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The Current Energy Crisis and the Challenges Ahead

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FOR SOUTH EAST EUROPE


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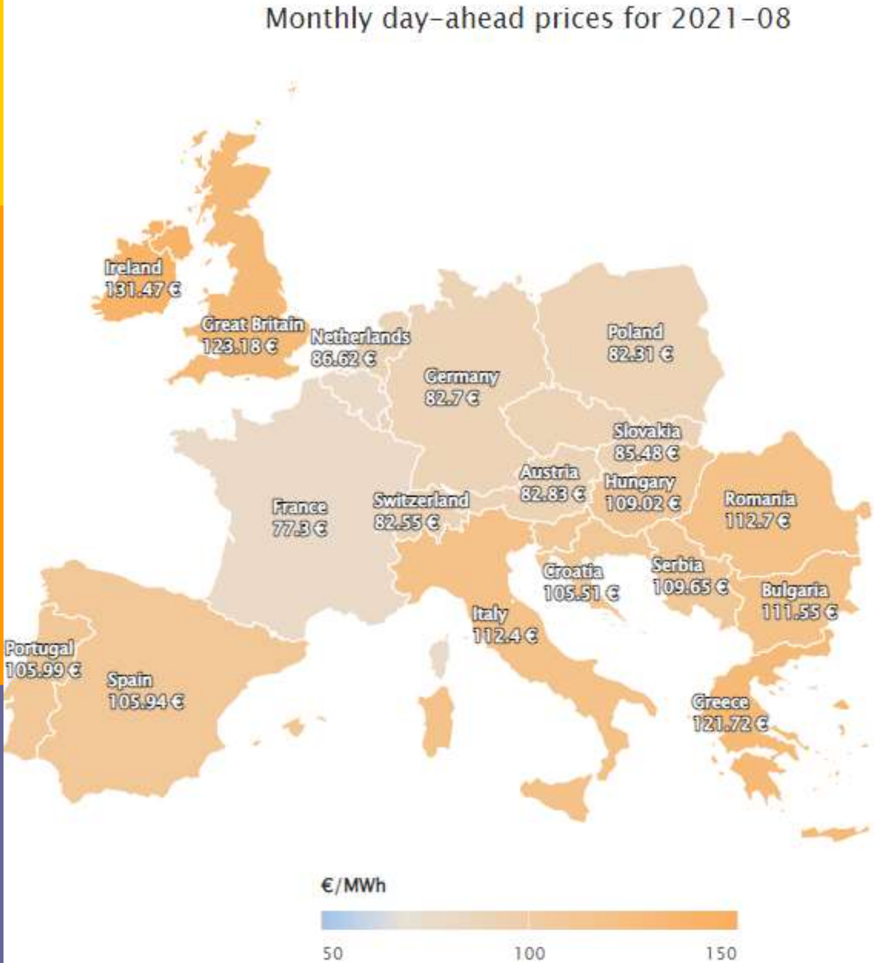
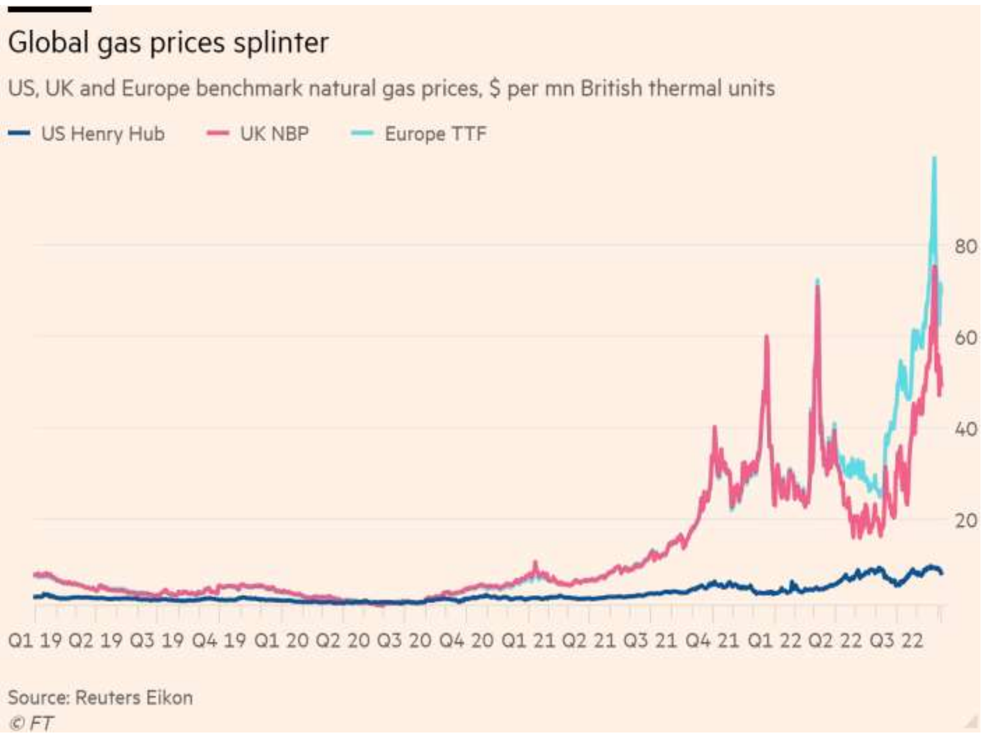
Introduction

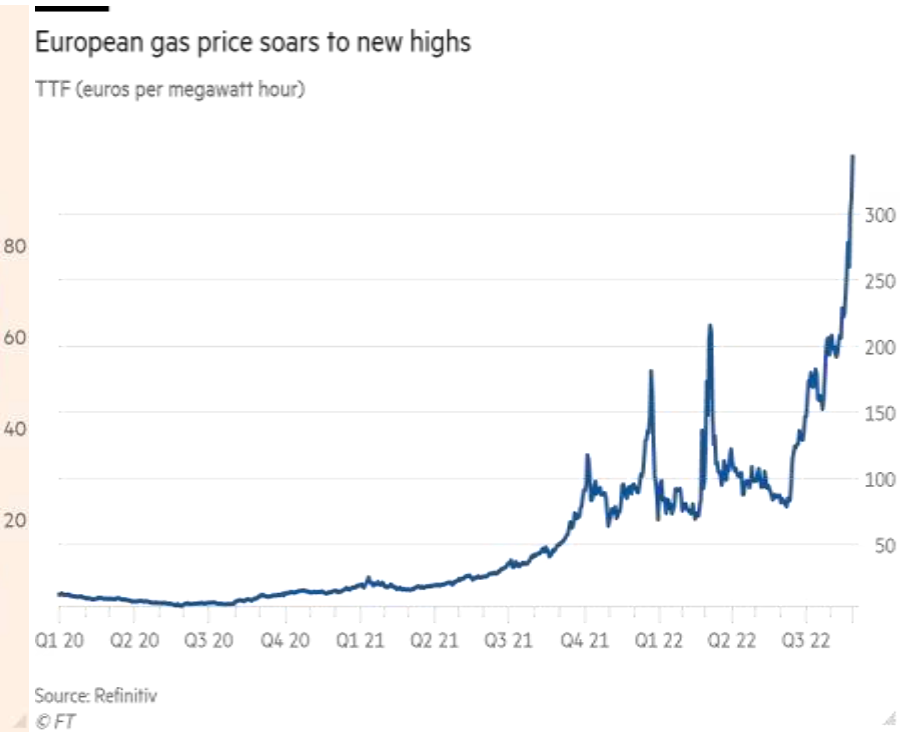
- An unprecedented energy crisis has been unfolding over the last 14-18 months with steep rises in oil, gas, coal and electricity.
- A far worse crisis than the ones in 1973 and 1979 since it has affected the whole spectrum of energy sources.
- The fundamental reasons behind the crisis appear to be a real supply shortage as the global economy has expanded exceedingly fast in the post Covid-19 period.
- Europe is worse hit by the current energy crisis than other parts of the world as the continent has to import from Russia and elsewhere more than 60% of the energy it consumes.
- The energy crisis in Europe has been further exarcebated by an ill conceived EU embargo against Russian oil, gas and coal imports.
- By blocking imports from EU's biggest energy supplier, the continent's energy markets have been destabilised with steep electricity and gas price rises and uncontrolled fluctuations.
- Substituting Russian gas with imported LNG can only substitute part of the missing gas volumes since the market produces finite gas quantities and no new major LNG suppliers are coming on stream before 2024.
- Likewise in oil, there appears to be a supply shortage as a result of years of underinvestment. Hence, the global market cannot increase much production, while OPEC+, which includes Russia and controls 50% of global oil supply, is not willing to open up the taps for fear of actual shortages in the near future.
- As a result of actual supply constraints and steady global demand, oil and gas prices are most likely to stay high over the next 12-18 months.
- A predicted global economic recession may curb demand but this is expected to be marginal, while oil and gas supply shortages are expected to influence a lot more price dynamics.
- As demand for oil and gas (especially LNG) is not expected to wane any time soon, the outlook for increased shipping activity is expected to remain strong with freight rates maintaining for sometime their current elevated level.

