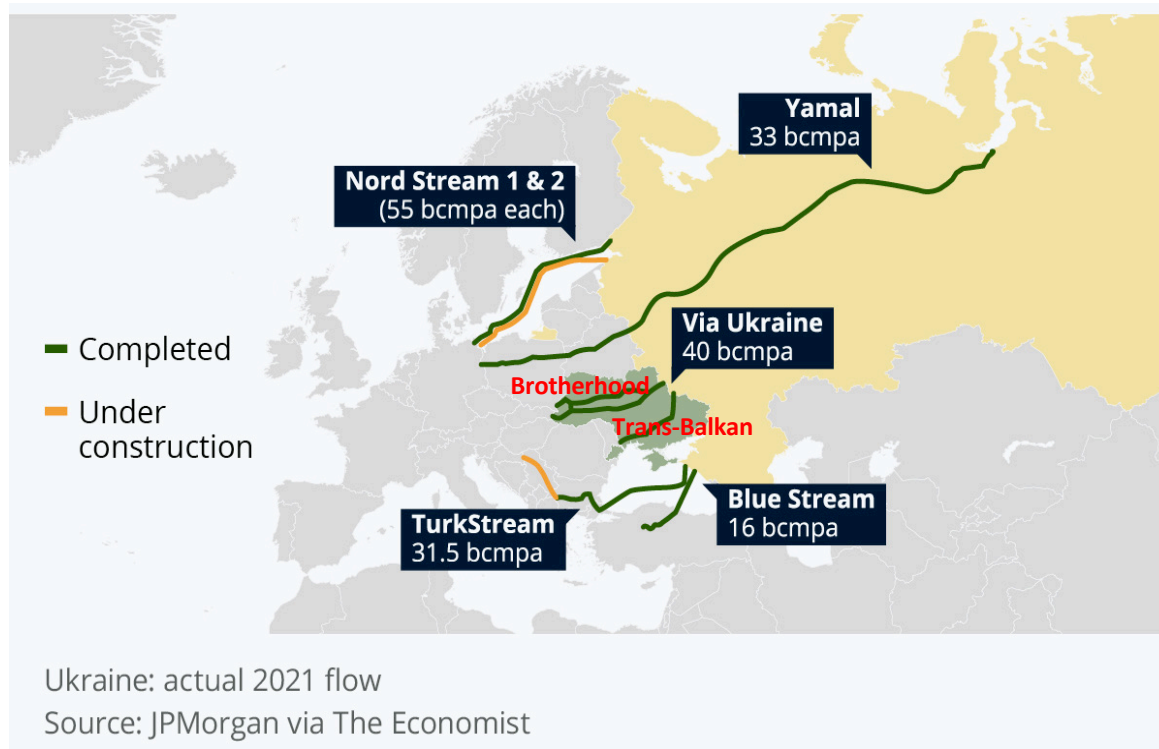
Ana Maria Jaller-Makarewicz

19 May 2022



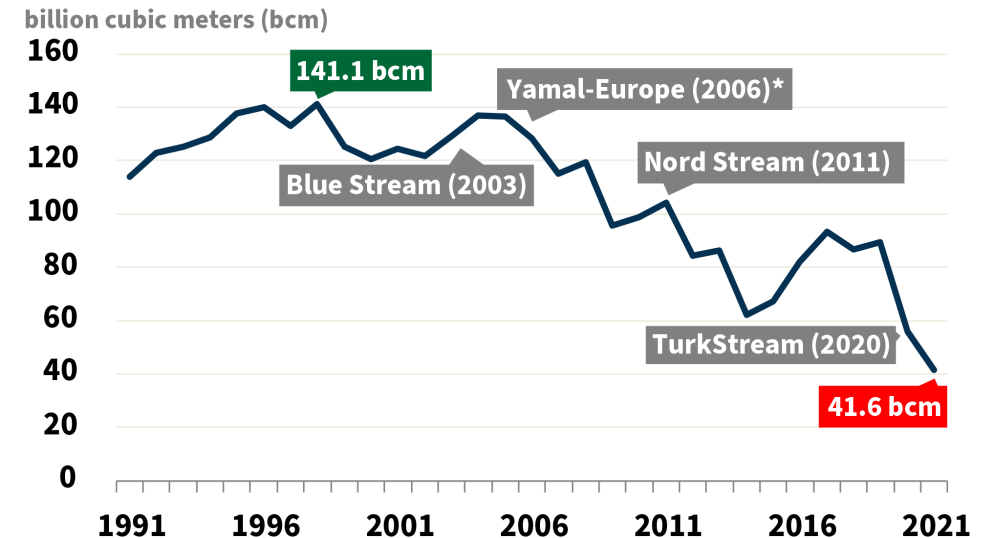
**Institute for Energy Economics
and Financial Analysis**
IEEFA.org

