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Green & Just Transition Conference 2024

The current energy crisis and energy security in the EU

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Global & EU Picture

Energy transition in times of crisis

1

NEW HIGHS IN COAL AND OIL

Despite the wind and solar growth, we continue to have high demand of fossils

2

GAS DEPENDENCY

Success and a failure at the same time

3

RISKS IN FRONT OF US

Substitution of natural gas with LNG, but no improvements in security of supply



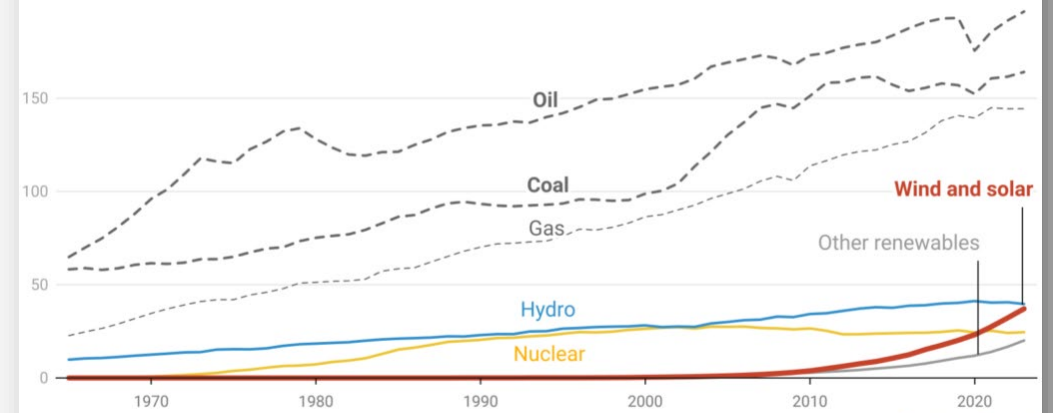
New highs in coal and oil

- We are using more coal and oil than ever before
- Global energy demand reached a record high of 620 exajoules (EJ) in 2023 and so did the emissions
- Wind and solar added more to global energy than any other sources in 2023 for the first time ever

1

Global coal and oil demand reached new highs in 2023, despite record wind and solar growth

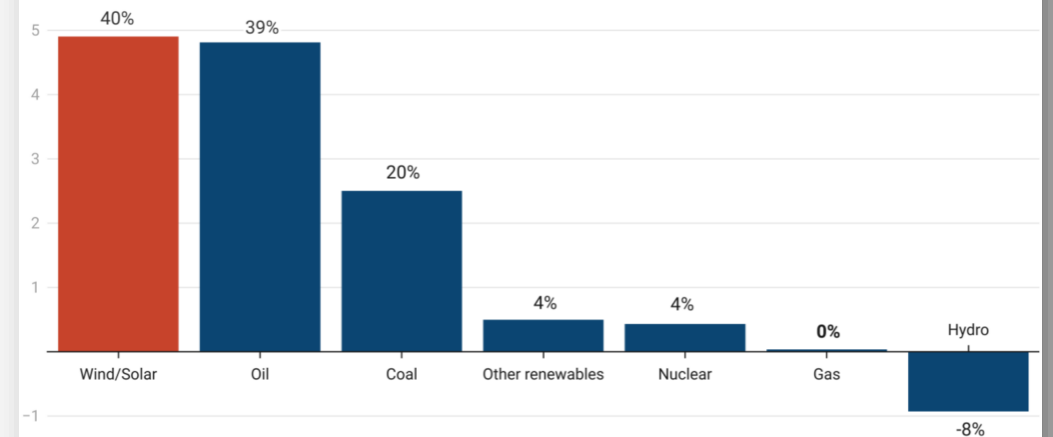
Global primary energy demand by fuel, exajoules



Source: Energy Institute Statistical Review of World Energy 2024.

Wind and solar added more to global energy than any other source in 2023 for the first time ever

Annual change in global energy supply in 2023, by fuel, exajoules



Source: Energy Institute Statistical Review of World Energy 2024.