Average Day-ahead Electricity Prices in Europe



Global and European Gas Prices

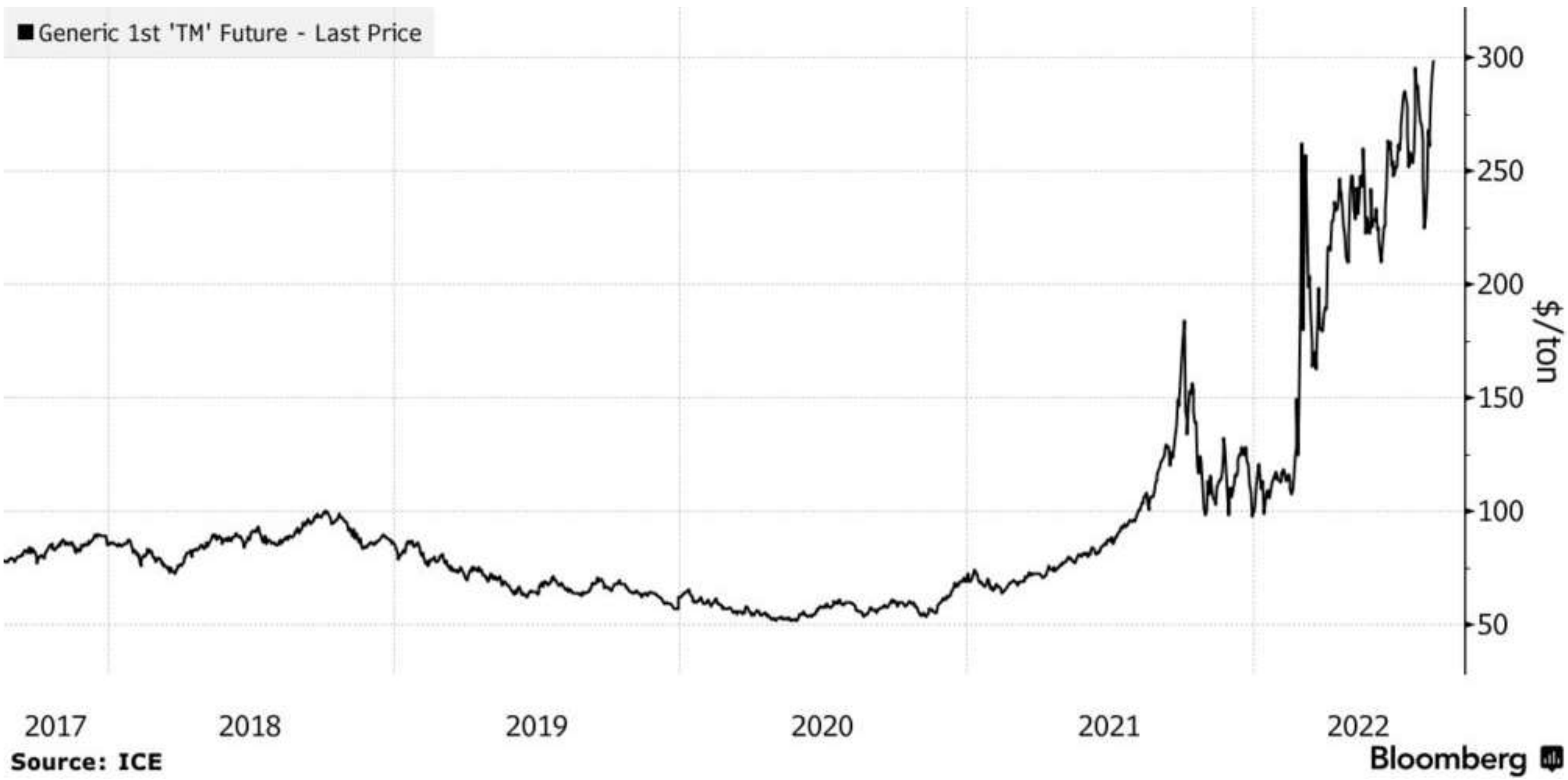




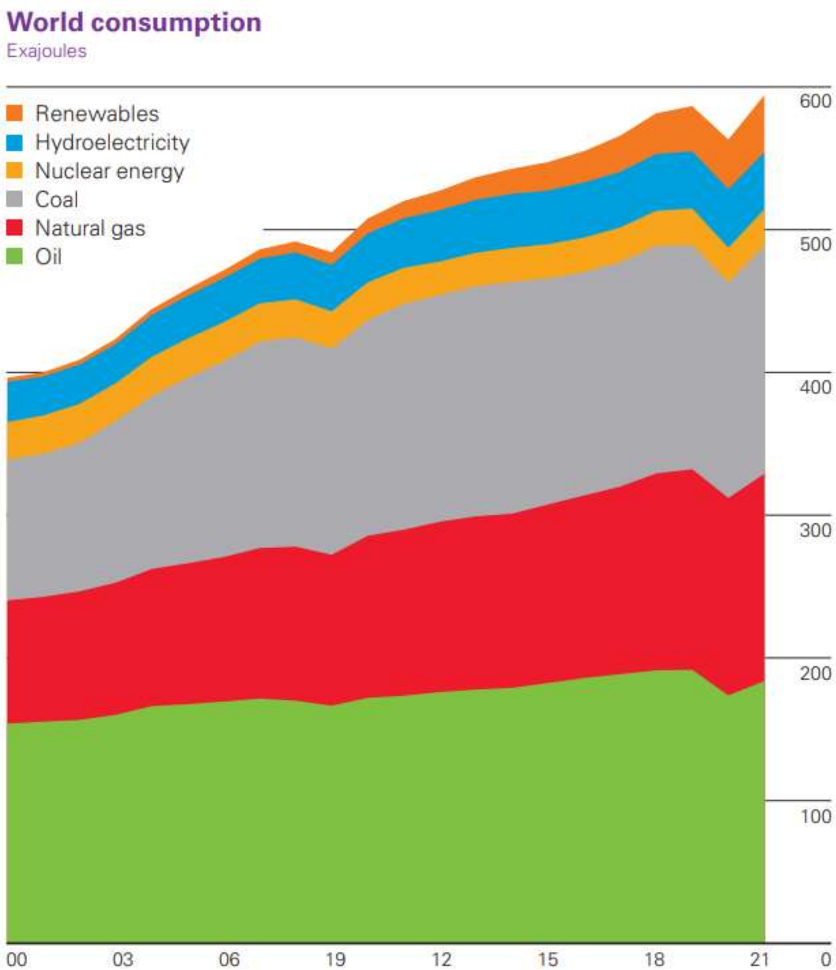
ICE Brent Crude Oil Front Month (1 Year)

