

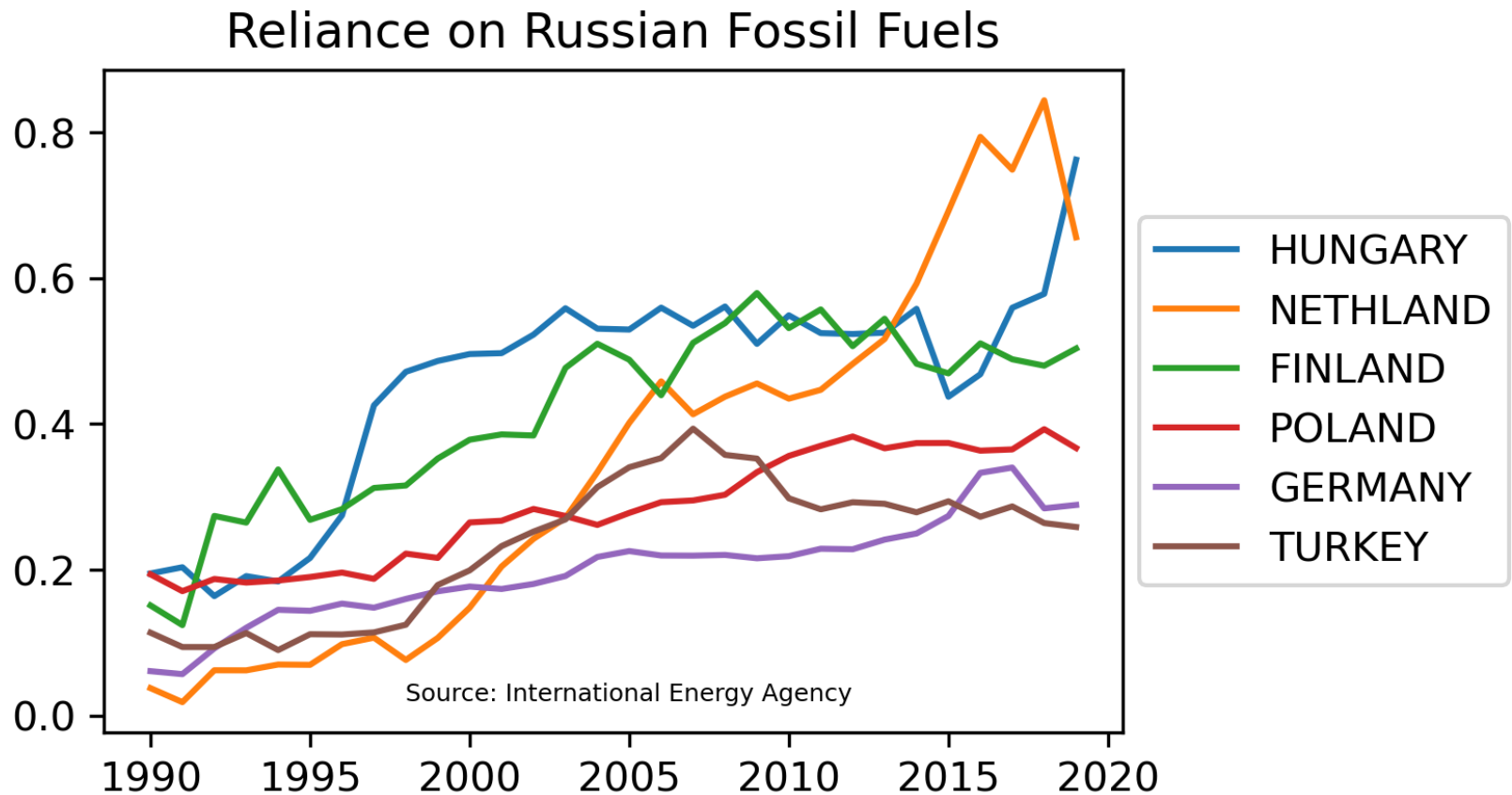
Energy Sustainability and Security in the Age of Weaponized Globalization

Remarks at the
International DAAD-TGU Conference on Economic Dimensions of
Sustainability
Istanbul, May 12-13, 2022