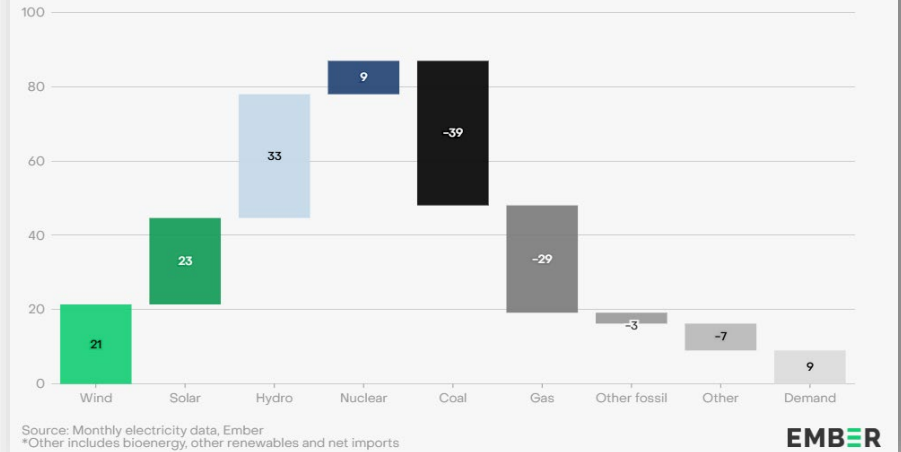
Gas dependency

- Gas dependency increased from 2000 to 2020 from ~66 to 83.6%
- Success in increased storage capacity 59%
- Increased renewable energy
- Higher energy efficiency
- In EU renewables have significantly increased and fossil fuel use has been reduced

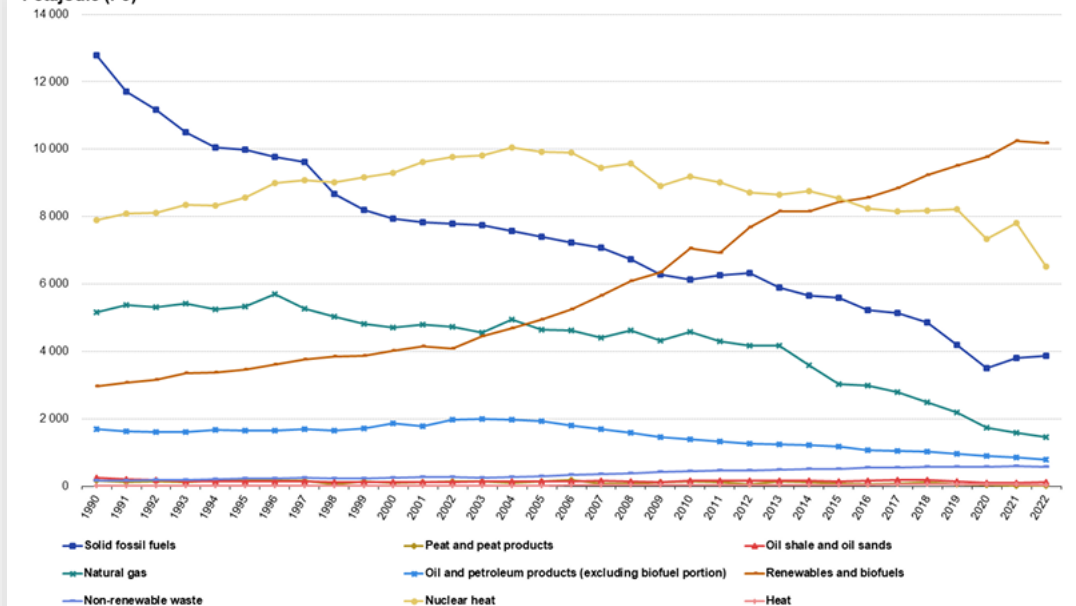
2

Renewables drove a strong fall in EU fossil generation in the first six months of 2024

Change in generation H1-2024 vs. H1-2023 (TWh)