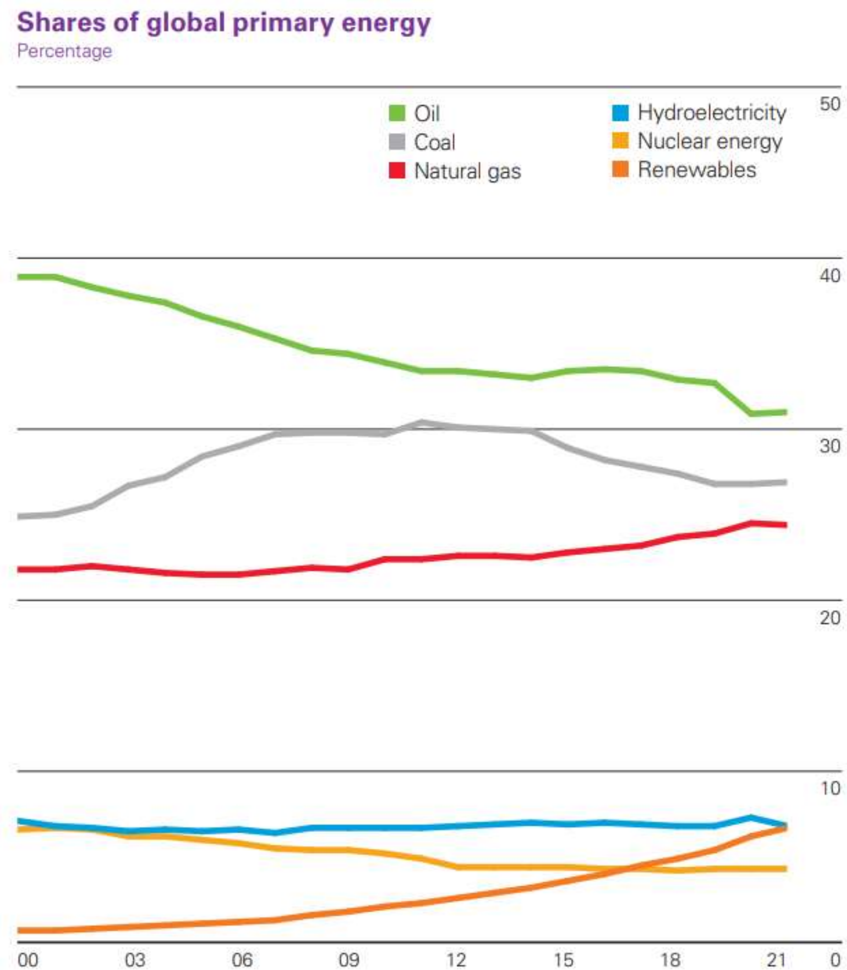
Sources: ICE, Financial Times

European Coal is in the Midst of an Historic Rally as Demand Surges



Global Energy Consumption and Shares of Global Primary Energy

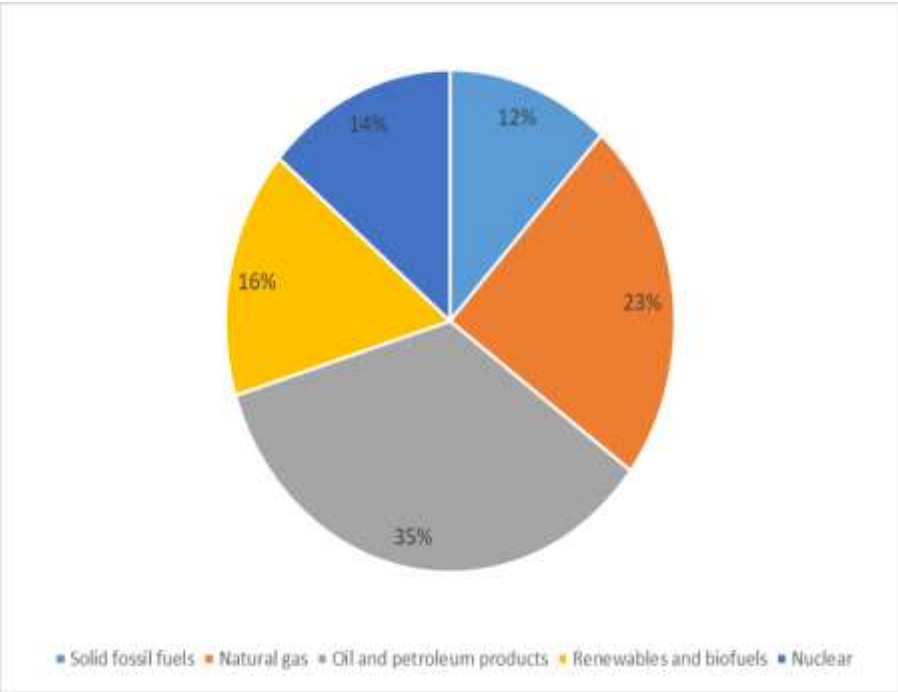




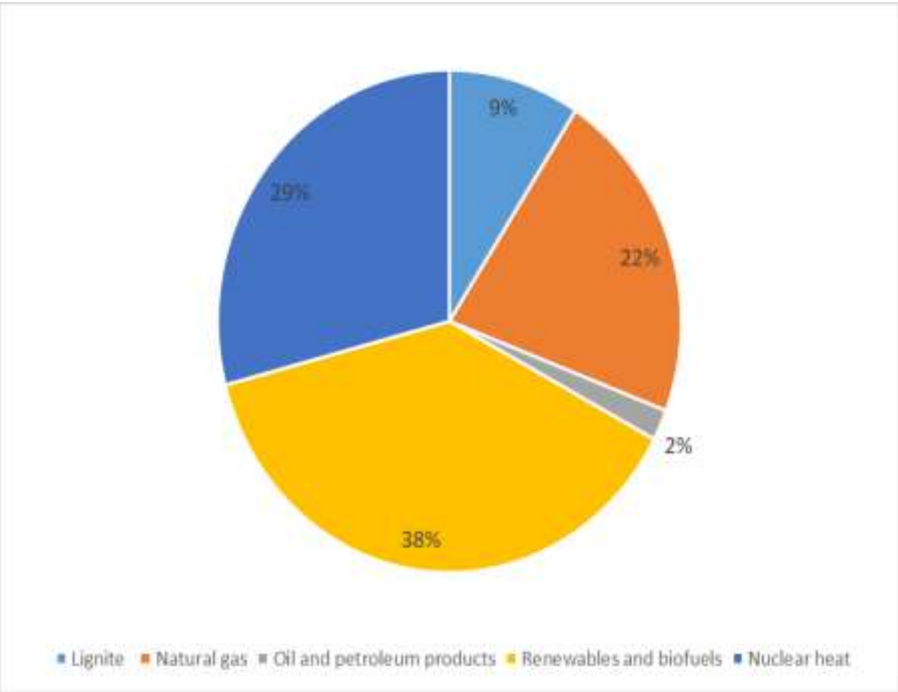
Source: BP Statistical Review of World Energy 2022