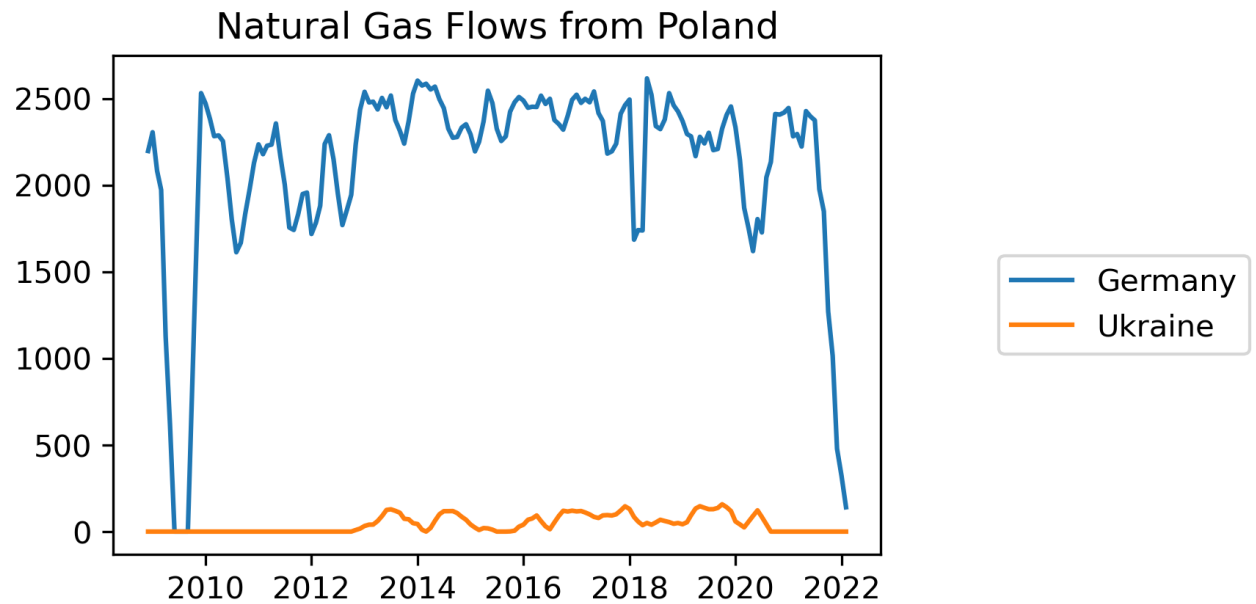
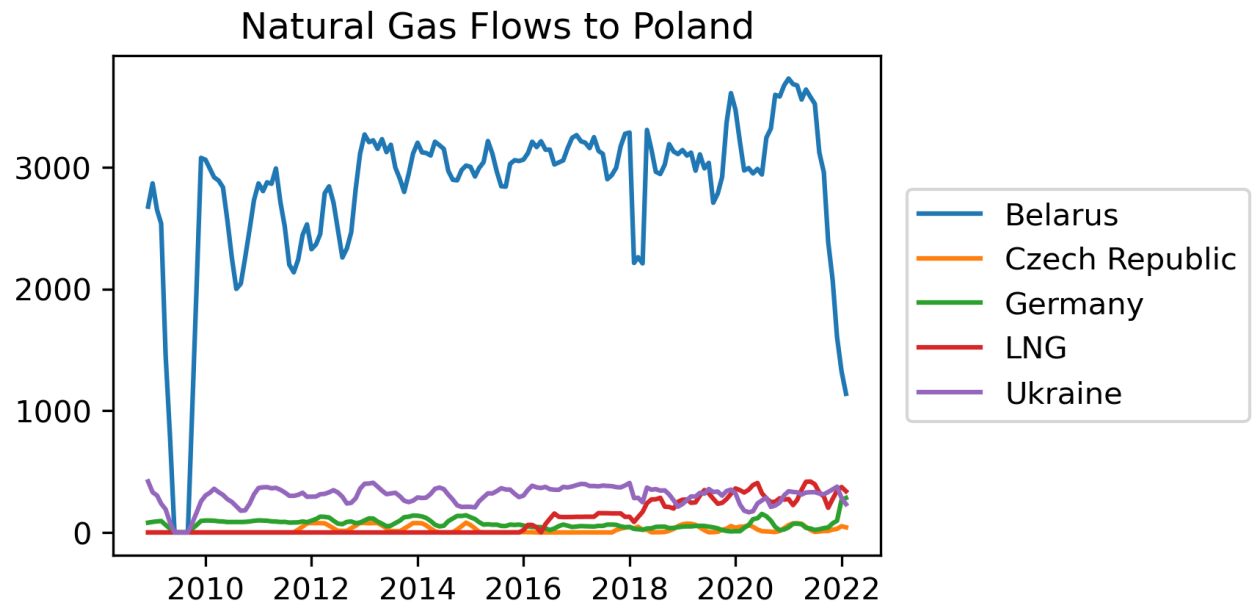
1