Since 2003, Europe Has Been Diversifying Gas Routes but Not Sources; and Transiting Through Ukraine Has Been Declining



Brotherhood: Ukraine-Slovakia-Western Europe
 Trans-Balkan: Ukraine-Moldova-Romania-Bulgaria

Natural Gas Transit through Ukraine

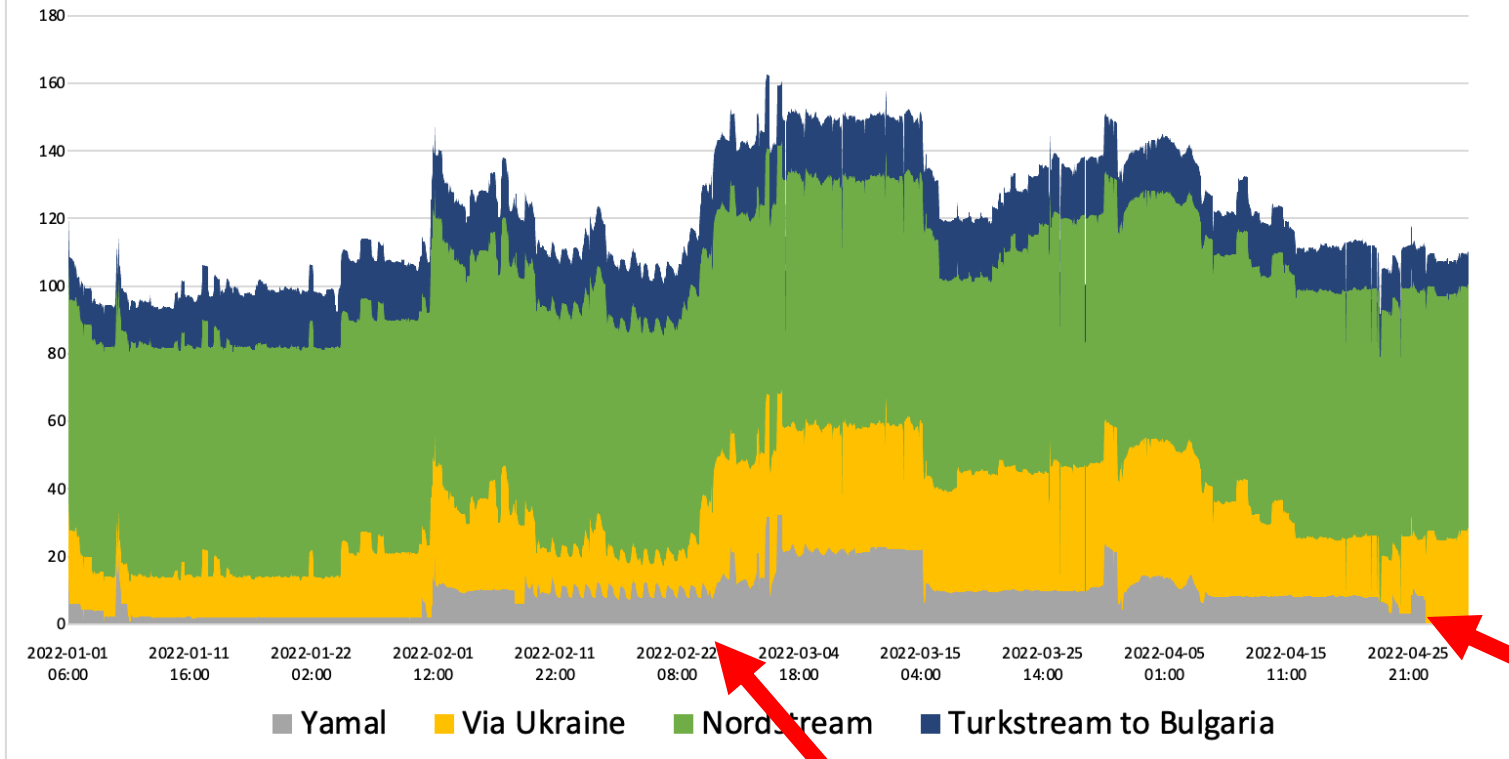


Source: Data for 1991 to 2020 comes from Naftogaz of Ukraine. For 2021, see "Transparency platform," Gas Transmission System Operator of Ukraine, <https://tsoua.com/en/transparency/test-transparency-platform/>.
 * For the Yamal-Europe pipeline, the date refers to the year it reached its design capacity. For the other pipelines, the date refers to the launch year.

CSIS | ENERGY SECURITY AND CLIMATE CHANGE PROGRAM

On 24 February 2022, Russia Invaded Ukraine

Russian Gas Flows to Europe (GWh)
January-April 2022