Energy and Electricity Mix in EU-27, 2019

Energy Mix in EU-27

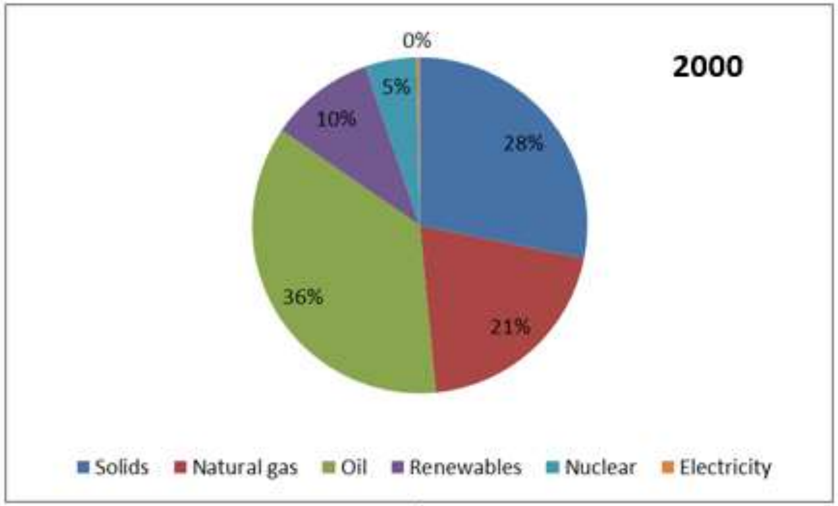


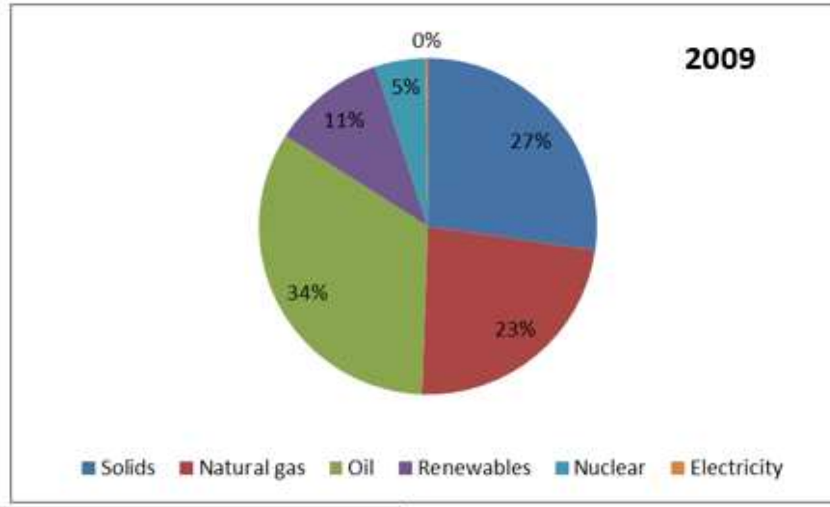
Electricity Mix in EU-27

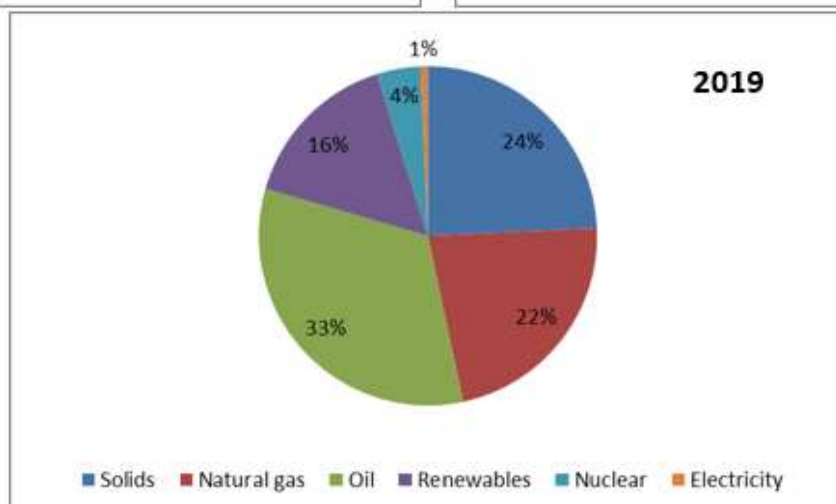


Source: Eurostat

SE Europe's Energy Mix, **Including Turkey**, 2000, 2009 and 2019

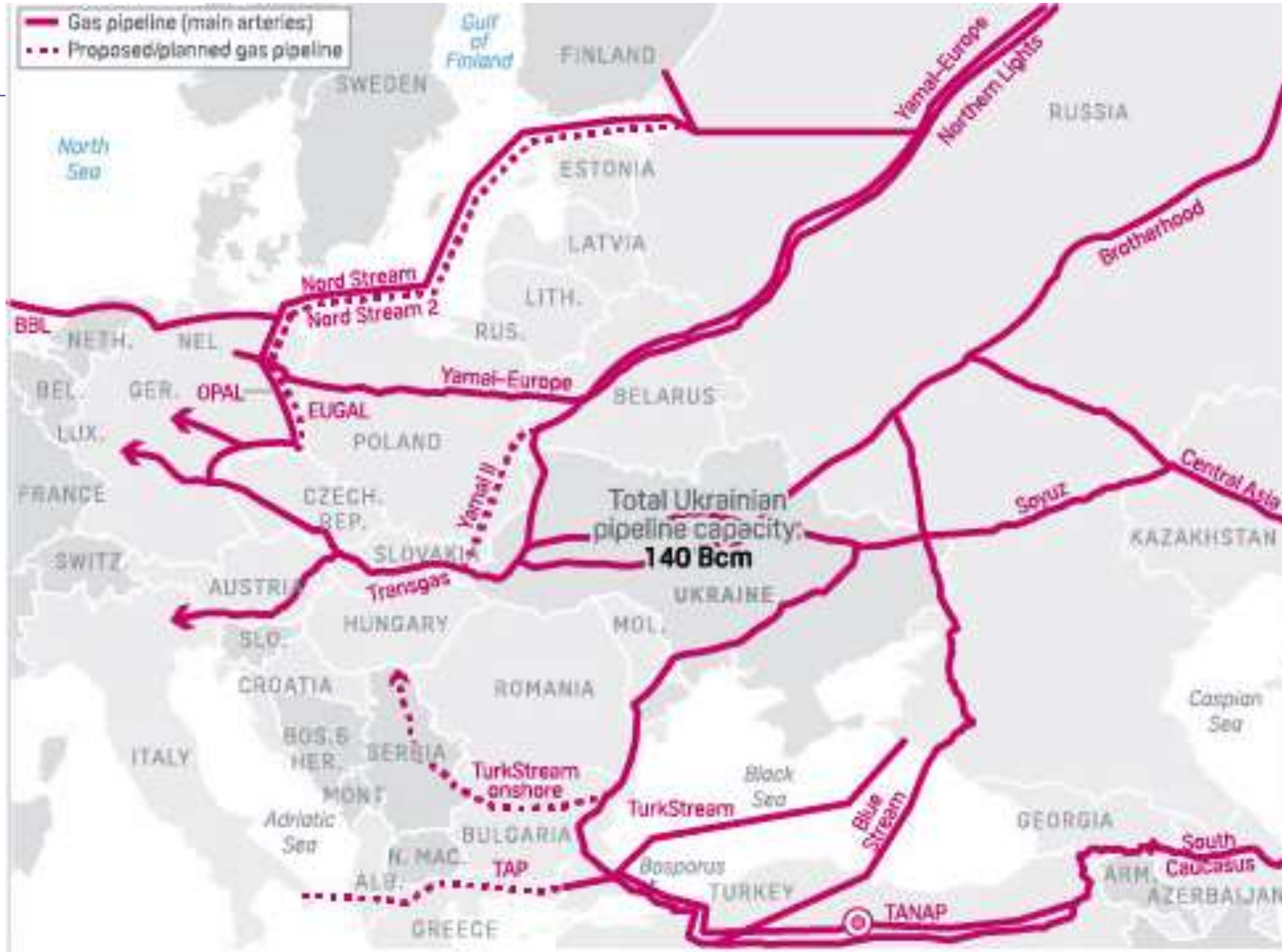






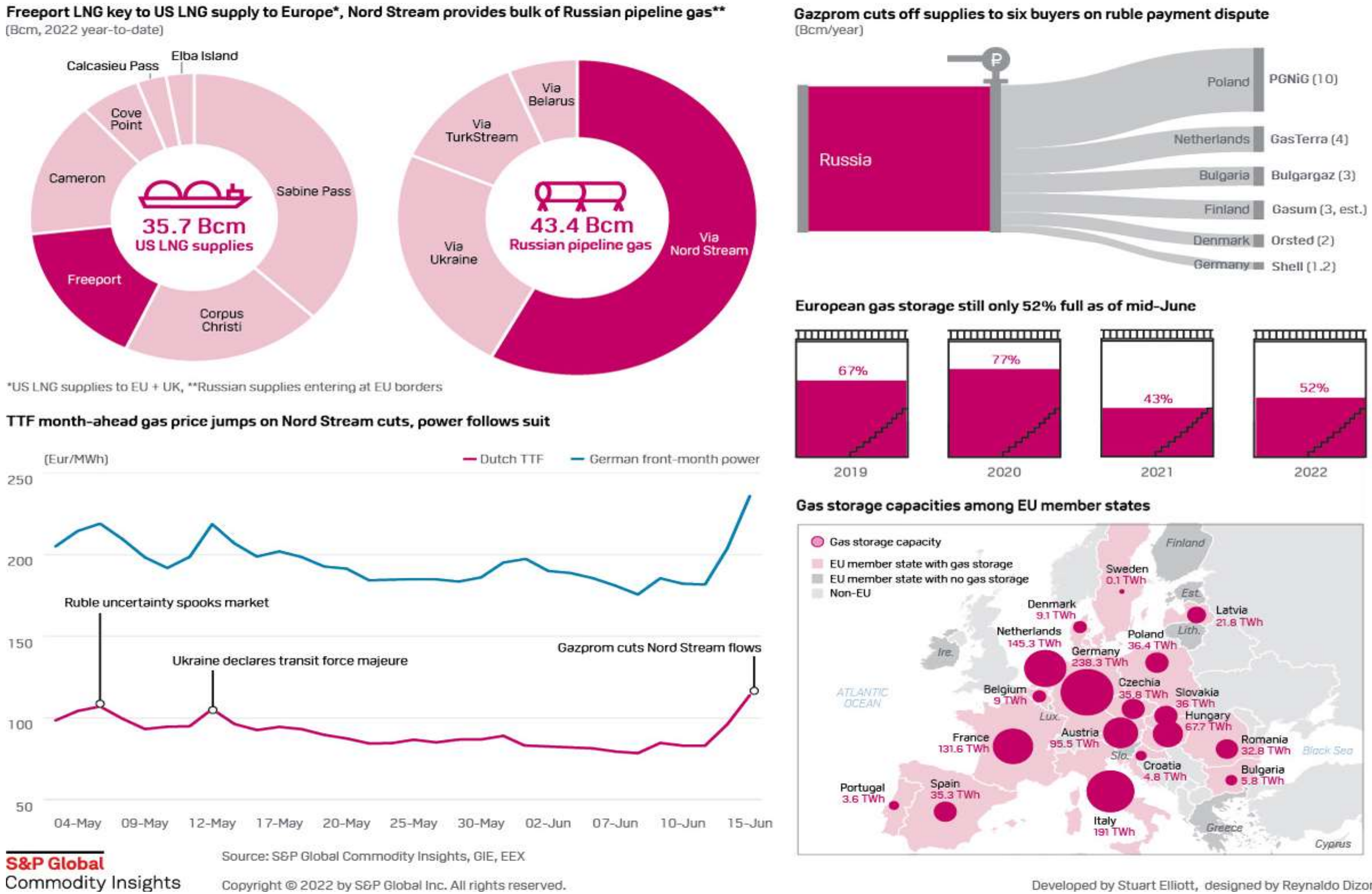
Source: Eurostat

Europe’s Gas Pipeline Ties to Russia



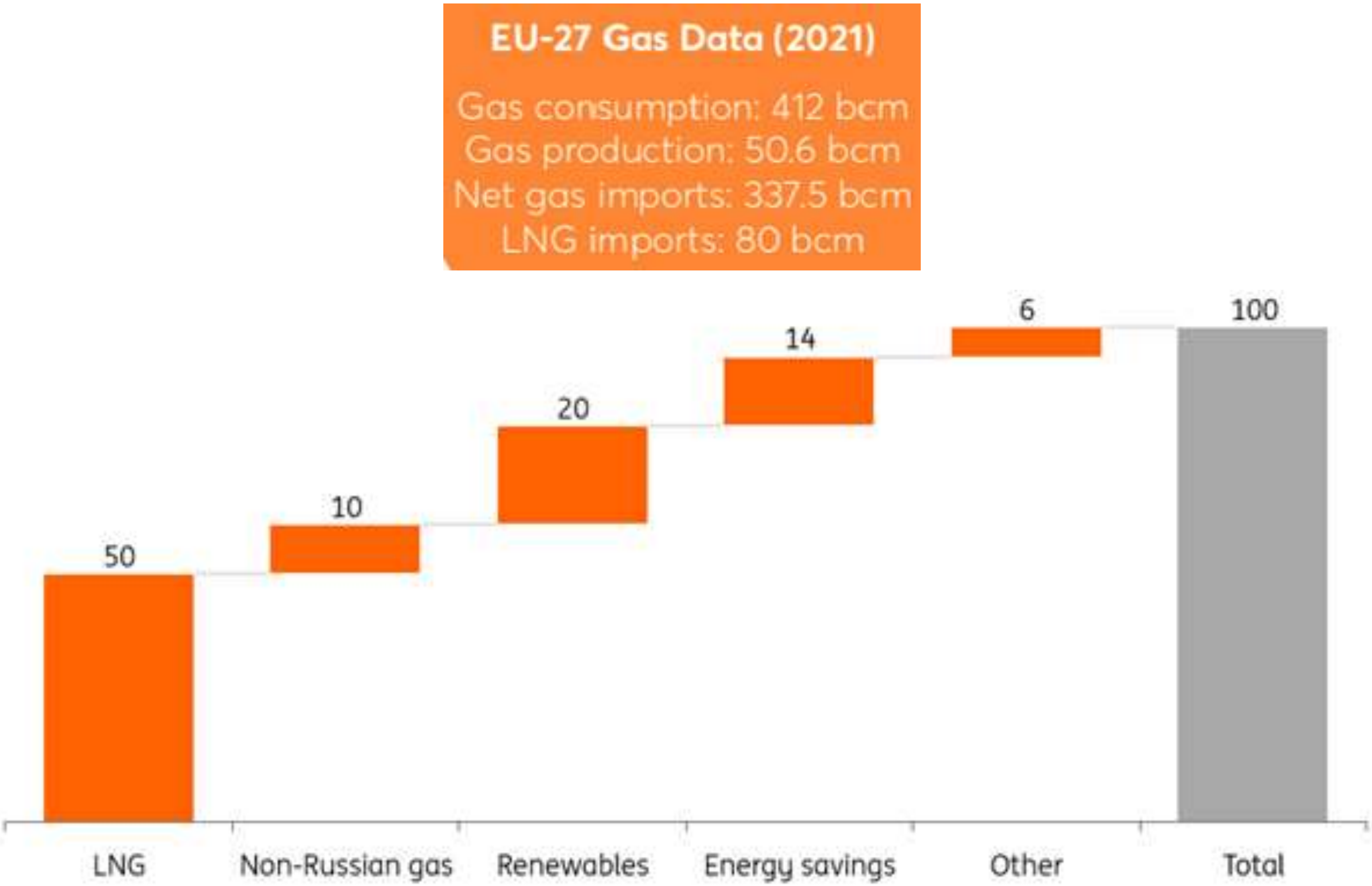
Source: S&P Global Platts

Europe on Brick of Gas Crisis as Russia Squeezes Market



Source: Eurostat