Russia: Weaponizing energy

European Countries have become dependent on Russian fossil fuels

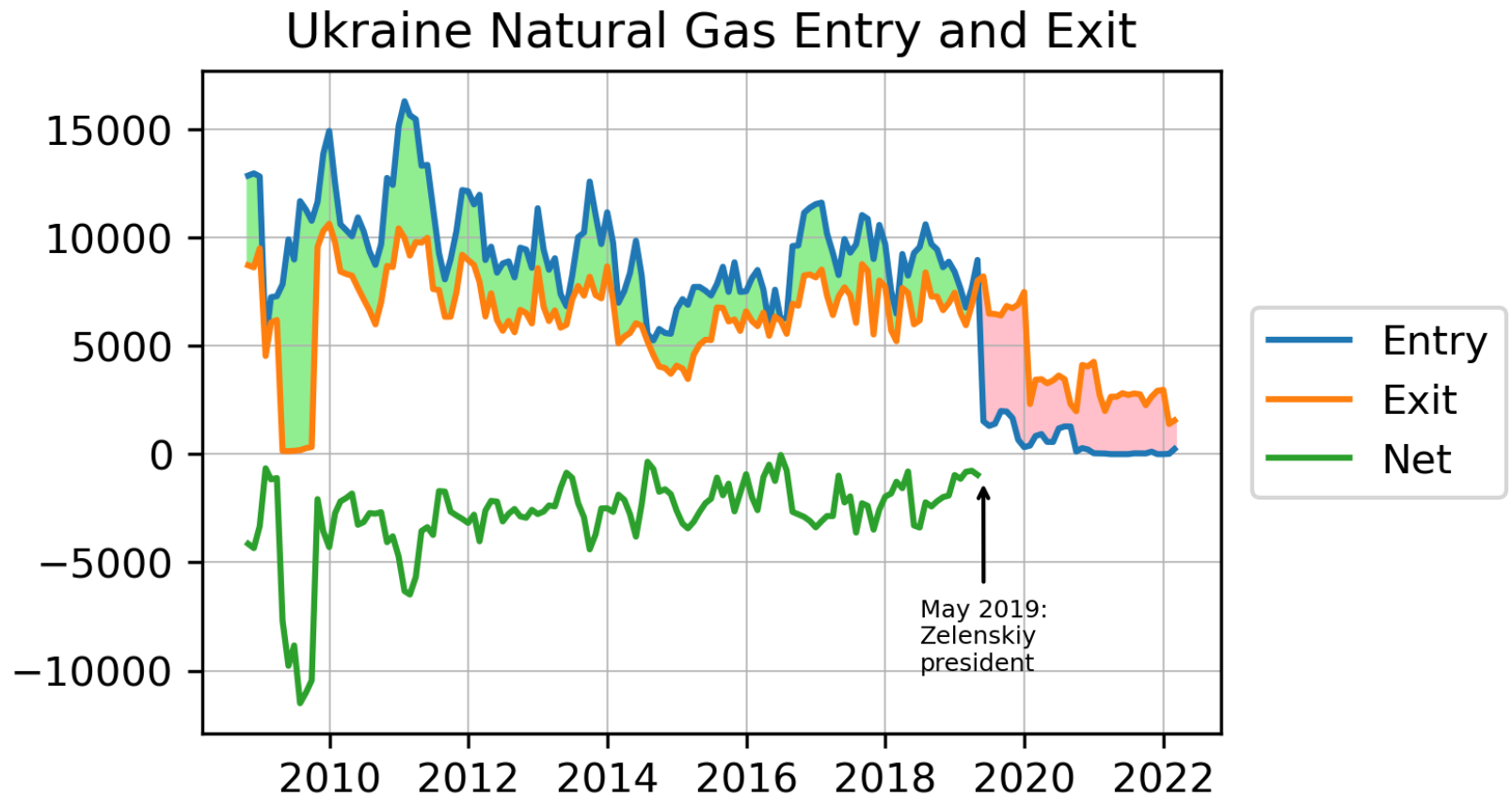


Poland: Cutoff of Russian Natural Gas



Source: IEA

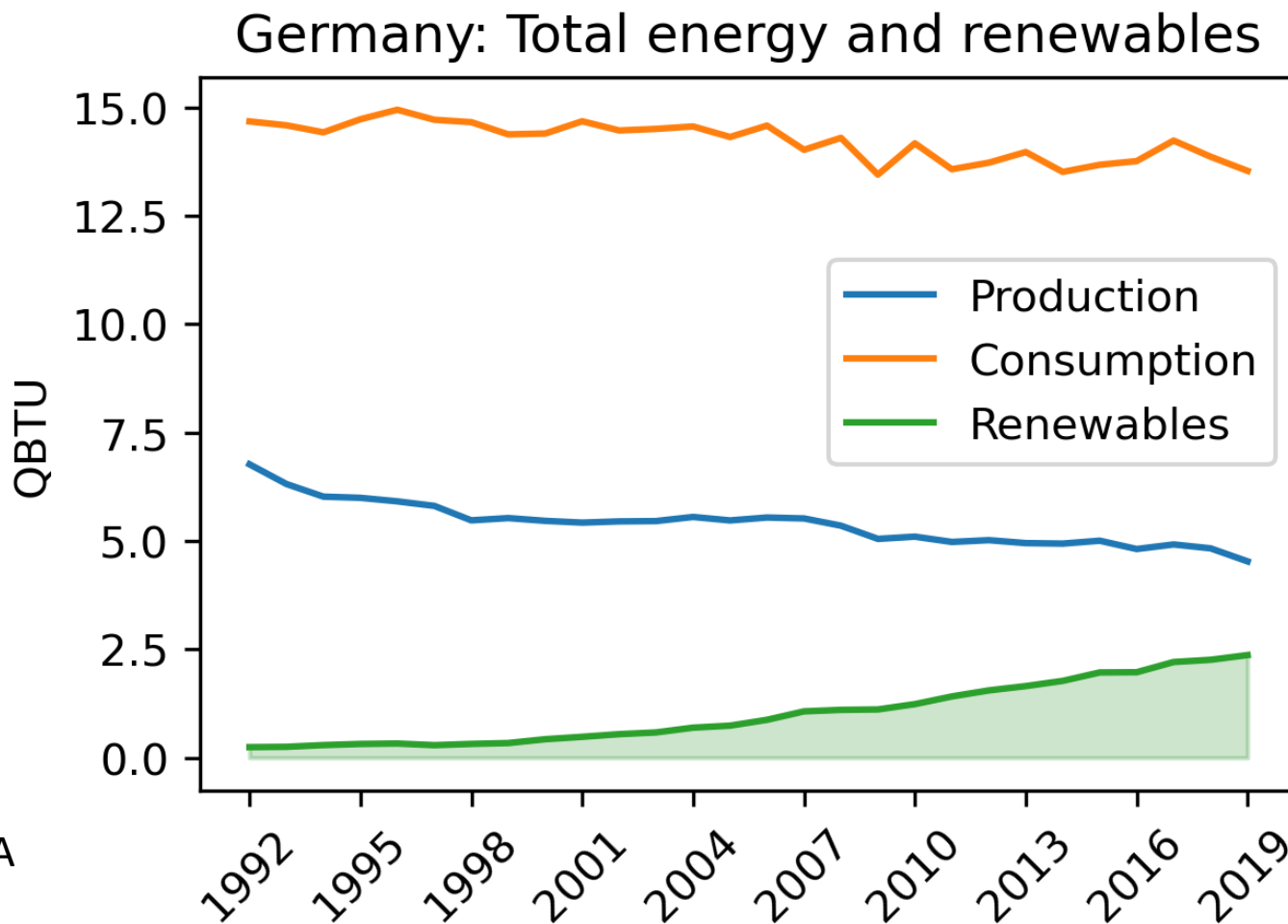
Ukraine: Cutoff of Russian Natural Gas



2

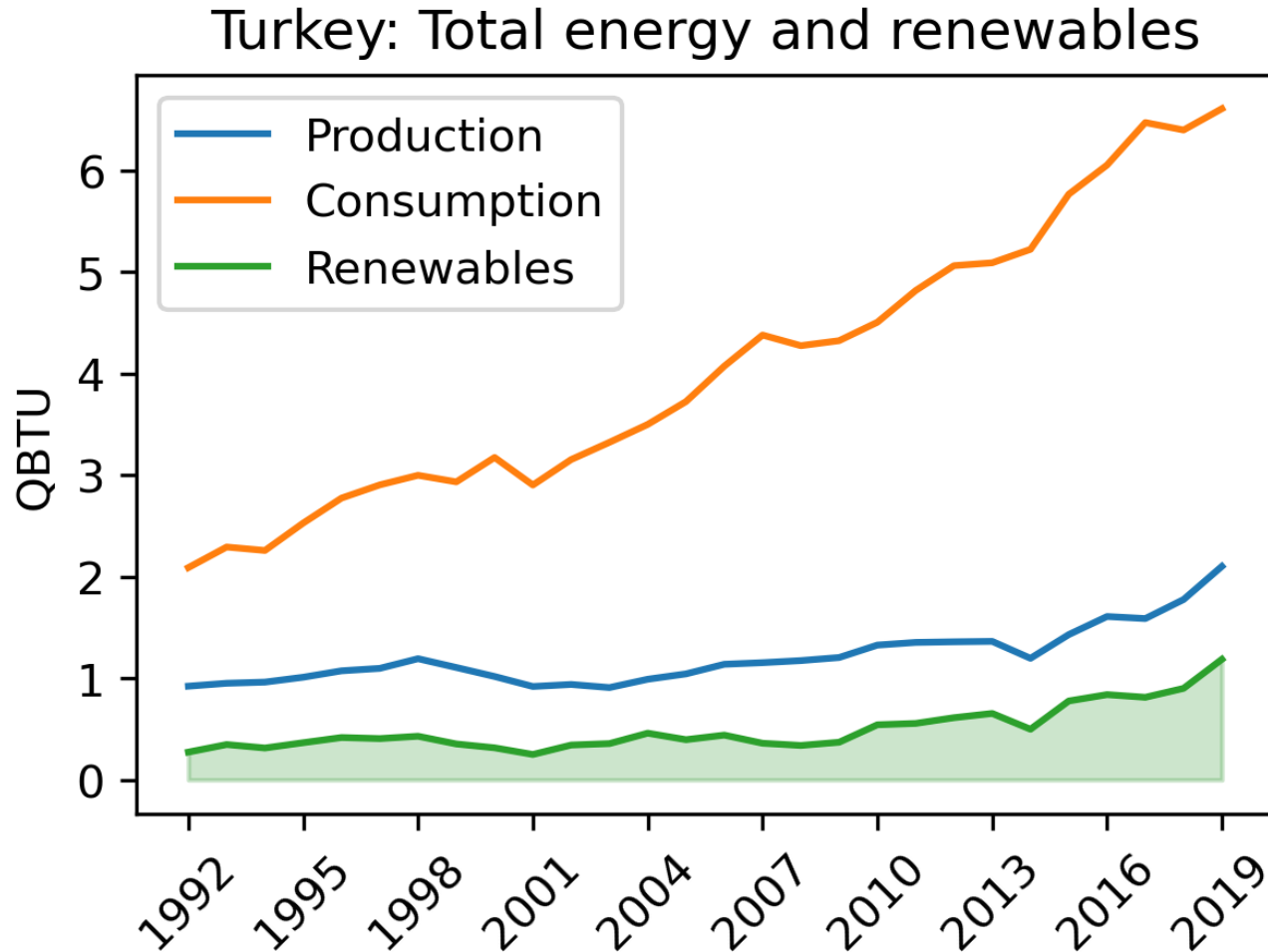
Europe: Persistent energy deficits