Increase in imports from Feb to Mar

- Russia's, 28%
- UK to EU, 43%
- Libya, 33%
- Azerbaijan, 17%
- LNG, 14%
- Norway, 6%
- Algeria, 5%

27 April 2022
Russia's Gazprom cut **Poland**
and **Bulgaria** off from its gas
over the countries' refusal to
pay for gas supplies in rubles.

How Are Poland and Bulgaria Coping Without Russian Gas?

Poland

(around 10 bcm from Russia)

- Increase in eastwards flows from Germany to Poland
- LNG terminal working at 100% capacity
- **Storage** was at around 79% capacity at end of April and is 90% today

Bulgaria

(around 3 bcm from Russia)

- Flows from Azerbaijan
- LNG deliveries via Turkey and Greece could be possible sources of gas

Europe Is an Important Hub of Russian LNG to the Rest of World

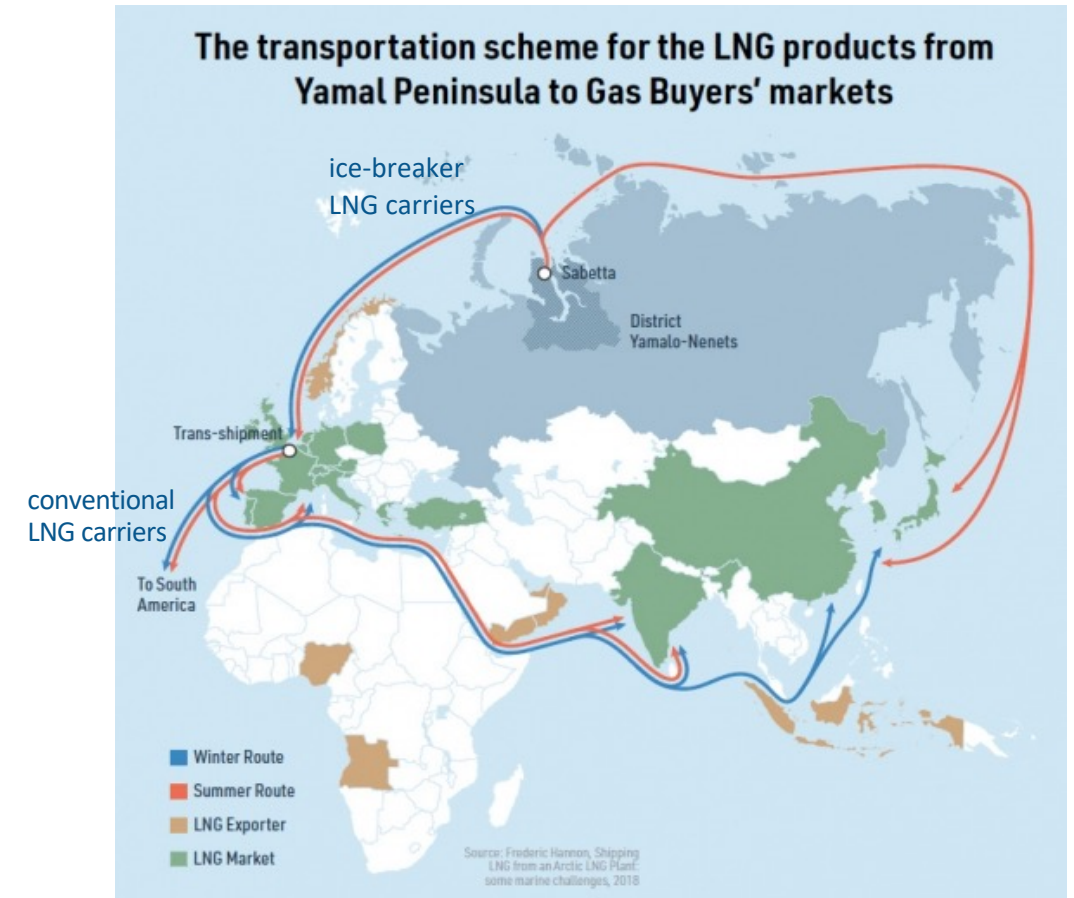
Zeebrugge LNG Terminal is a transshipment point for Russian LNG