REPowerEU's Targets Aiming to Reduce Gas Consumption by 100 bcm by 2022



Source: European Commission

EU Imports of Natural Gas by Source

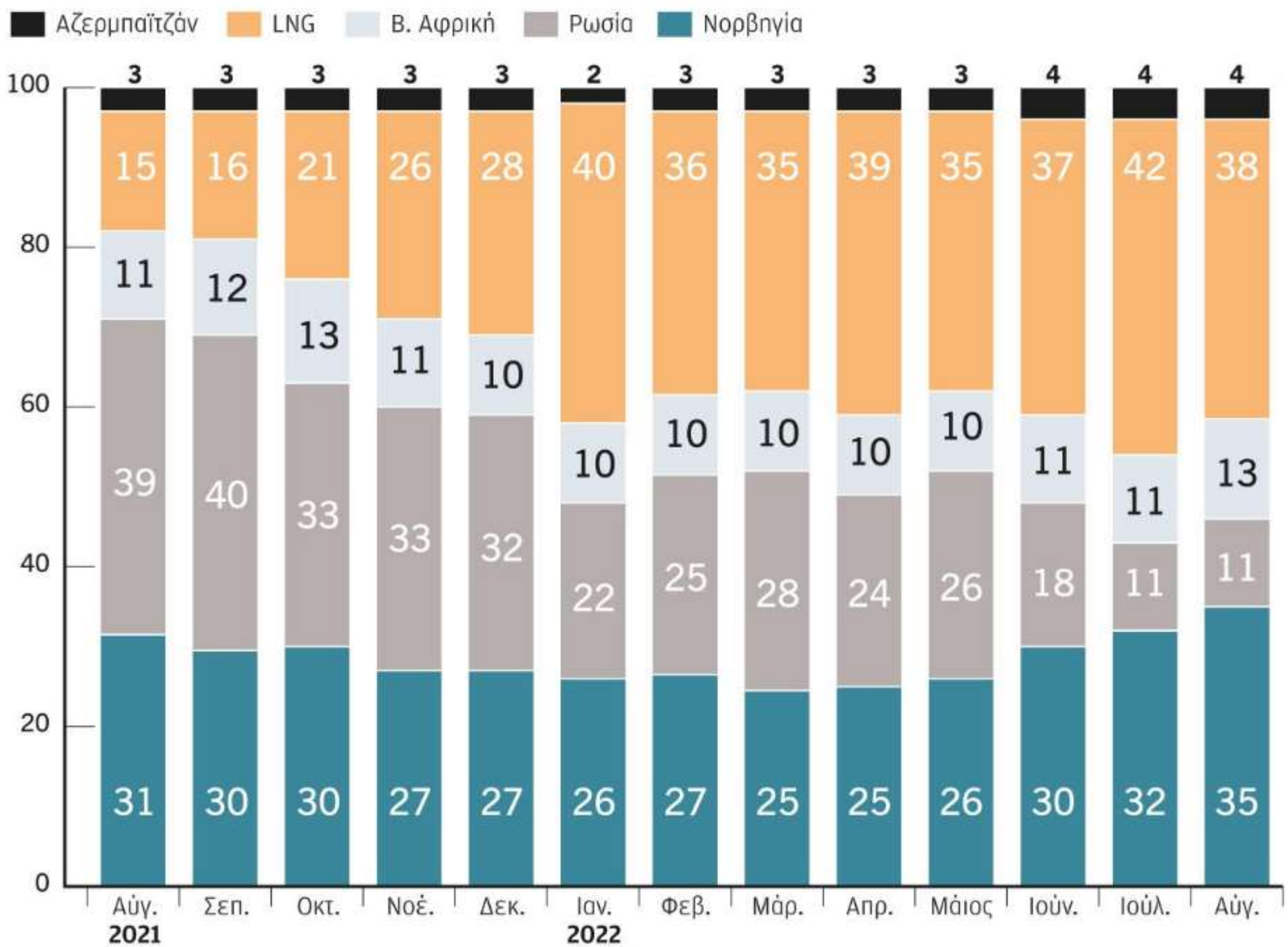
EU-27 Gas Data (2021)

Gas consumption: 412 bcm
Gas production: 50.6 bcm
Net gas imports: 337.5 bcm
LNG imports: 80 bcm

In 2021, the EU imported 58 bcm of Russian gas via Nord Stream, 37 bcm via the Ukrainian route, 33 bcm via the Belarus transit and 9 bcm via the Turk Stream.
Total = 137 bcm

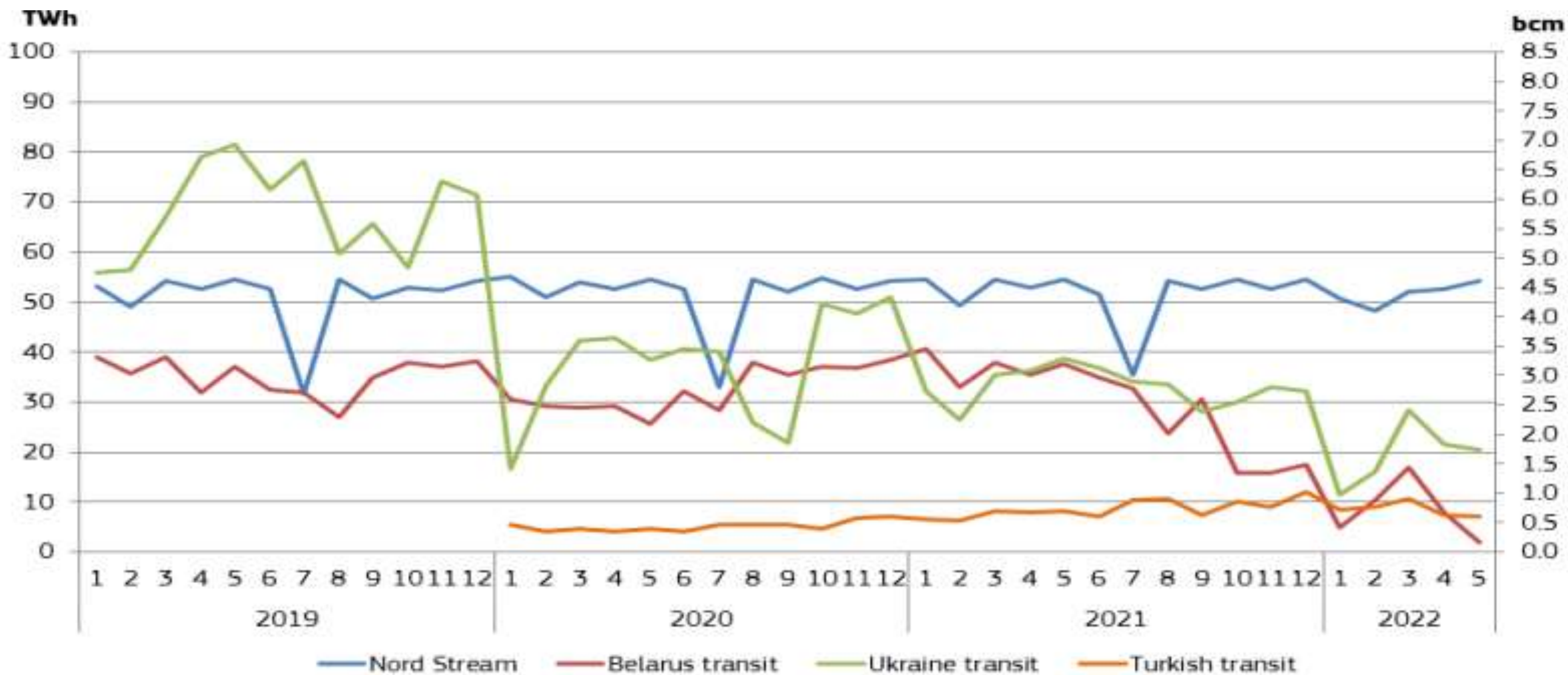
Source: European Commission

Share of European Gas Imports (%)