Germany: Renewables production is growing, but total energy production is shrinking



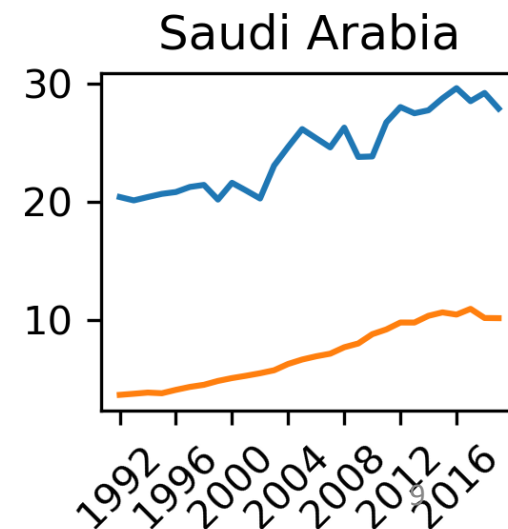
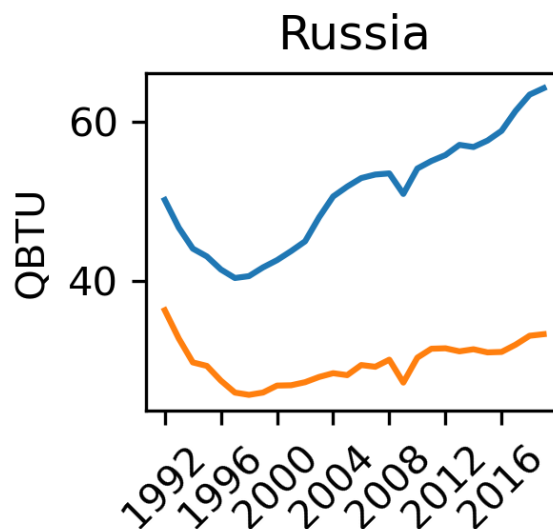
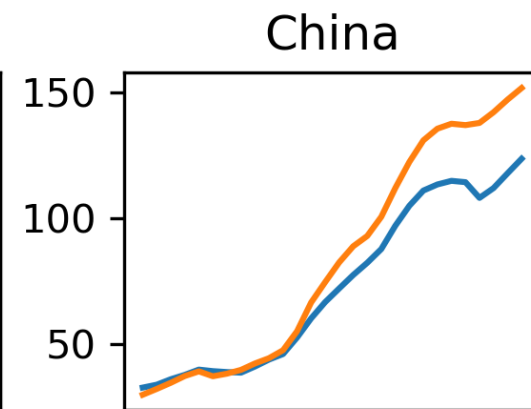
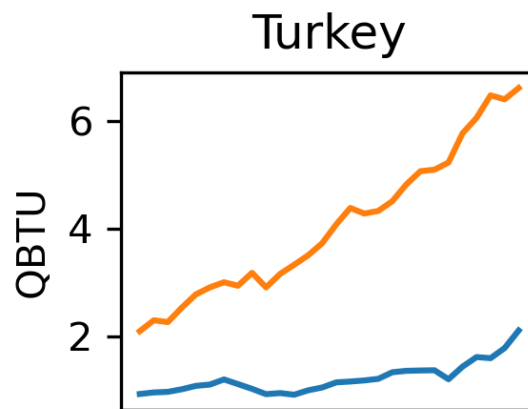
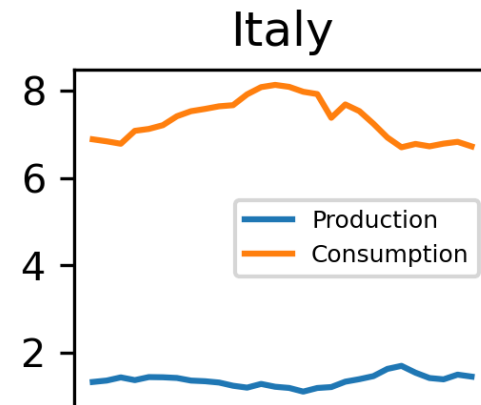
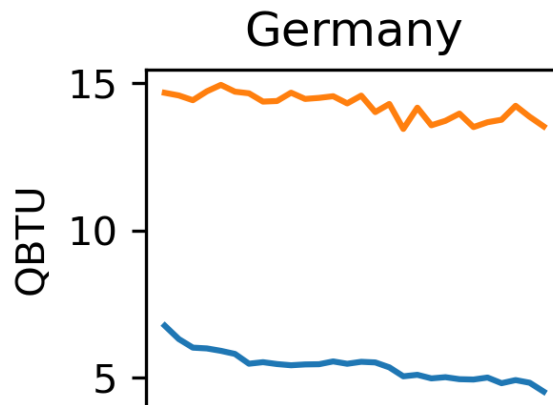
Source: EIA

