Short, mid and long-term costs of phasing out Russian gas in CEE

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Enhancing connectivity and market integration
17 Gas Forum
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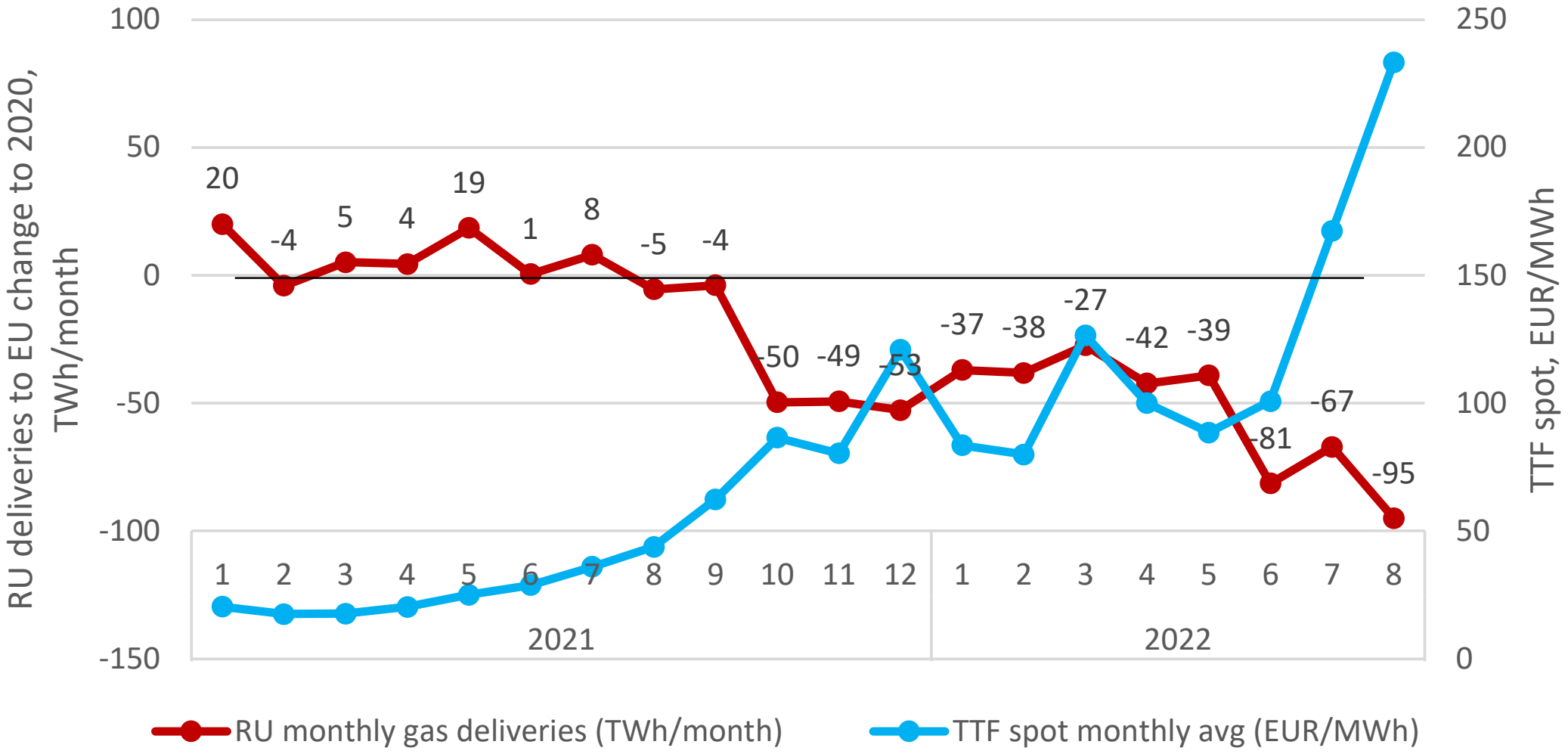
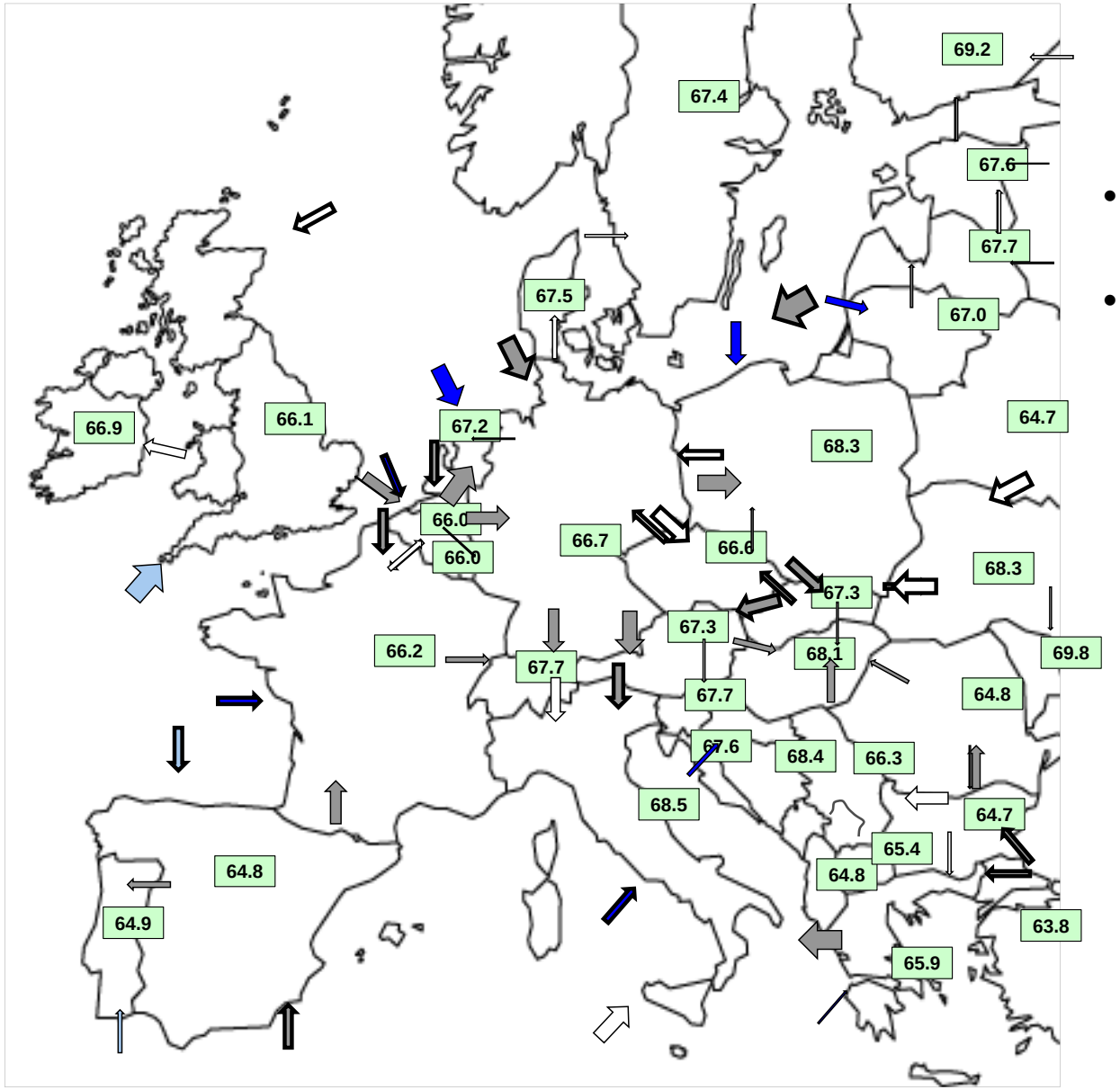
Image source: Gazprom video „Winter will be big” 06.09.2022.

