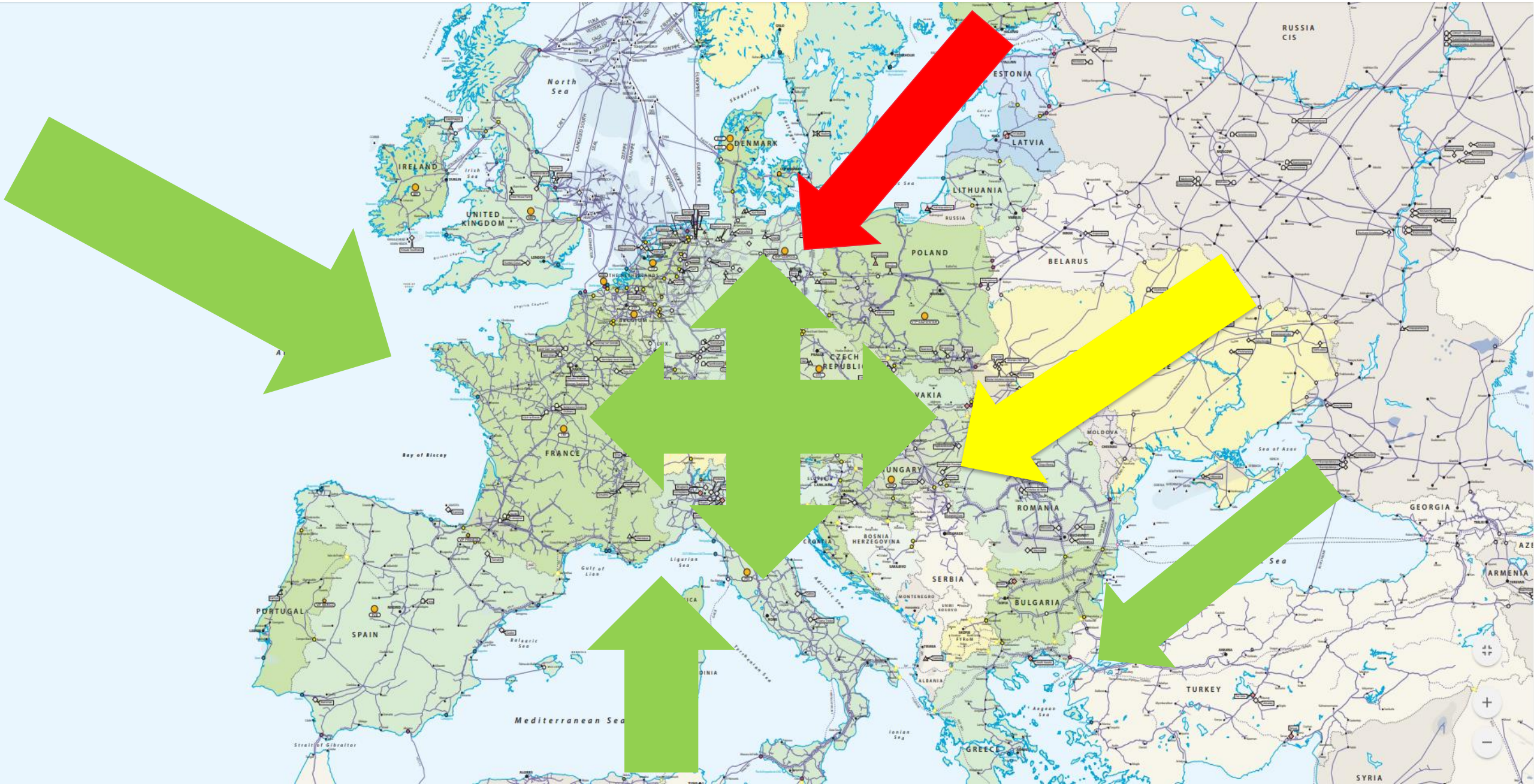


CEE and its future role in energy security of Europe

Mgr. Martin Jirušek, Ph.D.

CEE and its future

- Indispensably interconnected with the future of EU
- In need of structural reforms both in terms of infrastructure as well as policy-making
- Varying in terms of supply-dependence on Russia
 - CZ – no RUS contract
 - PL – no Rus gas
 - SVK – Natural gas still coming from Russia
 - AUT – LTC (2040)
 - HU – LTC (2036)
 - UA – transit?