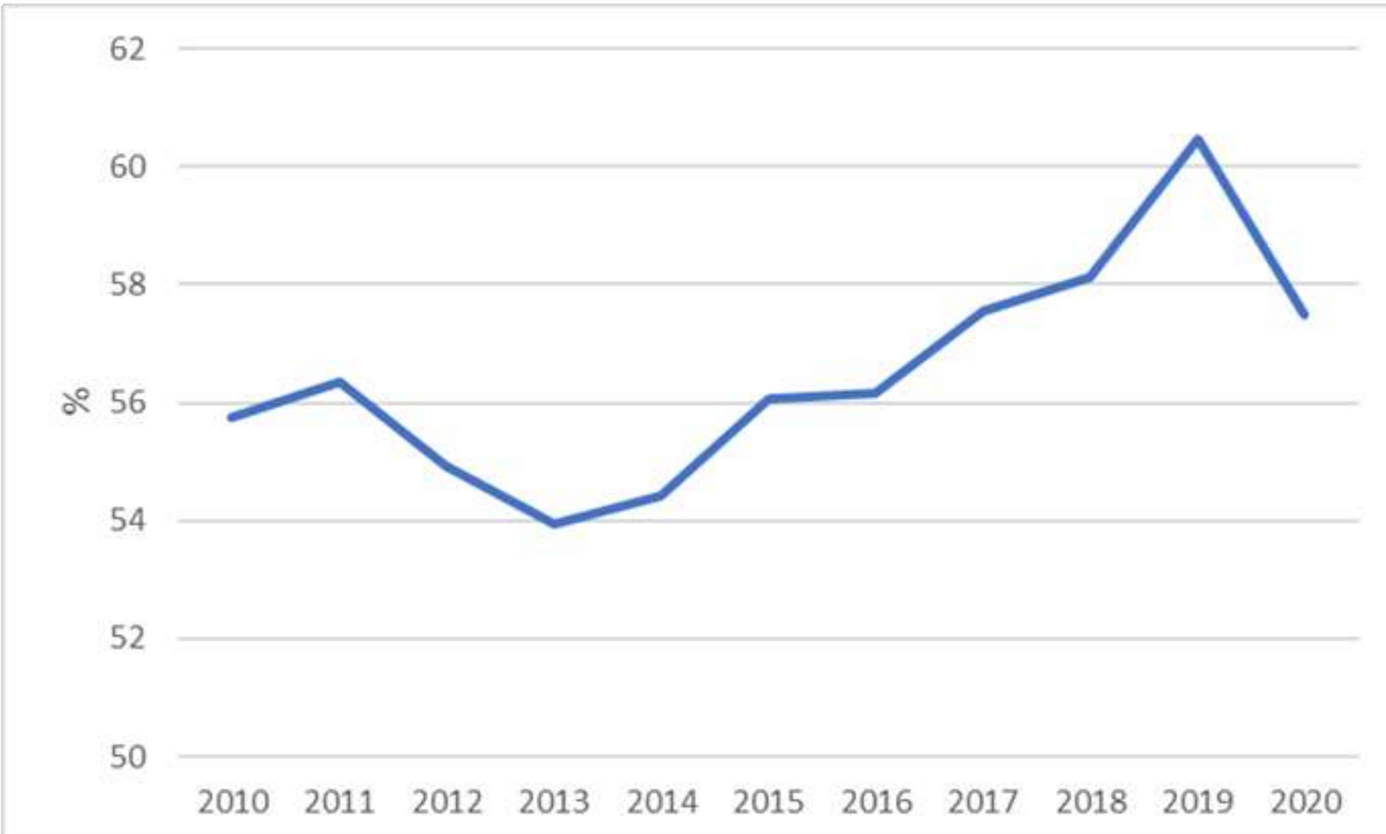
Source: European Commission

Monthly EU Imports of Natural Gas From Russia By Supply Route



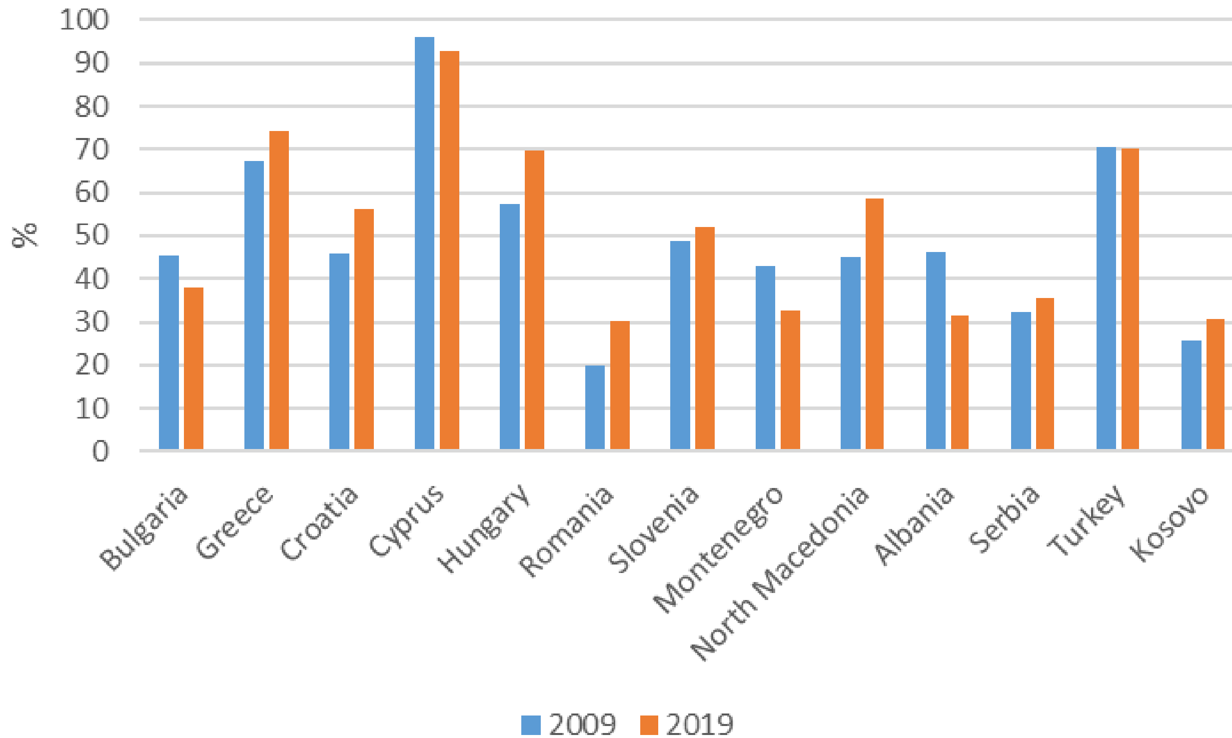
Source: European Commission

Evolution of the EU Energy Dependence (%) over 2010-2020



Sources: Eurostat, IENE

Energy Dependence in SE Europe (2009 and 2019)