Primary energy production by fuel, EU, in selected years, 1990-2022

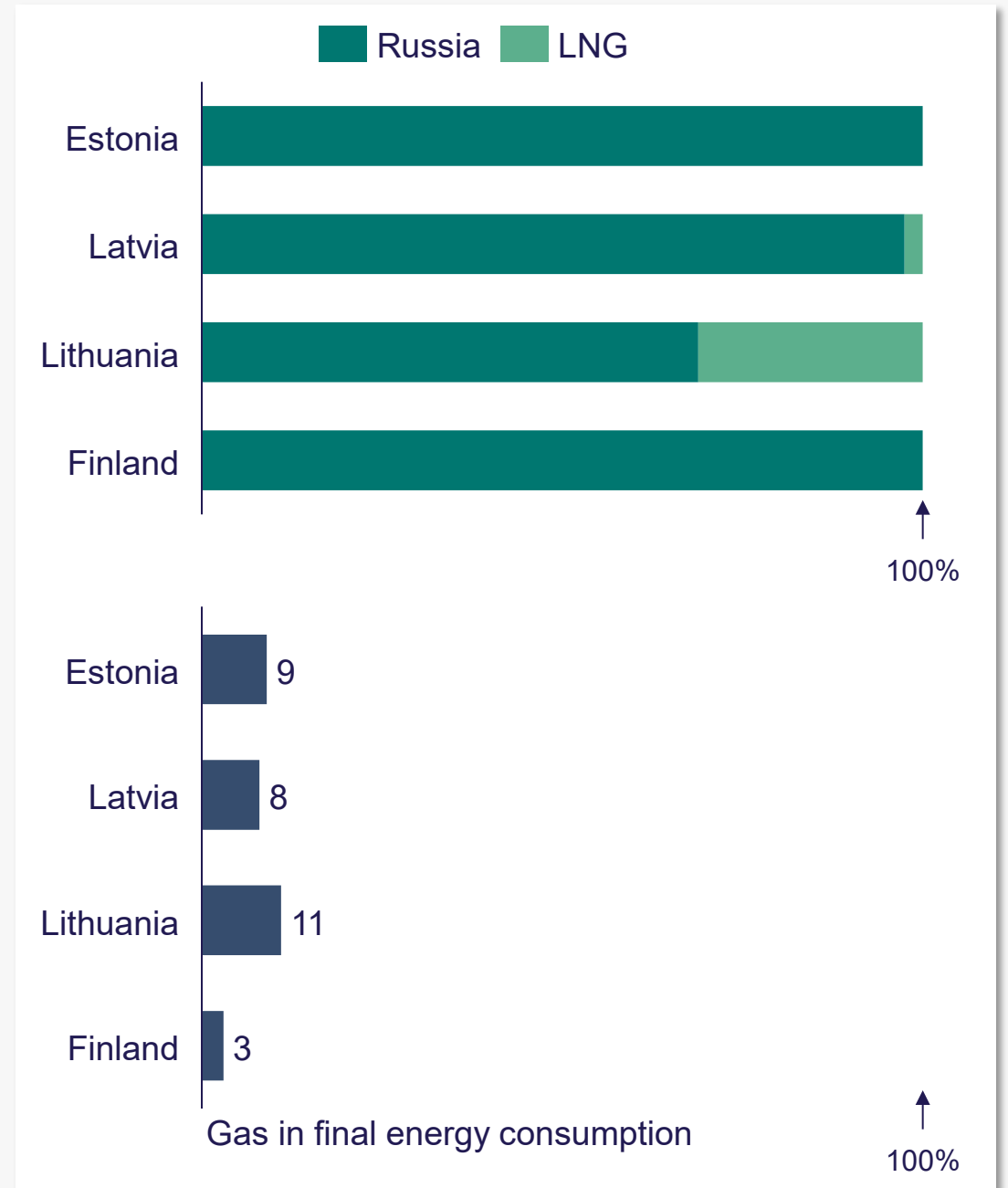


Source: Eurostat (online data code: nrg_bal_c)

Gas dependency

- 74% of the Baltic gas demand was met by Russia gas in 2021
- Only region that is so reliant on Russia for its energy, while so disconnected from the rest of the European energy system.
- However, overall the gas in final energy consumption is low
- Achieved massive reductions

2



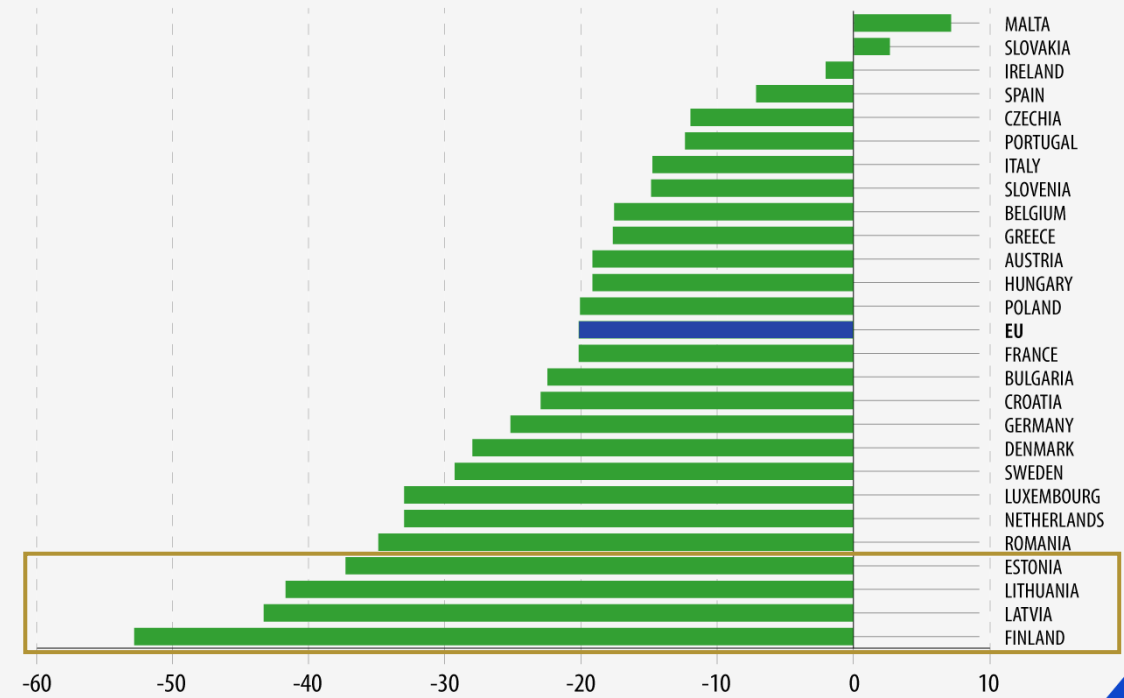
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Natural gas consumption reduction