The war changes everything

- European markets are lost for Russian O& G after 24.2.2022
 - supply weaponization means lost trust in times of looming decarbonization
- Oil – price capped, imports banned
- Natural gas – supplies ceased, diversification in progress, substantial saving measures in place
- Market changes in the EU – proposed market reform to stabilize prices and enable building capital-intensive projects

Are European markets lost for Russia?

- Oil is more fungible than gas, less dependent on a rigid infrastructure
- Some buyers willing to import more Russian oil (India) but others tend to avoid Russian supplies for reputational risks, sanctions and difficulties in securing insurance
- Crude oil imports banned (Dec 2022)
 - exception: the Druzhba pipeline (CZ, HU, SVK, BLG, CRO)
 - EU vessels banned from transporting Russian oil (unless the price cap is applied)
 - Russian shadow fleet
- Oil product imports banned (Feb 2023)
- International oil price cap (60USD/bbl) on Russian crude agreed on by the EU, Australia and the G7 members
 - non-members of the price cap coalition happily followed the suit – buying Russian crude at a discount
 - Russia's oil export volume back to pre-war levels but revenues trailing by ca. 40%
 - Russia's exports partly reoriented, but bring less money to the state budget

Are European markets lost for Russia?

- Russian gas supply manipulation (from Q2/2021) resulting in high spot prices
- High prices and panic buying drove the spot price high (Q1 – Q3/2022)
 - resulted in high gas and electricity price (merit-order principle)
- Natural gas price cap/correction mechanism (12/2022)
 - rather generous trigger conditions
- Gas demand reduction (15%)
- “Iberian exception”
 - high gas price impact in states with a large share of RES/low running cost sources
 - decoupling of natural gas and electricity price in the merit-order principle price formulation

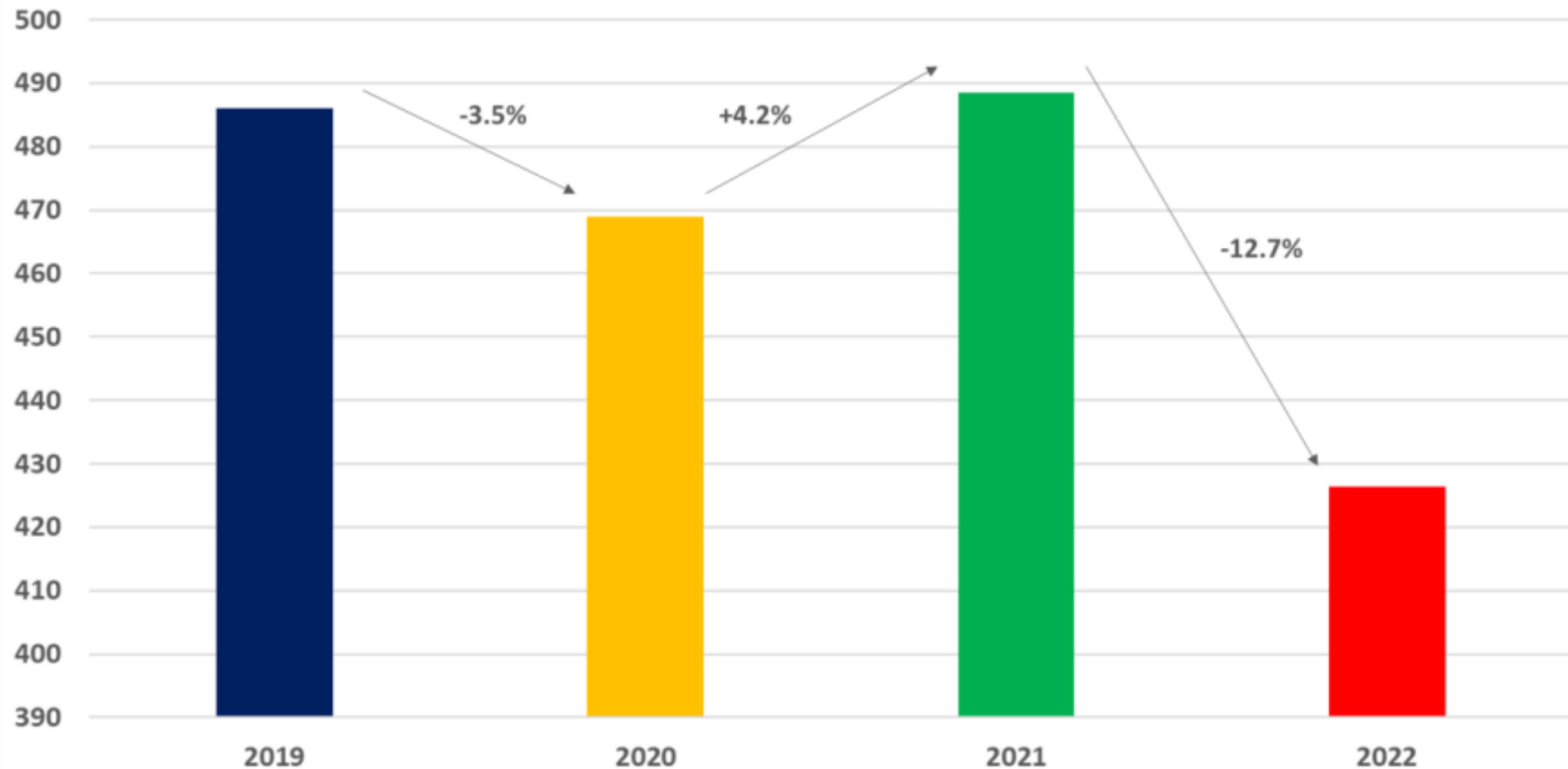
Are European markets lost for Russia?