Turkey: Growing energy deficit despite growing total energy production



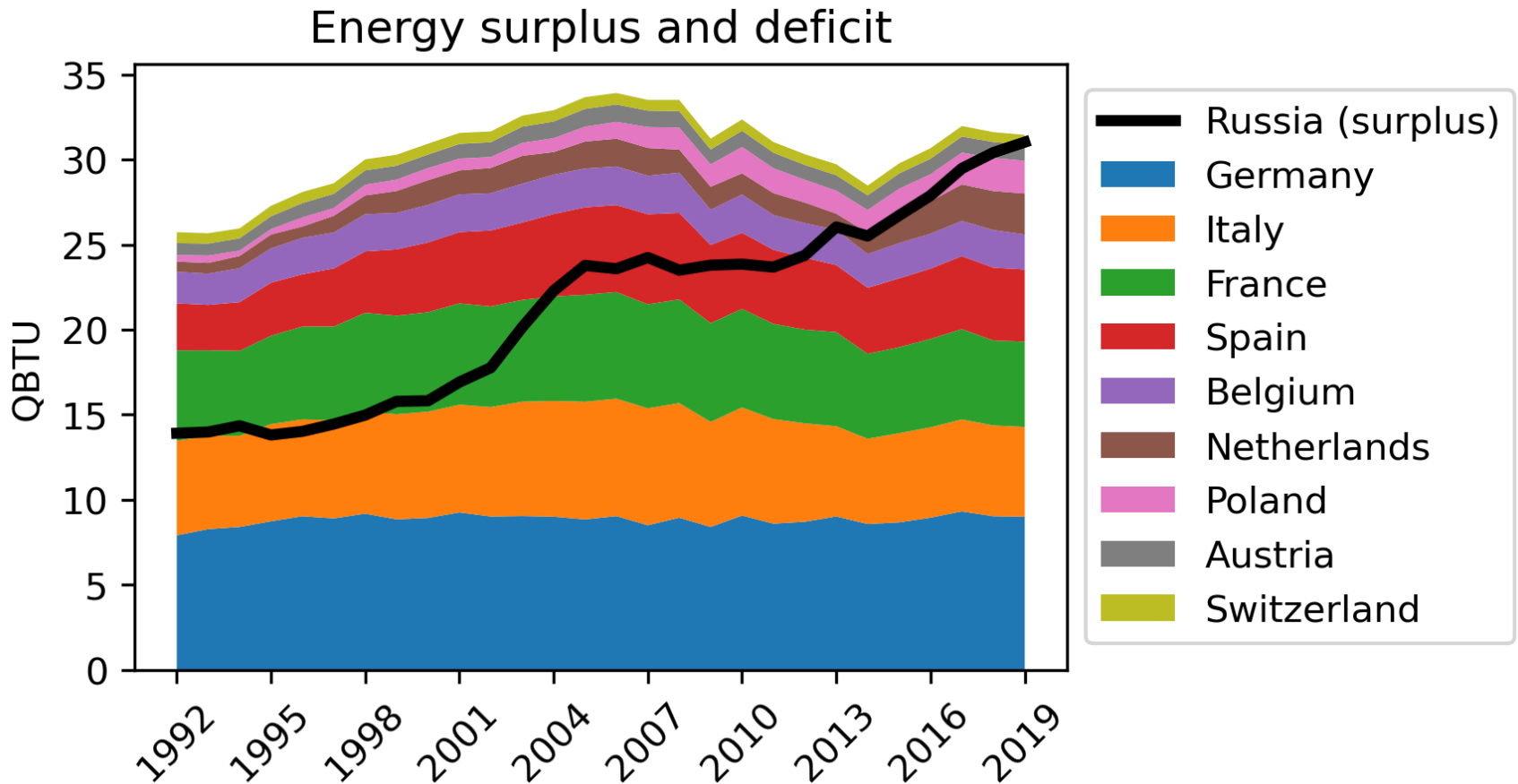
Source: EIA

Energy balances in selected countries



Source: EIA

Energy balances in Russia and in selected Western European countries