2019

20-year transshipment contract between Fluxys and Yamal LNG

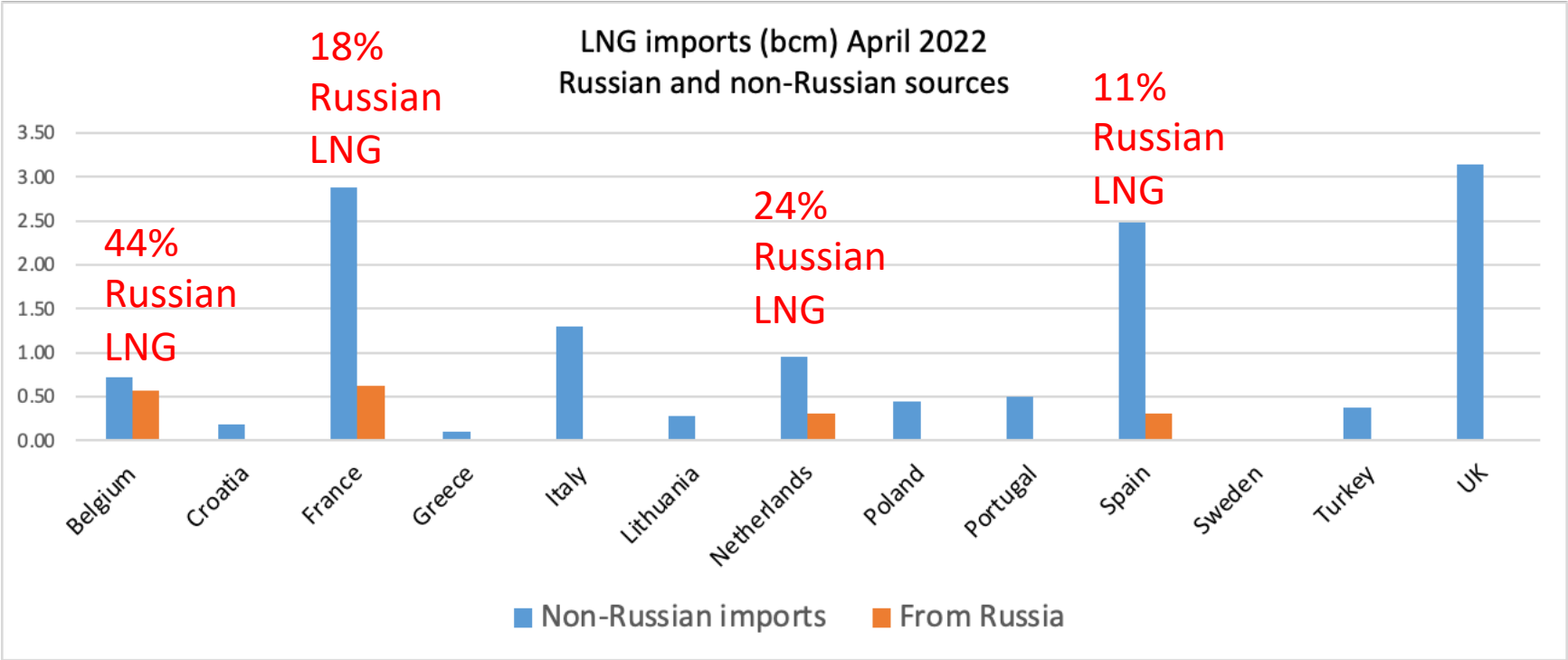
January and February 2022

- 5 of 8 eight cargoes exporting Yamal LNG transshipped at Zeebrugge
- 7 of 8 were sent to buyers to rest of the world



Source: Natural Gas World.