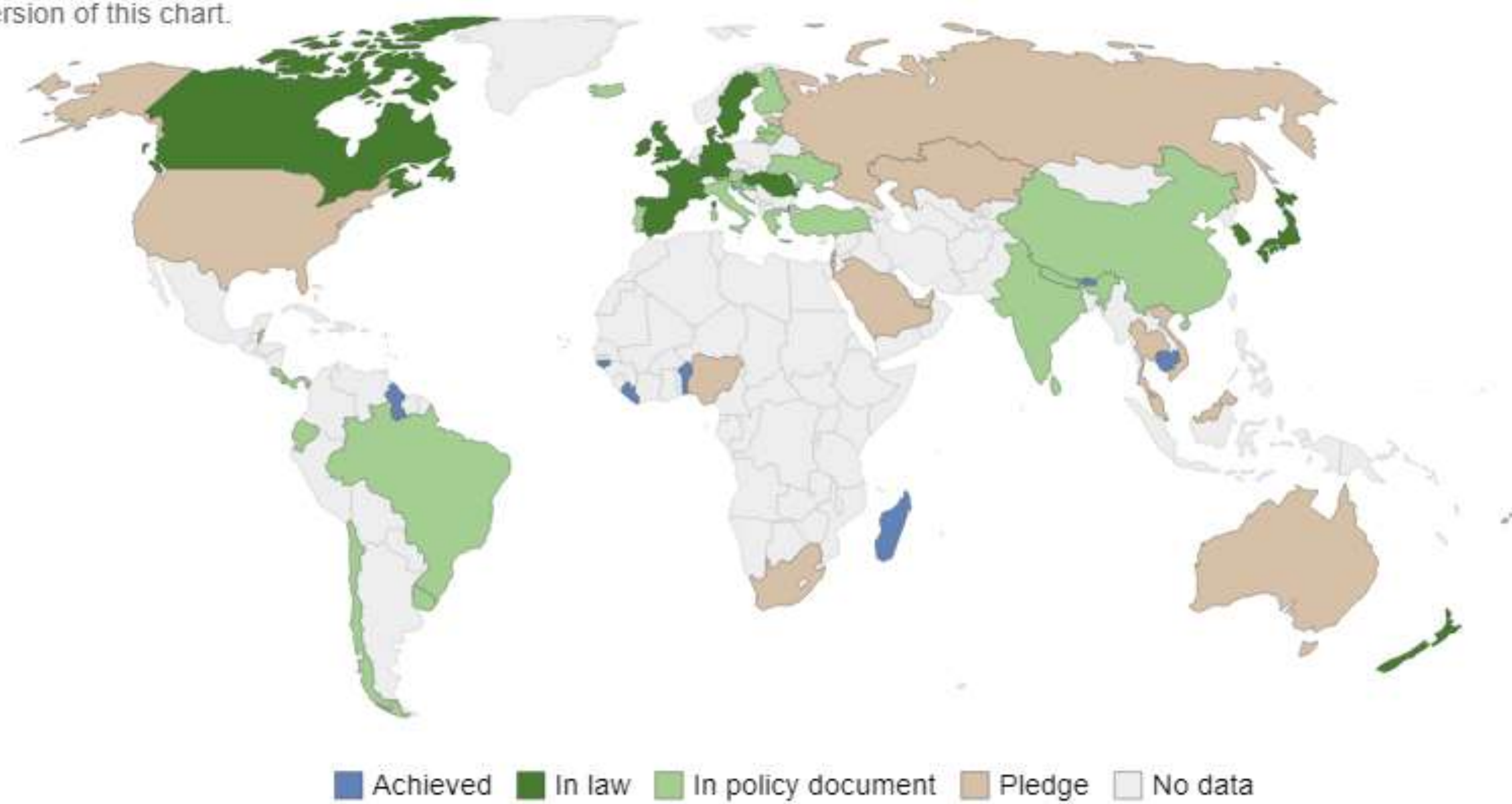


Source: IENE study “SE Europe Energy Outlook 2021/2022”, Athens, 2022

Status of net-zero carbon emissions targets

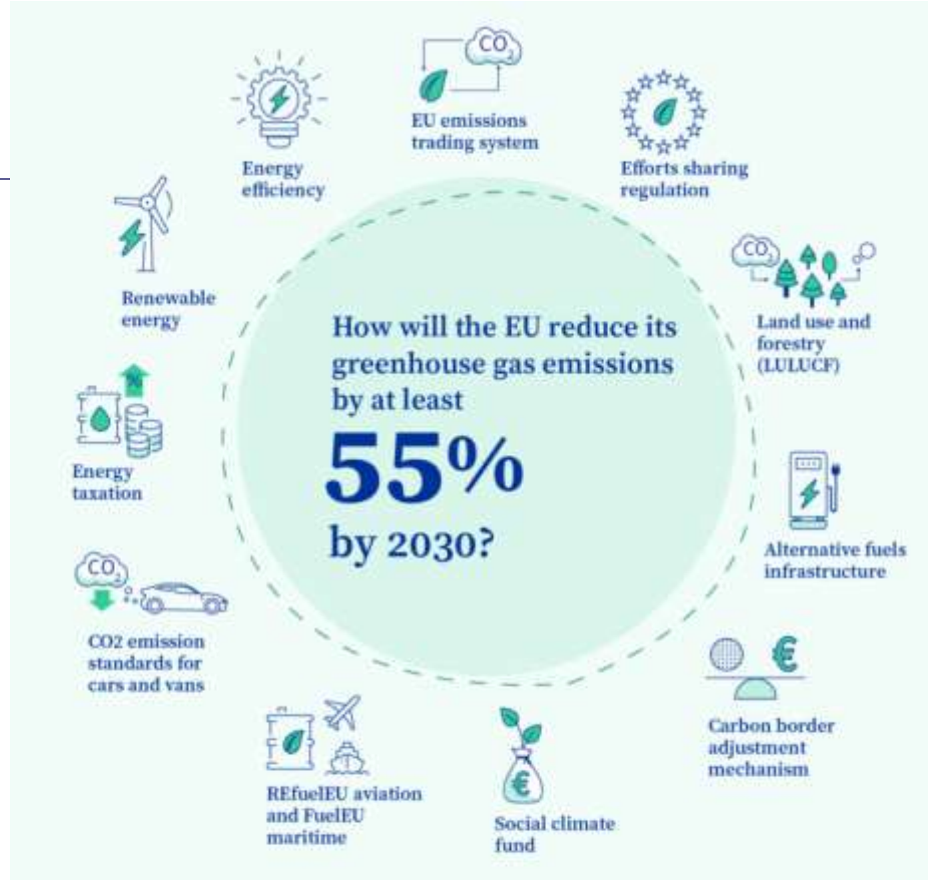
The inclusion criteria for net-zero commitments may vary from country to country. For example, the inclusion of international aviation emissions; or the acceptance of carbon offsets.

To see the year for which countries have pledged to achieve net-zero, hover over the country in the interactive version of this chart.



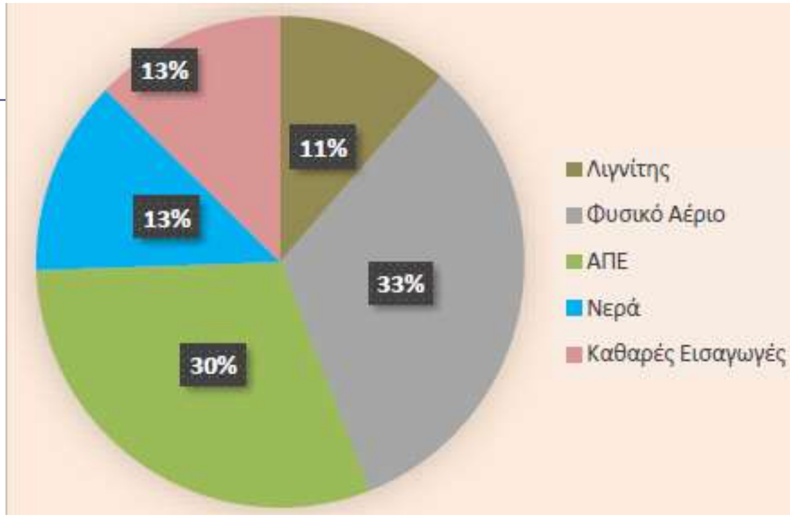
Source: Net Zero Tracker. Energy and Climate Intelligence Unit, Data-Driven EnviroLab, NewClimate Institute, Oxford Net Zero. Last updated: 2nd November 2021.
OurWorldInData.org/co2-and-other-greenhouse-gas-emissions •