We have a problem...

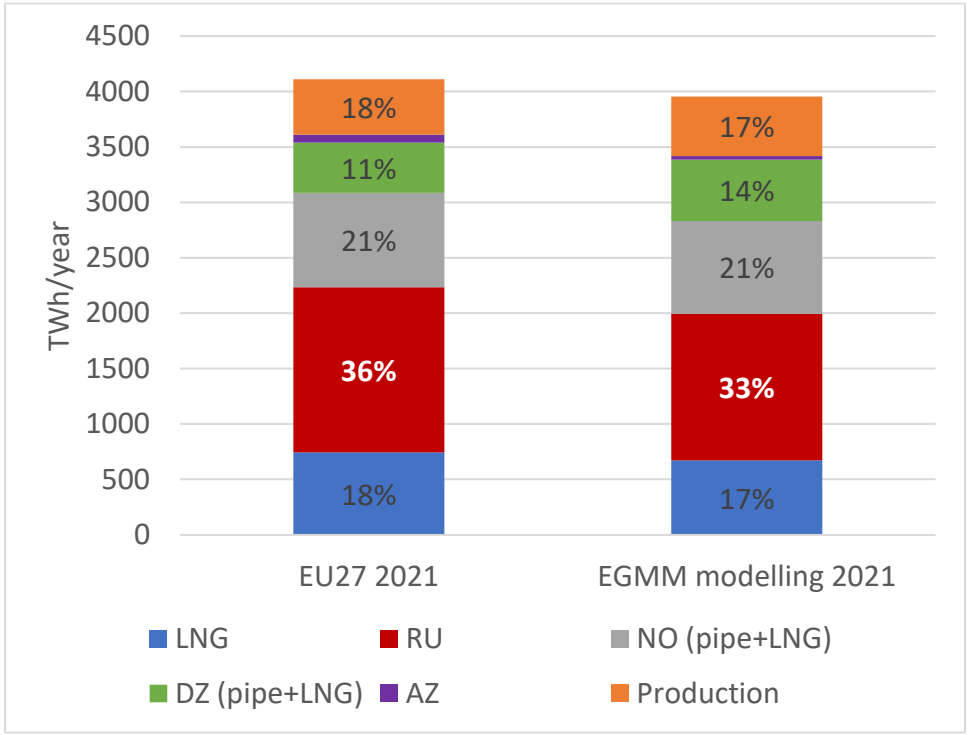


Modelling reference 2021

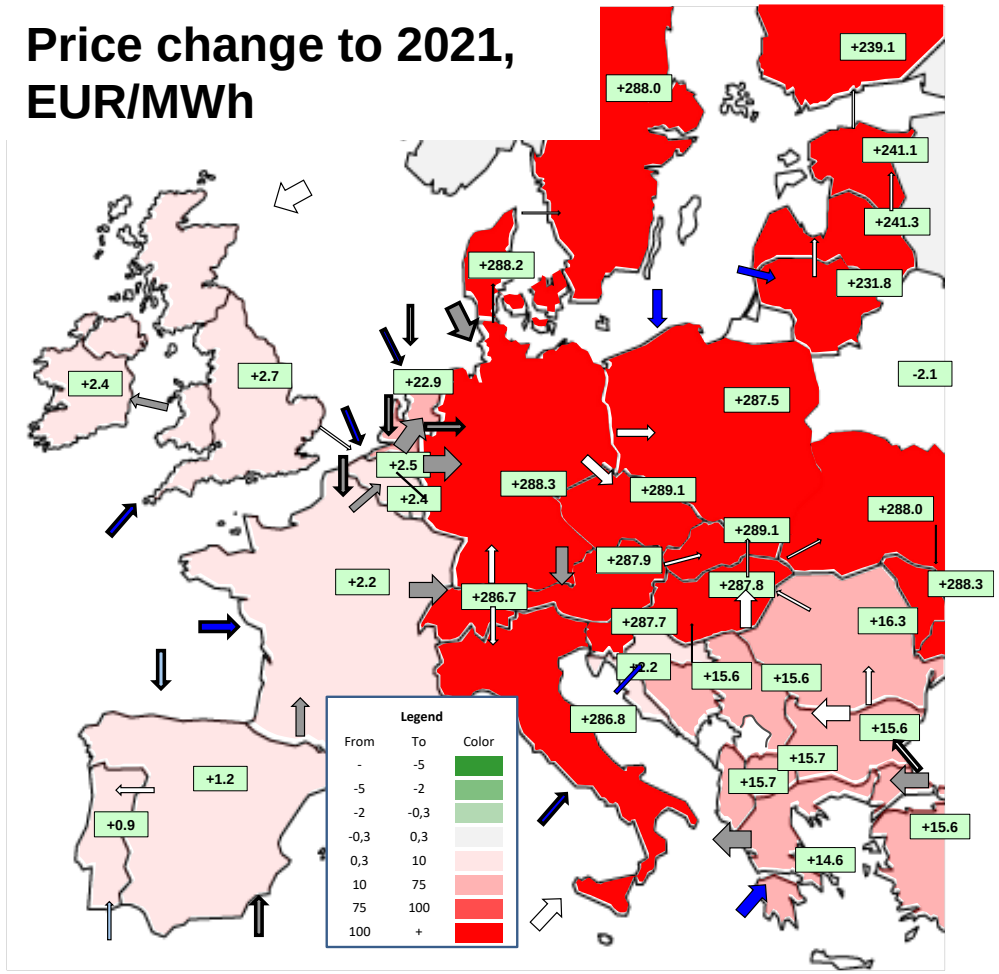


- Reference scenario was calibrated to the 2021 European gas market demand and supply structure, capacity and use of infrastructure, and price environment.
- Price levels are around 65-70 EUR/MWh, indicative of H2 2021
- High Asian demand and tight LNG market is assumed.

Supply structure in our 2021 reference compared to fact data



Full Russian cut without further measures (Full cut)