Europe Continues Importing Russian LNG



Source: entsog



“We should stop and do an analysis

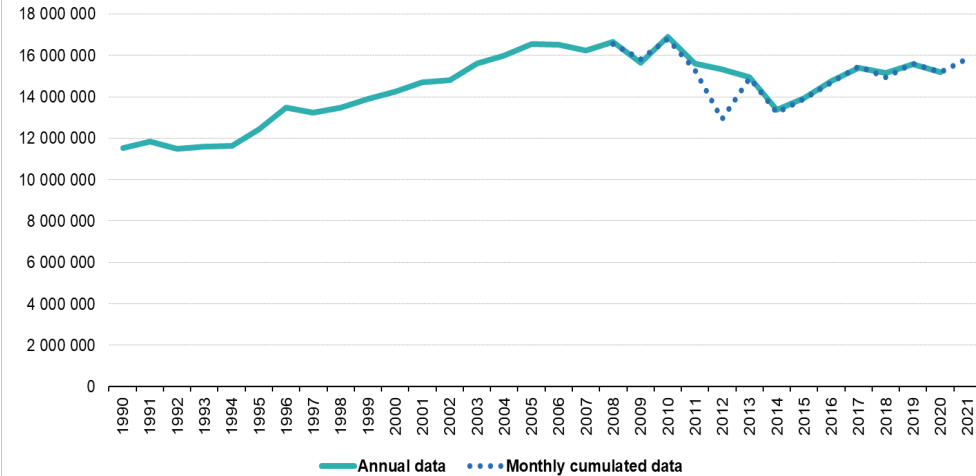
- what infrastructure do we have?
- what can be used more and improved?
- instead of going crazy building, building and building”

“There’s a lack of planning as a whole continent together.”

Quoted in *The Financial Times*, 16 May 2022, “Europe’s push to plug its energy gaps”

Gas Demand in Europe Has Not Been Growing and Is Expected to Fall

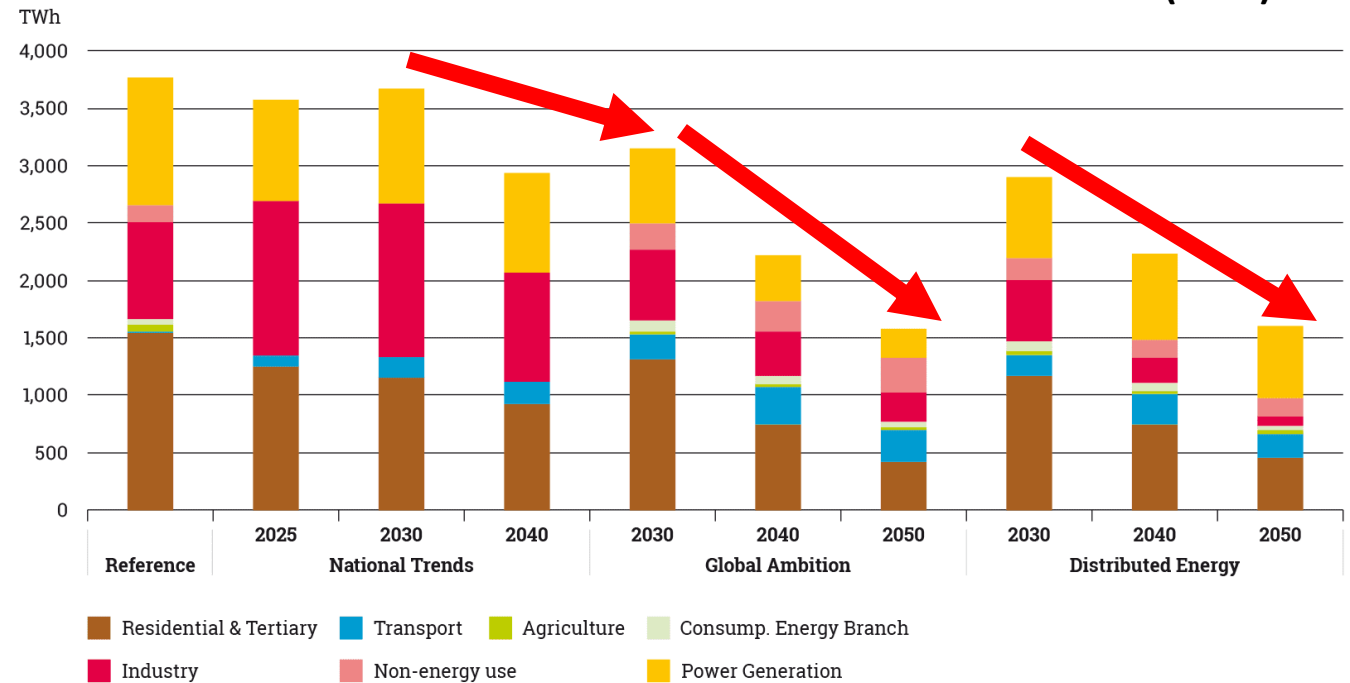
Inland demand of natural gas, EU, 1990-2021
(terajoules (Gross Calorific Value))