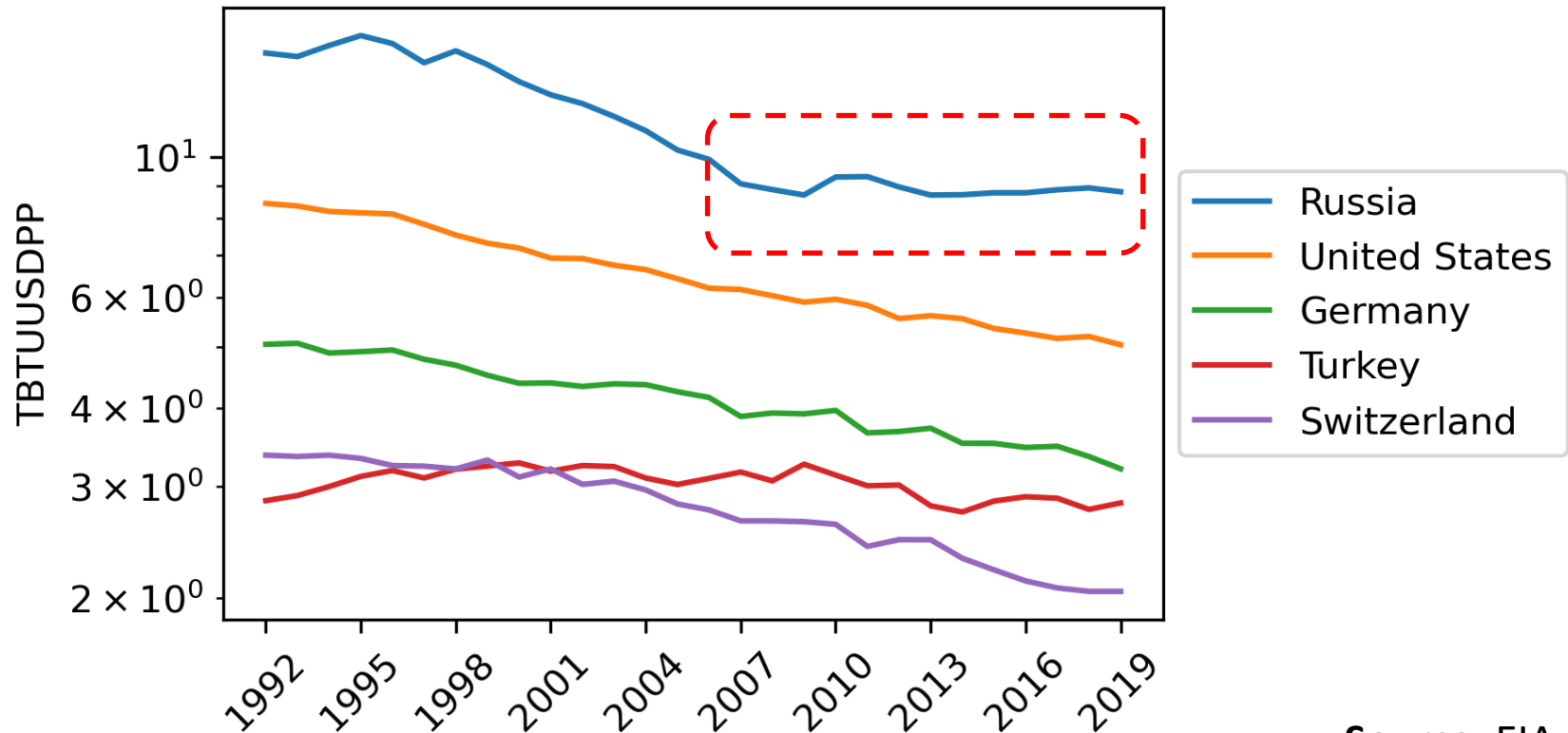
Source: EIA

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Russia: Economic sanctions, industrial stagnation and fossil development

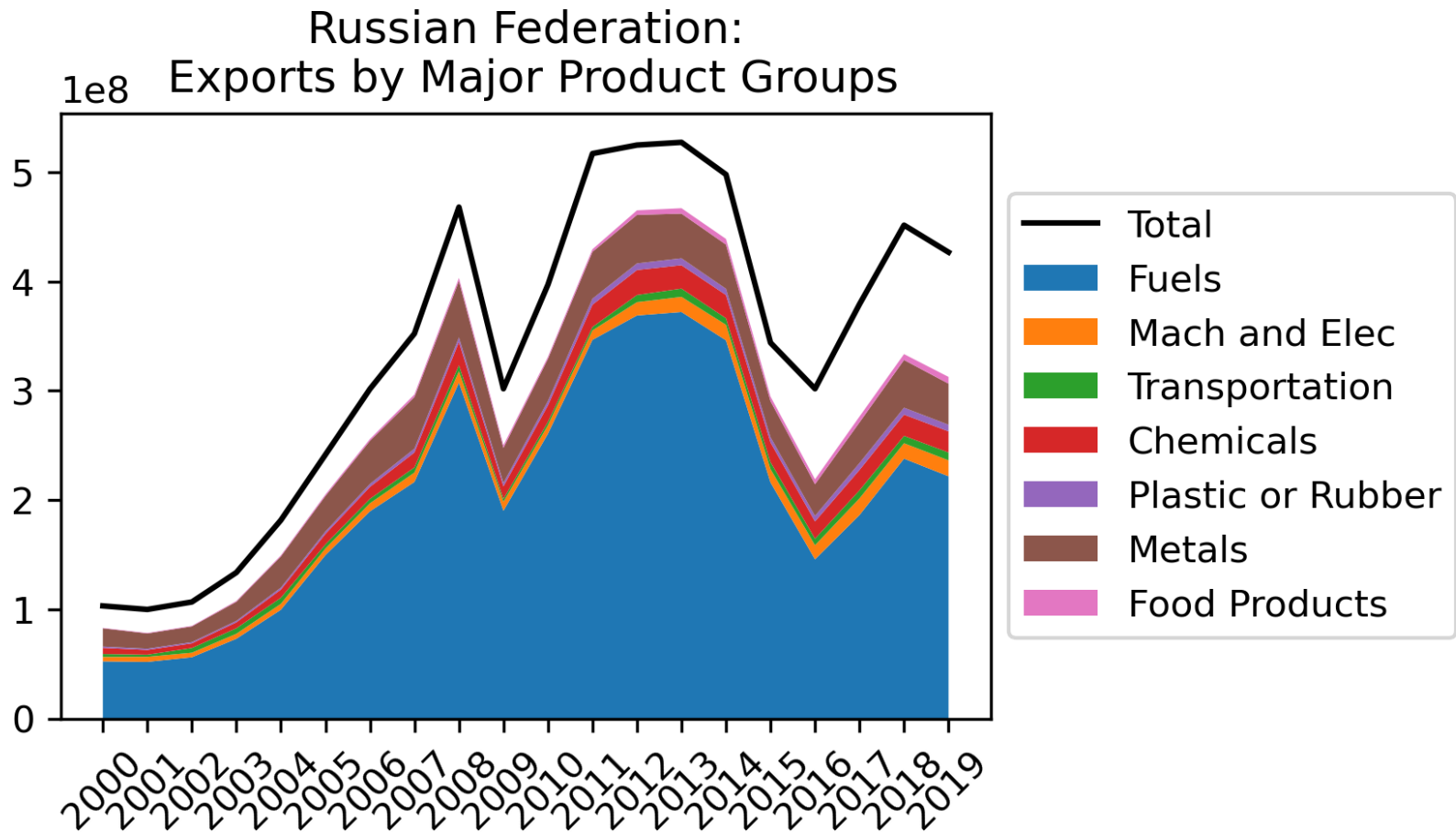
Energy efficiency of GDP improves, except in Russia