-902 TWh/yr
EU27 demand adjustment compared to 2021

LNG **1226** TWh/yr
LNG supply to EU27 (incl. NO, DZ)

+290 €/MWh
Price change in CEE compared to 2021

+149%
EU 27 gas bill compared to 2021

- Similar price zones would emerge based on ability to access to LNG and global markets.
- LNG inflow cannot increase further with existing infrastructure (E.g. Spain-France bottlenecks).

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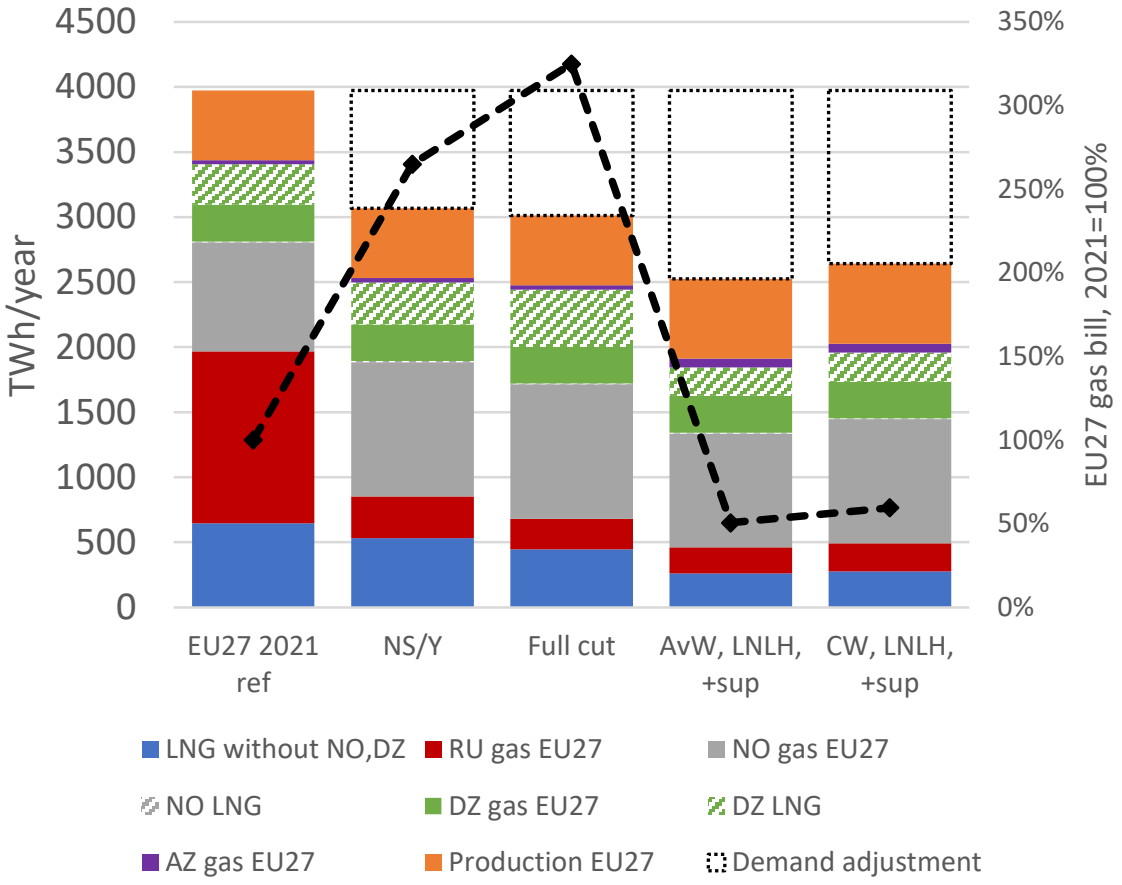
What can the EU do in the short run?