- EU's 2050 carbon neutrality goal – closing window of opportunity for fossil fuel suppliers
 - What will the EU look like when/if Russia is allowed to return?
- New suppliers want a bite – Qatar, US, ...?
- Revival of LTCs?
 - Qatar's 15-year deal with Germany (2,8 bcma)
- What kind of future for natural gas?
- EU (green) taxonomy involved natural gas (and nuclear energy)
 - under (relatively strict) conditions – 2035 deadline, 100% low-emission gases, permanent repository, ...

Demand changes in Europe post-2/2022

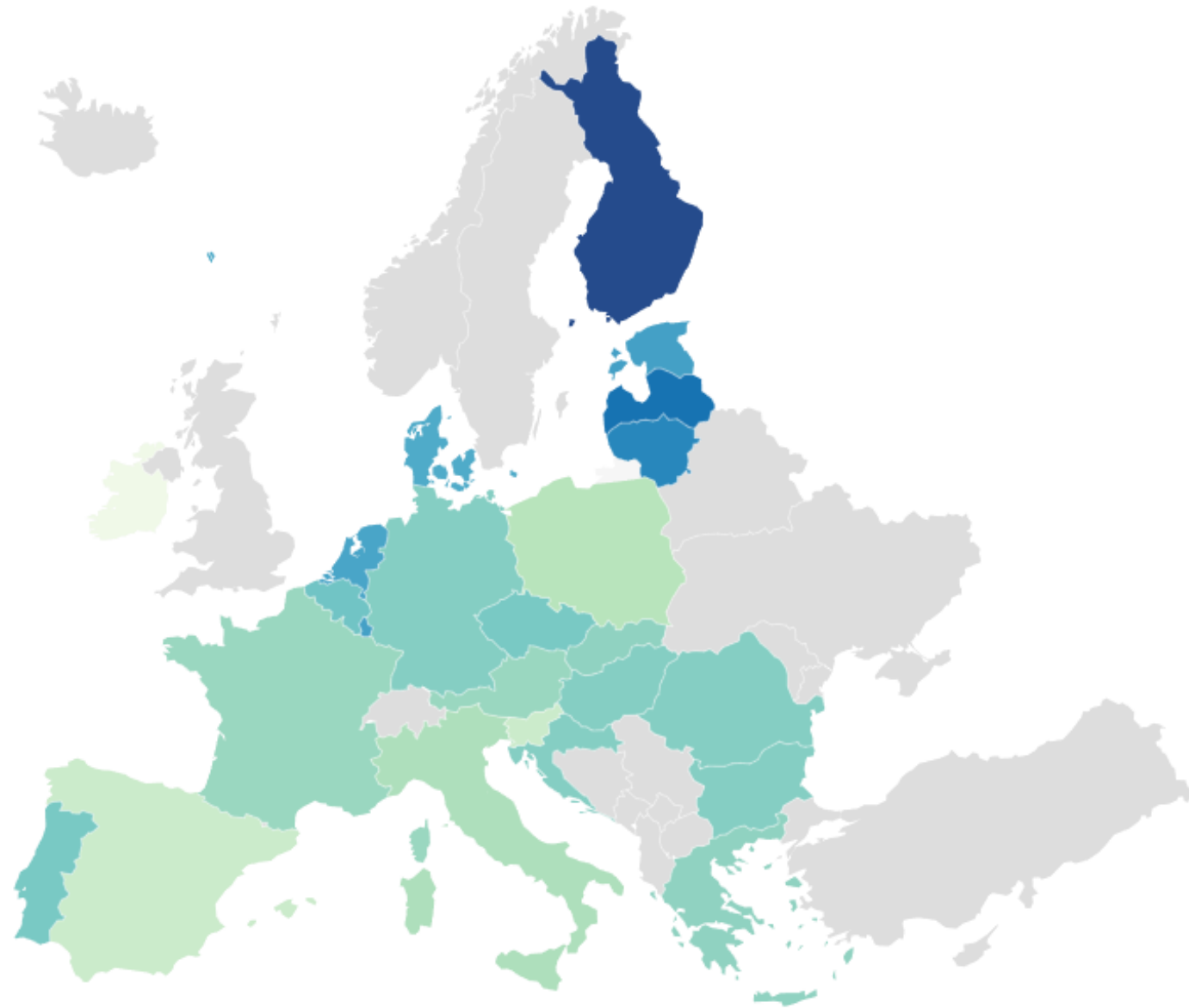
- Gas demand decrease compared to 2019-2021 avg.
 - 12 % decrease in 2022
 - 20 % decrease in 2023
- Highest demand reductions in industrial, residential, and commercial sectors (in that order)
- Increase in power generation
 - result of serious droughts and missing nuclear-based power in FRA
 - gas-based generation as a high-price substitute
- Coal-to-gas switching, French nuclear and winter temperatures pose important factors in 2023
- Demand rebound possible