Selected countries:
Energy consumption per GDP



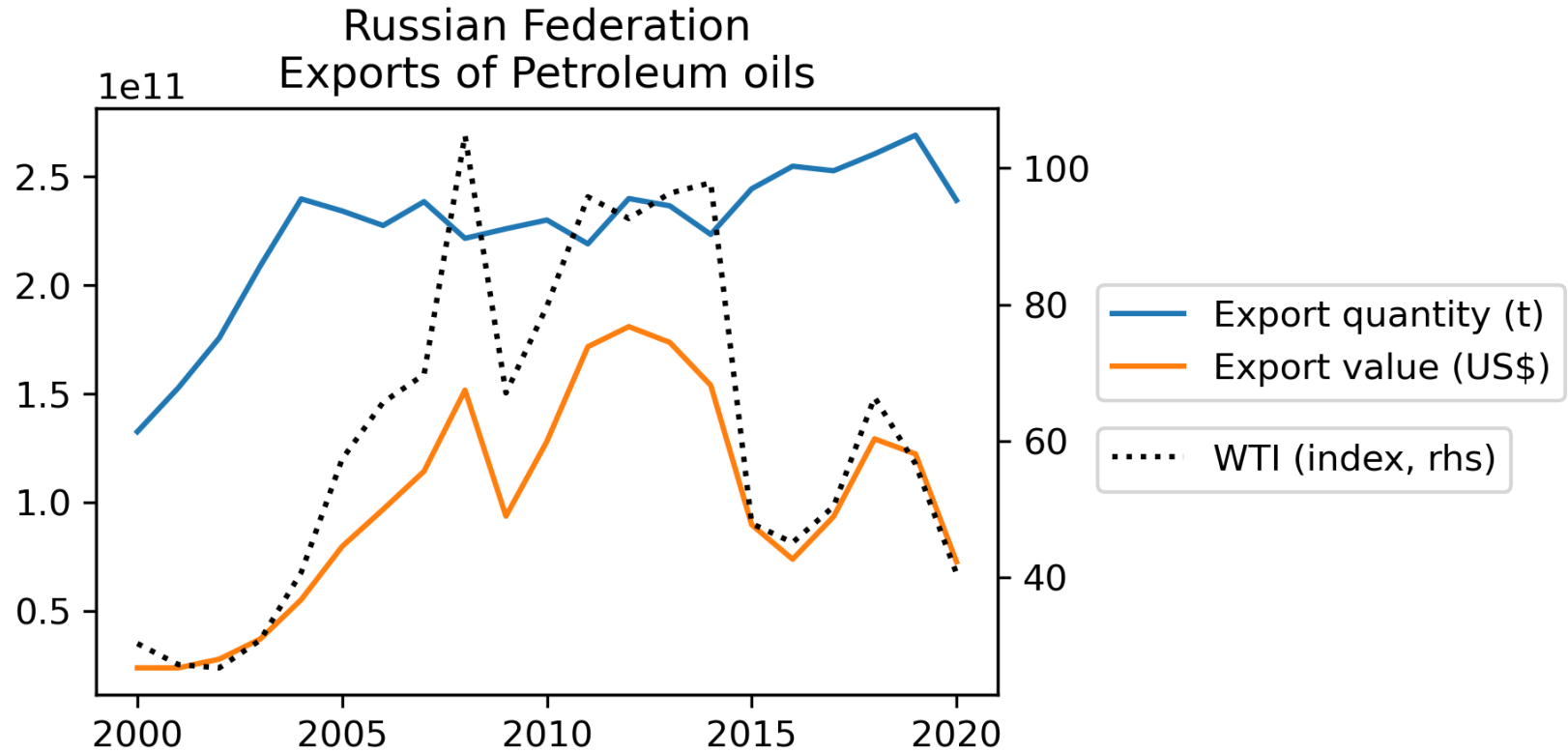
Source: EIA

Russia: Export volatility driven by fossil fuels



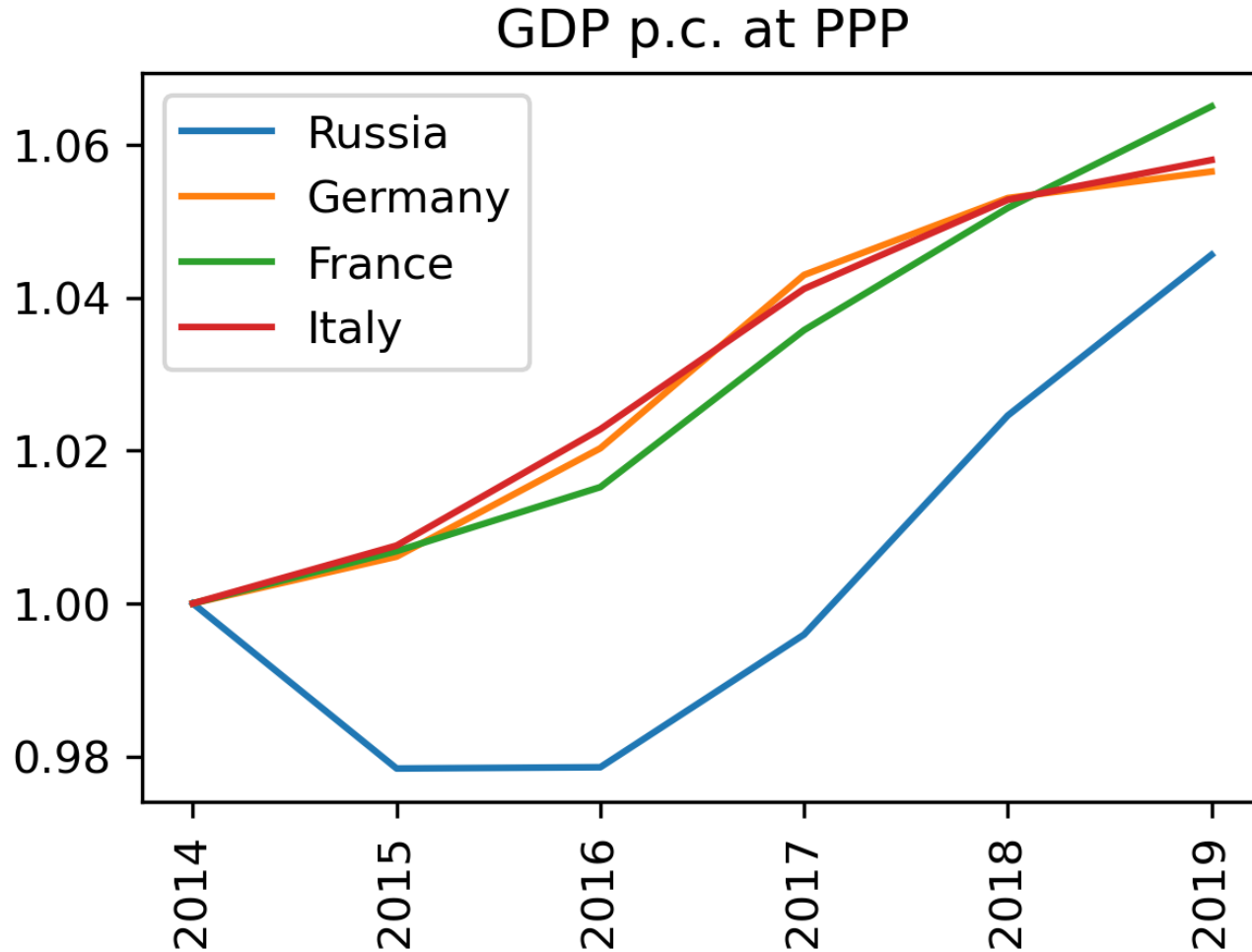
Source: WITS

Diagram



Source: UN Comtrade, FRED

Russia vs. EU: After Crimea Sanctions



Even EU member countries are undermining EU sanctions against Russian fossil fuels

Bloomberg

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EU Drops Plan to Stop Tankers Moving Russian Oil Anywhere

- Important ban on oil-tanker insurance remains on the table
- Ban on vessels needs international coordination, documents say

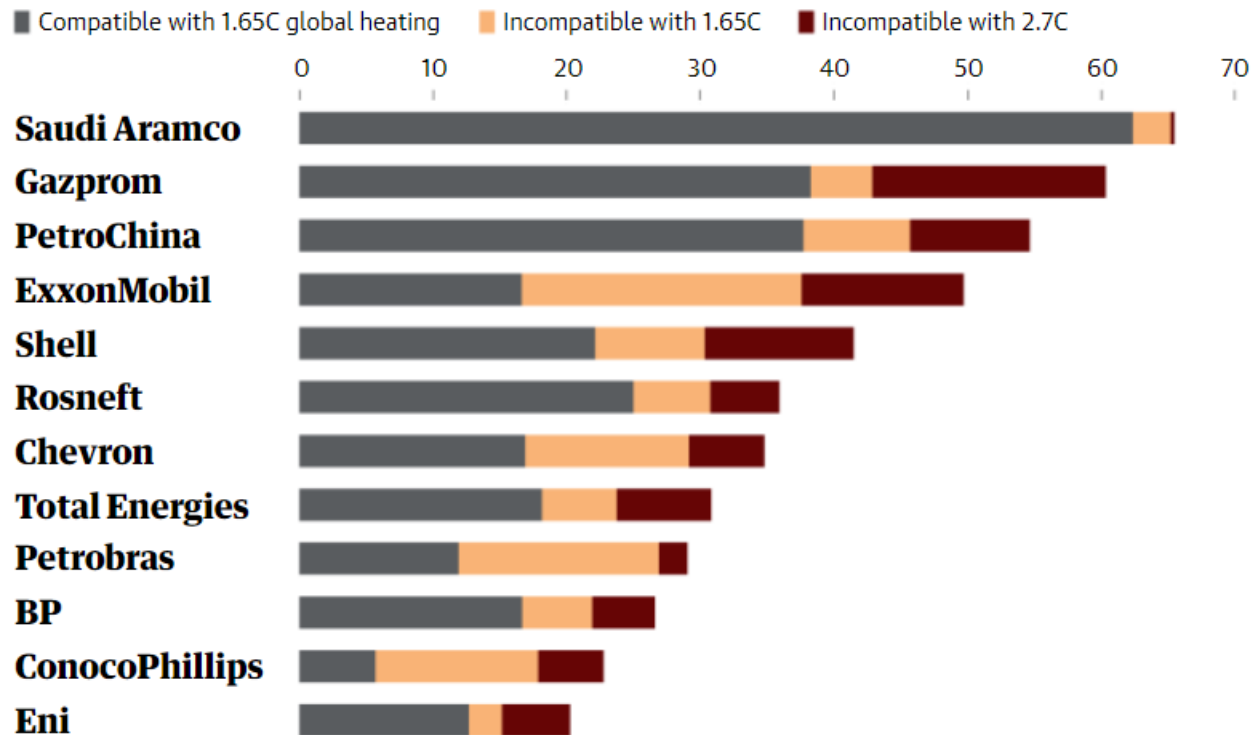
Source: <https://www.bloomberg.com/news/articles/2022-05-09/eu-drops-plan-to-stop-tankers-moving-russian-oil-to-other-buyers>

The Guardian, 11 May 2022:

Oil and gas majors are planning scores of vast projects that threaten to shatter the 1.5C climate goal.

Major companies plan to spend many millions a day to 2030 on exploiting new oil and gas

Capital expenditure per day 2021-2030, \$m



Guardian graphic. Source: Carbon Tracker Initiative / Rystad Energy

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Summary and conclusion

Take-aways

- European dependency on Russian fossil fuels was driven by large and persistent deficits in total energy production. Energy efficiency and production of renewable energy are rising, but these deficits are likely to persist for many years
- Meanwhile in Russia, energy efficiency and production of renewable energies are stagnating, while its energy surplus is growing (consisting largely of fossil fuels)
- Western sanctions against Russia are working. They have cut off Russia's economy from Western supply chains, which will severely hamper its industrial development. As a result, Russia will most likely focus even more on production and exports of fossil fuels
- Combatting climate change requires international cooperation. Going forward, NATO and EU will have to find a way to combine their legitimate security interests with their agenda to combat climate change