- Demand:
  - -15% demand in industry sectors
  - -15% demand in building sector in average winter / -6% in cold winter
  - -20-35% in power&heat generation Due to high energy prices, strong switching from gas with low hydro and nuclear availability
- Supply:
  - +300 TWh for Q1 2023 additional LNG terminals in NL, DE, FI
  - Additional pipelines (IGB, Baltic pipe, etc.)
  - +80 TWh production in DE, DK, NL
  - Storages are used up fully by the end of the withdrawal season



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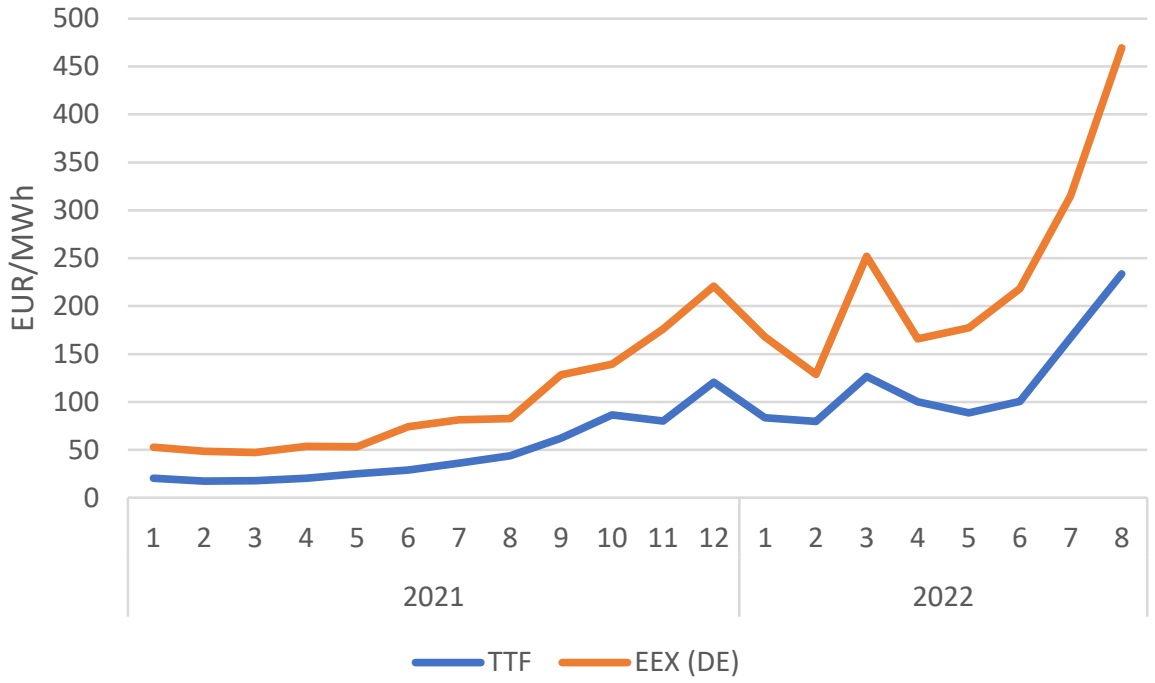
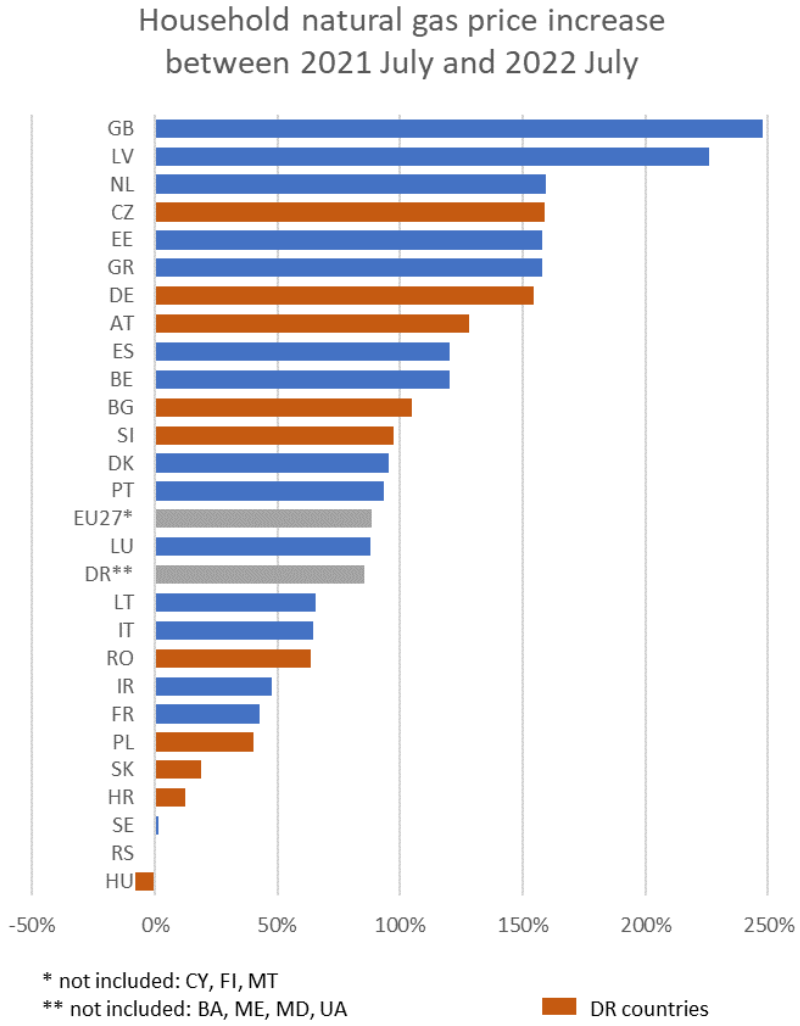
Demand response

- Power sector did not react to the high prices
- More gas was consumed in the power sector than last year – FR nuclear + dry summer