EU Climate Targets

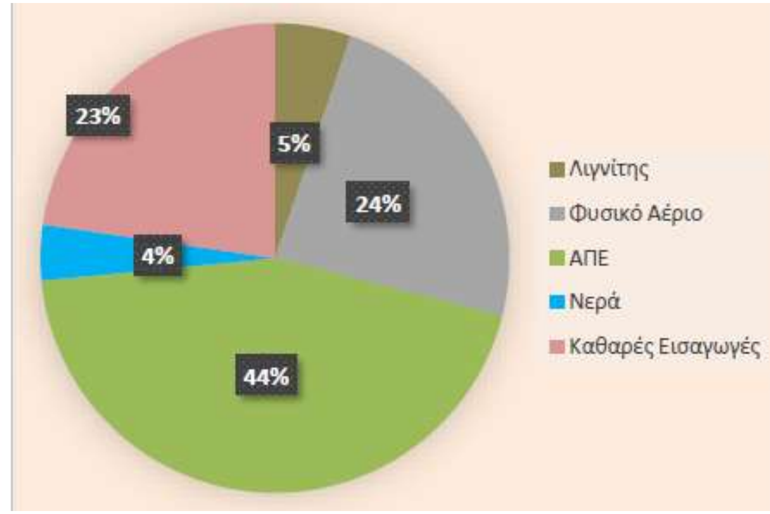


Fuel Mix in Greece

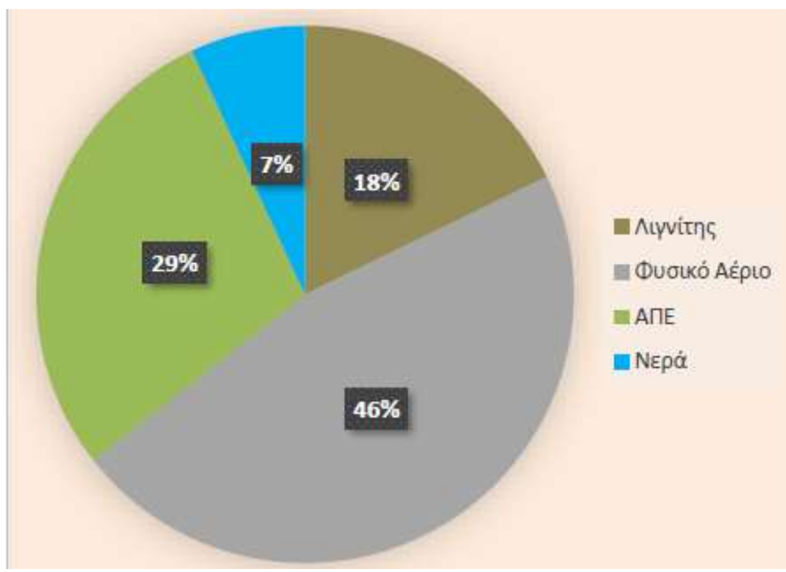
January 2022



April 2022

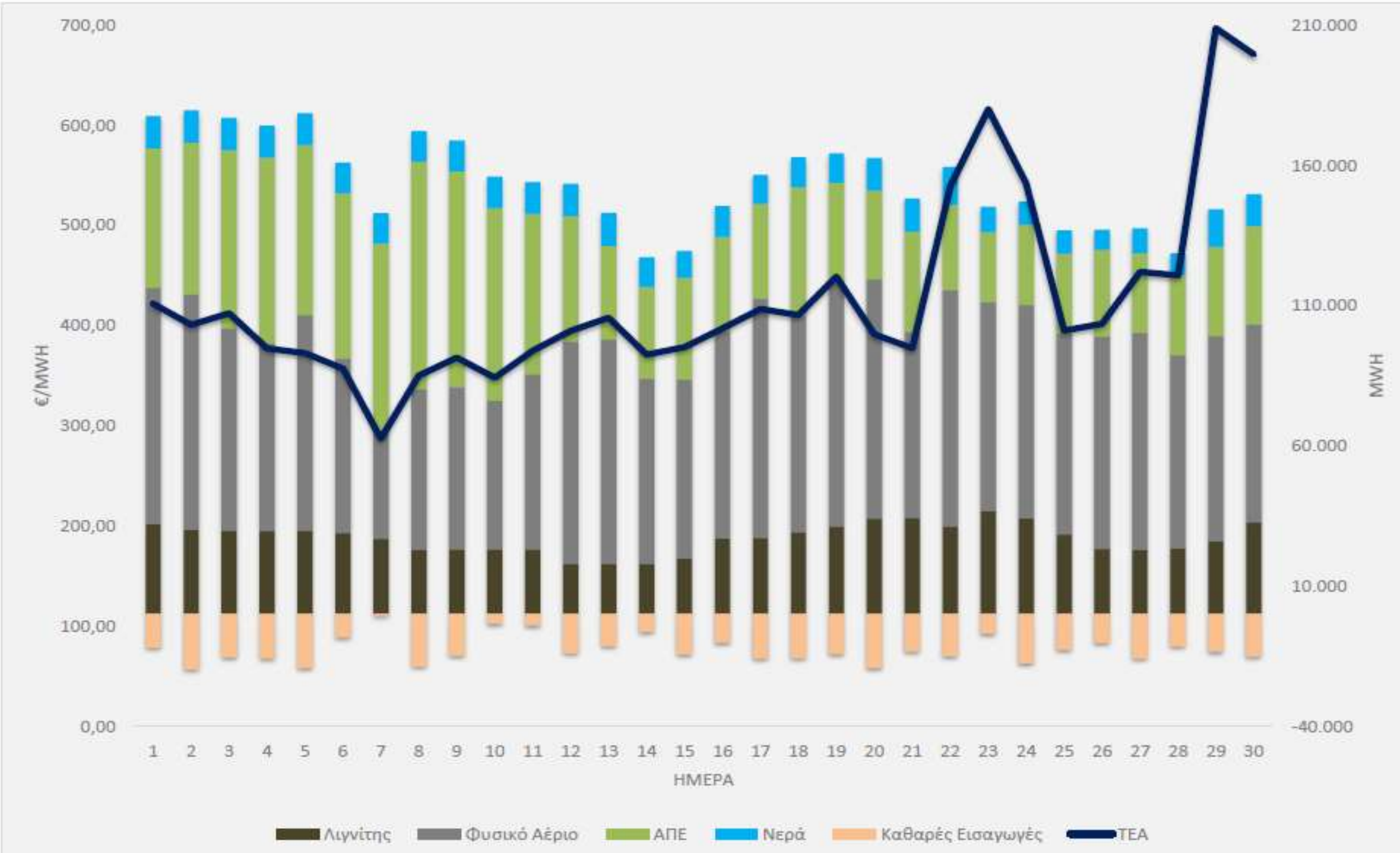


August 2022



Source: IENE

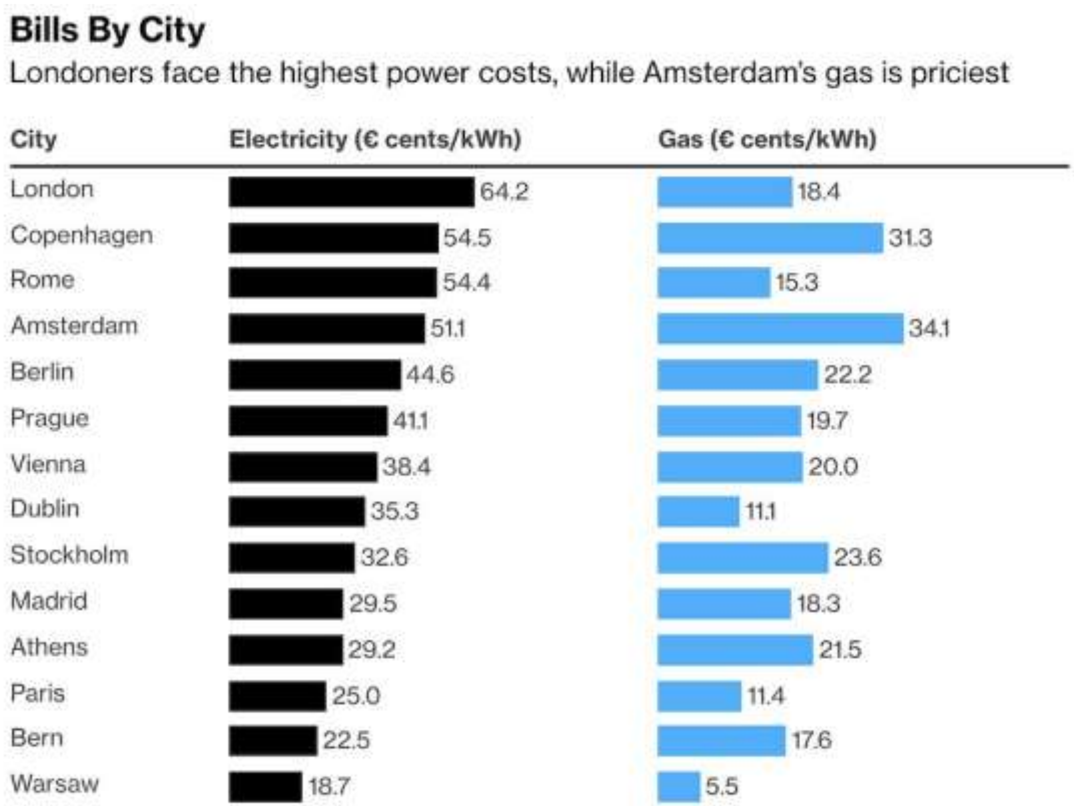
Fuel Mix per Day in August in Greece



Source: IENE

Energy Crisis and European Subsidies

- The war in Ukraine and EU's embargo against Russia, its major energy supplier, has not simply worked out, with European gas prices rising to dangerously high levels, affecting electricity and sidetracking the economy on account of huge subsidies, which governments are forced to provide, unless they want to see their economies completely upended.



Source: Household Energy Price Index by Energie-Control Austria, MEKH and VaasaETT, © 2022 VaasaETT Ltd.
Note: Analysis of end-user costs of domestic contracts offered in August 2022

A Partial Critique of Europe’s Current Energy Policy

- With gas being an indispensable fuel of the energy mix and an accepted part of the energy transition, it makes sense for Europe to develop ASAP its indigenous hydrocarbon resources as well as coal, nuclear and RES.
- By developing its indigenous gas resources, Europe will not only lessen its energy dependence but will also reap important economic benefits. There is a complete lack of clearly defined guidelines and a positive outlook for the development of the continent’s enormous gas resource base.
- Europe has huge potential utilizing its indigenous oil and gas resources to be found in the North Sea, in the Adriatic, in the Black Sea, in the Ionian and in the East Mediterranean .
    - Some 10-12 tcm of proven and contingent reserves with conservative estimates that could cover 40-50 years of the European consumption.

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Thank you
for your attention!

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