Figure 3: Evolution of annual gas demand in Europe between 2019 and 2022 (bcm)



Gas Demand, January 22 to December 23 vs 2019-21 average

Percentage reduction



Clash of principles: market vs. state

- EC´proposed market reform (3/2023, EP-agreed 4/2024)
 - strengthening of long-term contracts
 - contract for difference
 - power purchase agreements
 - (regulated asset base?)
- More regulation, less free market?
 - To provide price stability for a long-term planning
 - Capital-intensive projects, e.g., nuclear power plants need to calculate return of investments
 - Capacity markets
- A seminal shift for the EU energy market model?

EU in new position

- The European Green Deal
 - net-zero GHG by 2050
- Energy security and decarbonization seen as mutually inclusive after 2/2022
 - Reconciliation of diverging views in the EU
- Carbon Border Adjustment Mechanism (CBAM)
 - “carbon tarif” to prevent “carbon leakage”
 - “The Brussels Effect” of 0,5 bn. market
- Energy solidarity
 - transborder measures/solidarity in gas supplies

EU in new position

- Joint gas purchases via the EU Energy Platform
 - demand aggregation (12/2022 – in effect since 4/2023)
 - to prevent internal competition and overpaying
 - limited scope of compulsory measures (only ca. 13 bcm – 15% of storage obligations)
- Rare earth minerals and materials crucial for RES and related technologies
 - e.g., neodymium magnets for wind turbines, silicon for solar PVs
- Critical Raw Materials Act (proposal)