(August-November 2022 vs. 2017-2021)

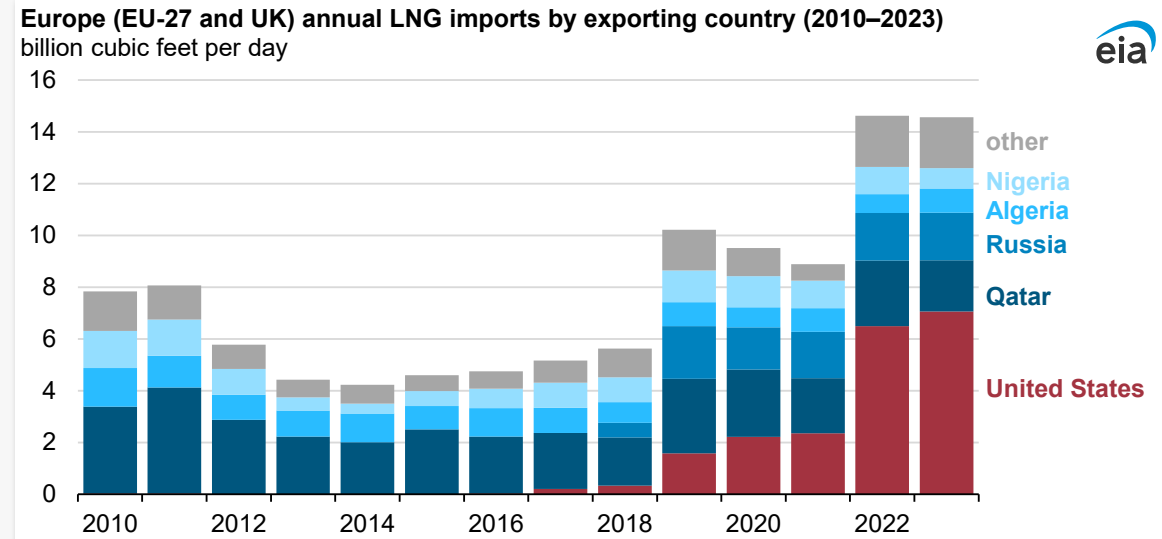
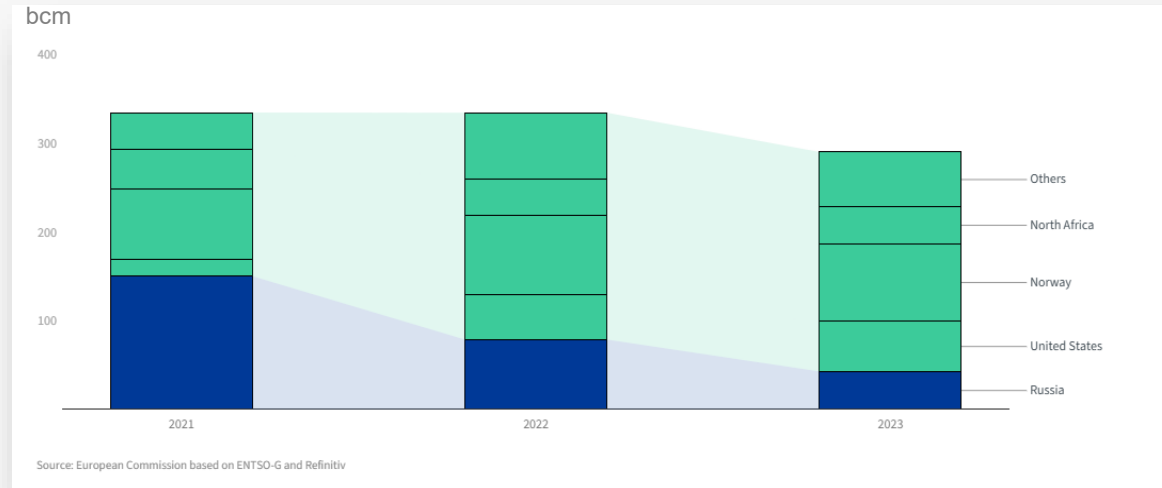


Cyprus does not use natural gas.

Risks in front of us

- Diversification of the gas markets – instead of a natural gas exit plan
- Gas imports displaced by LNG
- EU became Russian largest consumer of LNG
- Largest LNG provider is USA
- No improvements in security of supply
- Coldest winter since Russian invasion

3





Thank you for your attention



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