Source: Eurostat (online data codes: nrg_cb_gasm, nrg_cb_gas)

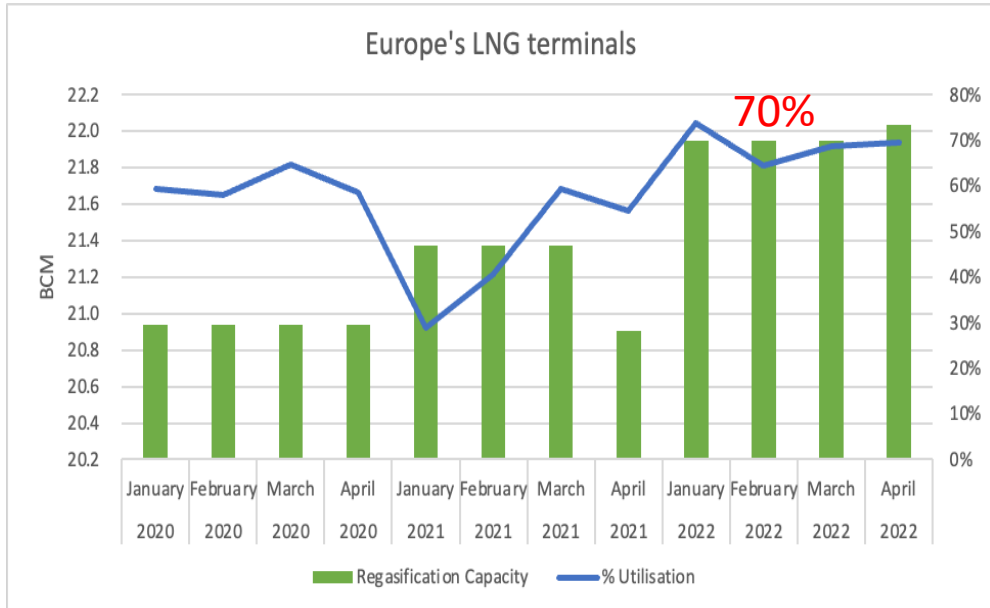


Methane demand per sector for EU27(TWh)