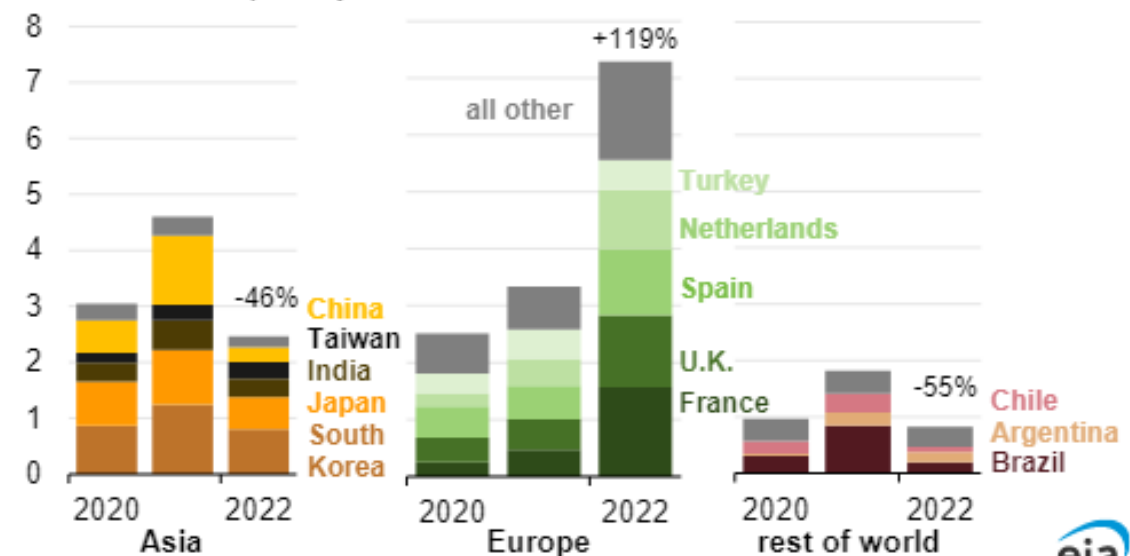
Gazprom's Export Position - EU

- Nord Stream I & II: inoperable
- Ukraine transit: underutilized but operating
- Yamal: empty
- Turk Stream: operating
- Missing demand for the pipeline gas (plus a price cap)
- 14th package finally taking on LNG?

Gas imports to EU

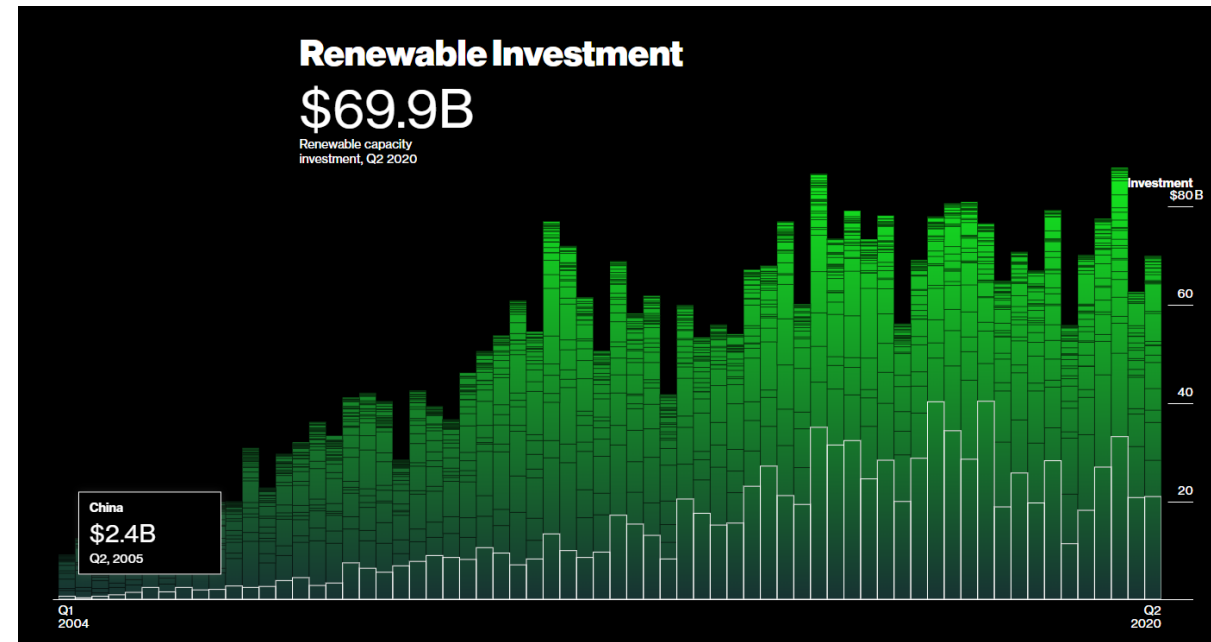
- US as the savior?
- Memorandum to supply at least 50 bcma to EU through to 2030
 - 141% increase between 2021-2022
- Domestic position of fossil fuels remains a question, concerning climate-mitigation policies
- Investment viability?
- Inflation Reduction Act vs. EU's Green Deal

Annual U.S. liquefied natural gas exports by destination (2020–2022)
billion cubic feet per day