- No clear price signal to households in some countries



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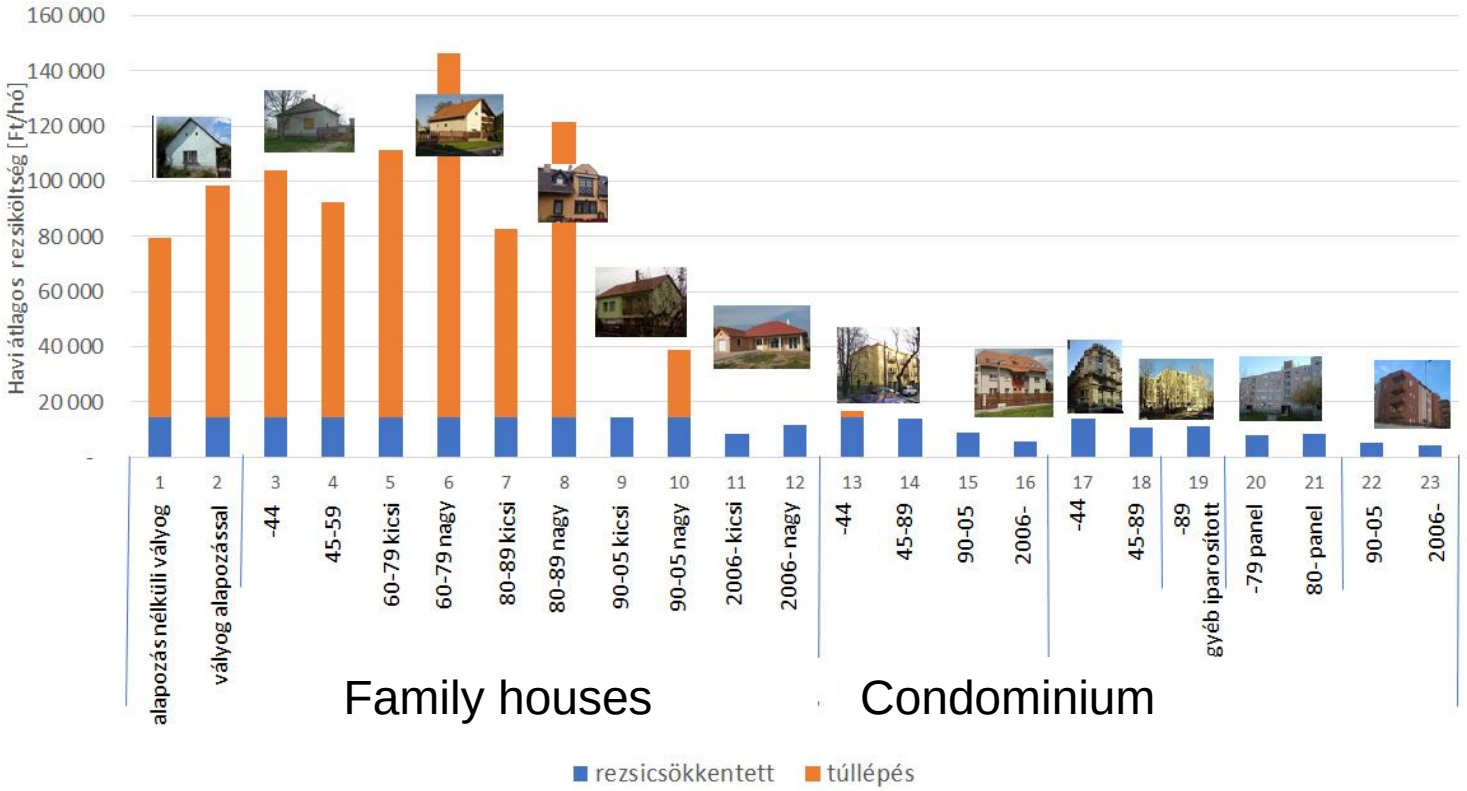
Hungary and the change in retail gas price regulation

- In Hungary the utility bill cut regime introduced a fix price for gas in 2013 and it has been kept stable for 10 years
- 10 years were wasted in terms of energy efficiency
- New ruled announced in July – entering into force from August:
  - Every household is entitled for „cheap" gas up to 1740 m3 (average consumption)
  - Above that market price will prevail

Estimated new natural gas bill for households in HUF/month



Conclusion and questions

- **SHORT TERM**
  - EU has acted timely with the storage targets. With over 82% filled by September, for this winter we see no major threat for supply disruption.
  - Europe needs to pay more for its gas supply than previous winter
- **MID-TERM**
  - Full cessation of Russian deliveris may be mitigated completely with combined supply and demand measures
  - The new equilibrium of gas consumption at ~3000 TWh for the EU27 brings lower gas bills
  - Short-term switching in power&heat sector will result in increased use of solid fossil fuels and GHG emmissions
- **LONG-TERM**
  - Continue energy efficiency and secure alternative gas suppliers, increased use of LNG
  - Speed up RES-E deployment to move away from

- **SHORT TERM**
  - Can we resist the temptation to put export ban on gas within the EU and EnC
- **MID TERM**
  - How do we fill up storages next winter without Russian gas?
  - Can we do a quick building sector gas demand reduction in a sufficient way? (Biomass!)
- **LONG TERM**
  - How will our industry and the competitiveness reflect the changes?

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THANK YOU FOR YOUR ATTENTION

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