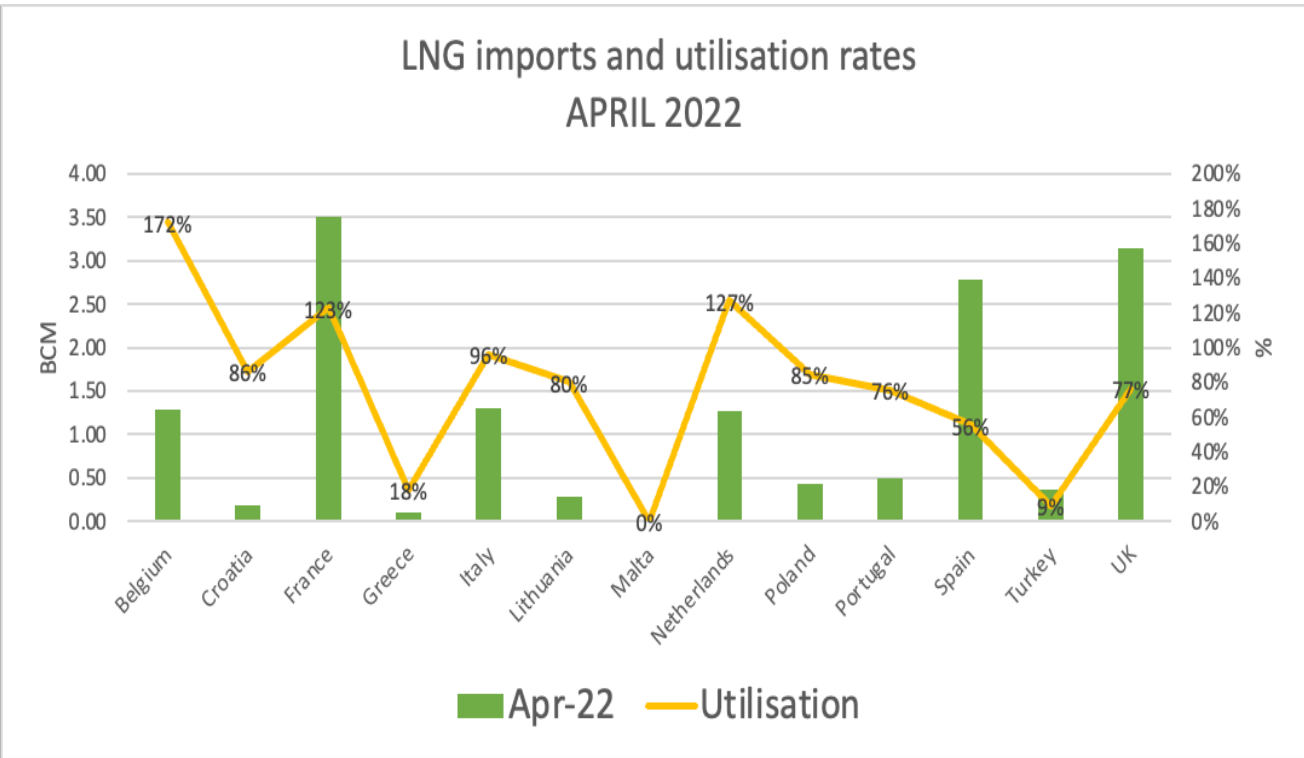
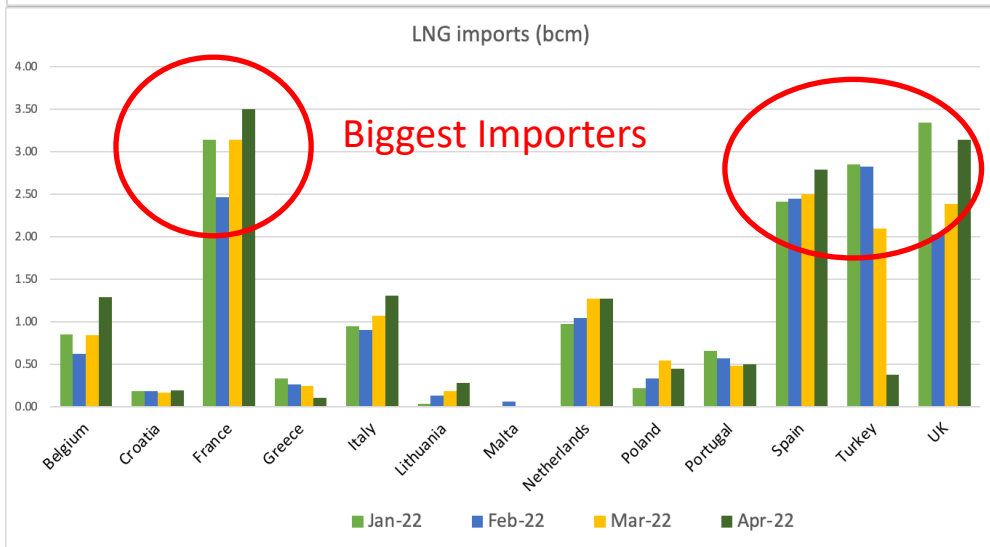


Source: entsog.

LNG Terminals Utilization Rate in 2022 Have Been 70% on Average



LNG imports have been growing, but there's still spare capacity: Turkey, Greece, Spain, UK, Portugal



Source: entsog.

Ana Maria Jaller-Makarewicz
Energy Finance Analyst, Europe
Institute for Energy Economics and Financial Analysis
ajallermakarewicz@ieefa.org