China's rise

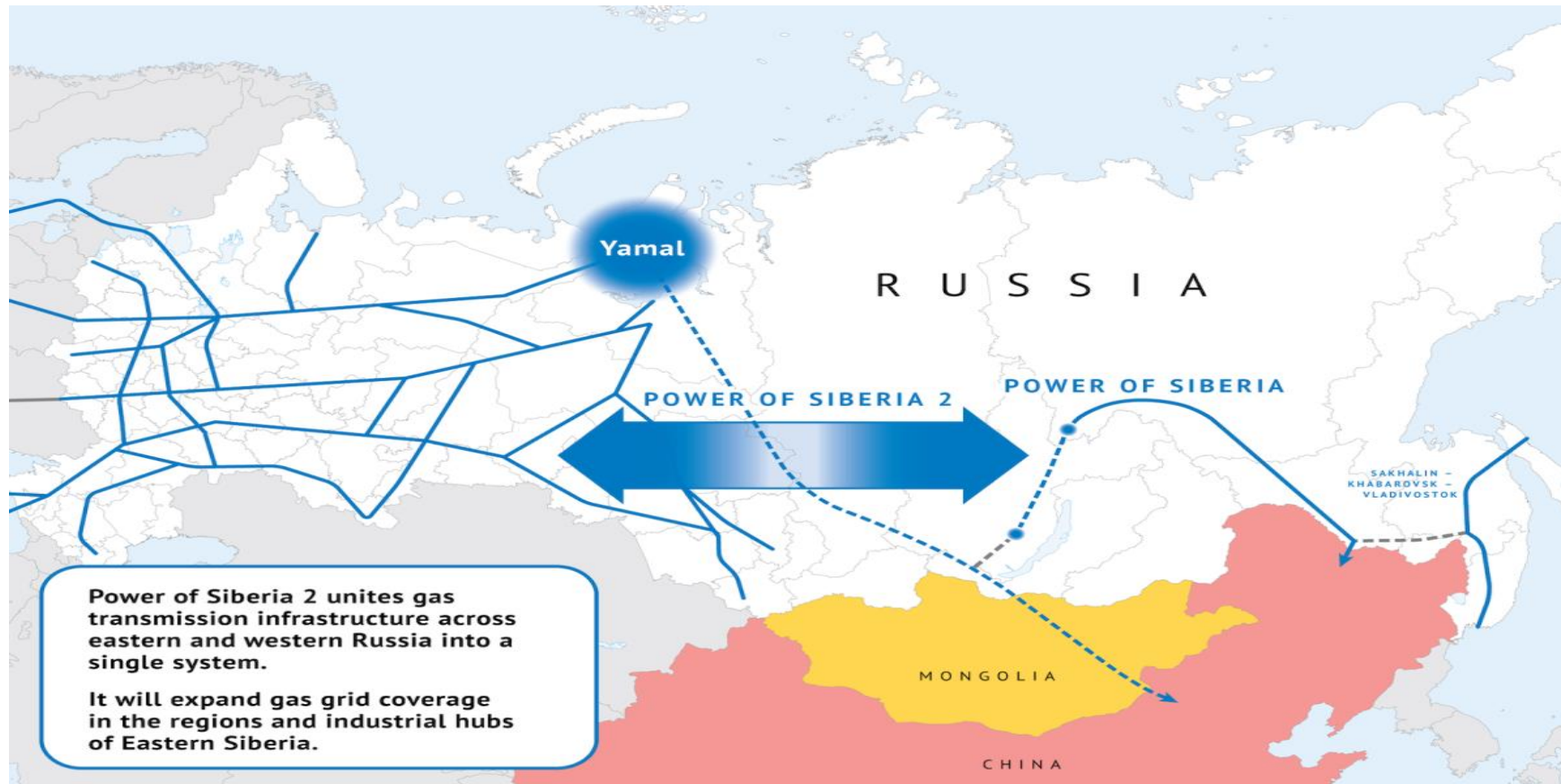
- US NSS (2022): China as a systemic challenger, Russia as a “mere” local threat
- US re-focus as a result of long-term process (since B. Obama)
 - focus shift to Indo-Pacific
- EU forced to stand on its own
- China's fossil fuel demand to rise into 2030s
- Biggest investor in RES



Can Russia pivot to China?

- Europe is a market Russia will not be able to replace in foreseeable future
- China's gas demand expected to double by 2035 – SE Asia as the obvious target
- All options are far from being non-problematic
- Power of Siberia 2 as the potential game-changer/an actual "switch"
- LNG will play a key role in reaching China and other main customers in SE Asia
- Tight competition in SE Asia (esp. LNG)
- Lower investment stability comp. to EU

Can Russia pivot to China?



Thank you for your attention

— jirusek.martin@mail.muni.cz