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*EU together  
Joint, cost-effective actions  
to fully end dependence on  
Russian fuels*

# Agenda

- Hungarian state of play in the gas markets
  - Capacities of the Hungarian gas transmission system
  - Long-term gas supply contracts in force
- What does the REPower Roadmap suggest?
- Modelling the gas phaseout – effects on Europe and the countries of the region
- Conclusions

# Hungarian natural gas infrastructure: strongly interconnected with neighbours, well-developed storages

**AT → HU**  
**5.3 bcm/y**

**SK → HU**  
**4.4 bcm/y**

**UA → HU**  
**17.5 bcm/y**

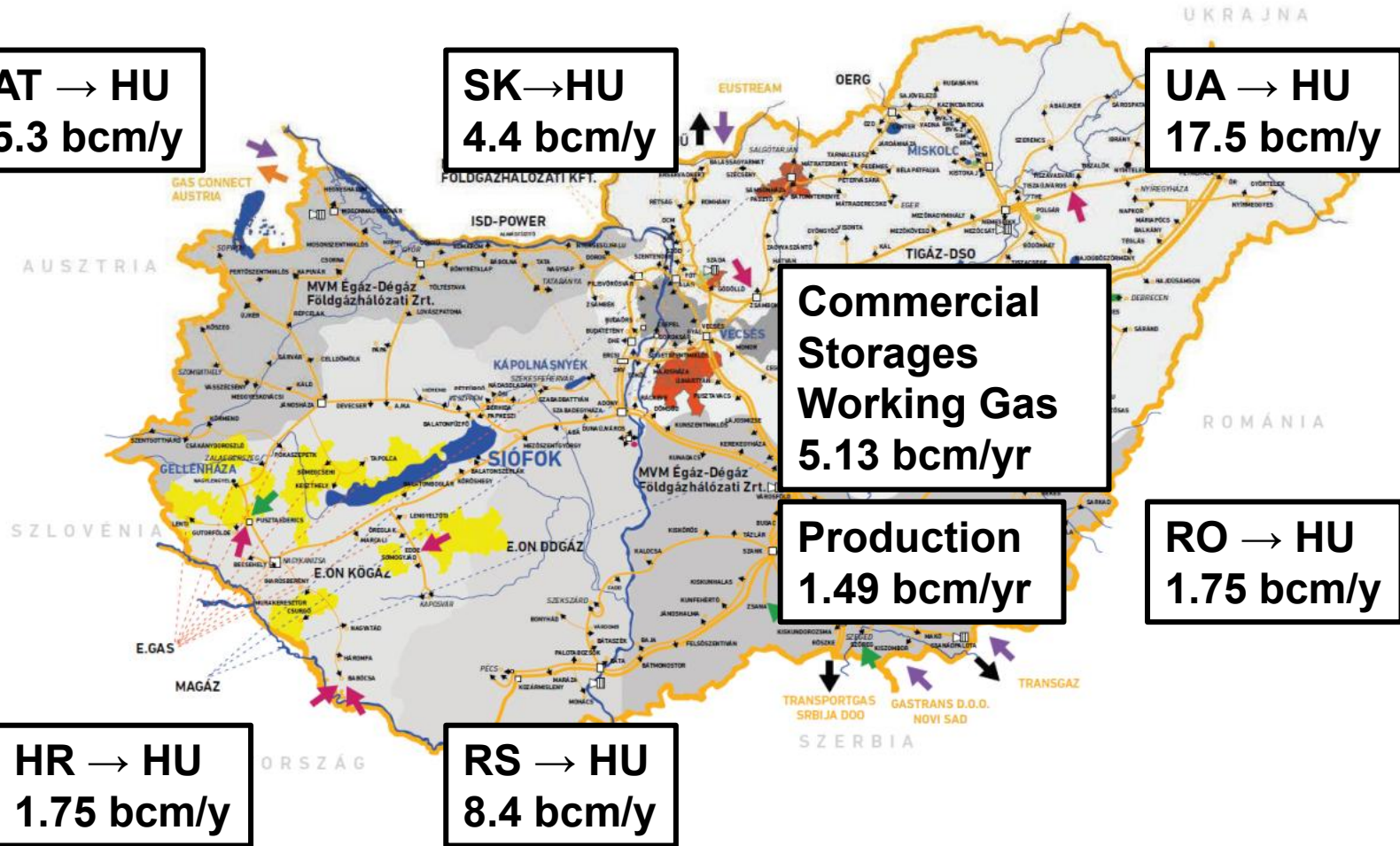
**Commercial Storages Working Gas**  
**5.13 bcm/yr**

**Production**  
**1.49 bcm/yr**

**RO → HU**  
**1.75 bcm/y**

**HR → HU**  
**1.75 bcm/y**

**RS → HU**  
**8.4 bcm/y**



HU annual gas consumption:  
~8.5-9 bcm/y in the last 3 yrs

Total firm entry capacity:  
~47 bcm/y

Without UA>HU and RS>HU:  
21 bcm/y

Without storages: 14.8 bcm/y

Capacity-wise there is more than enough possible sources to meet the demand in Hungary.  
There is no security of supply issue.

Source: [Data of the Hungarian natural gas system, 2023](#), Table 2.2B

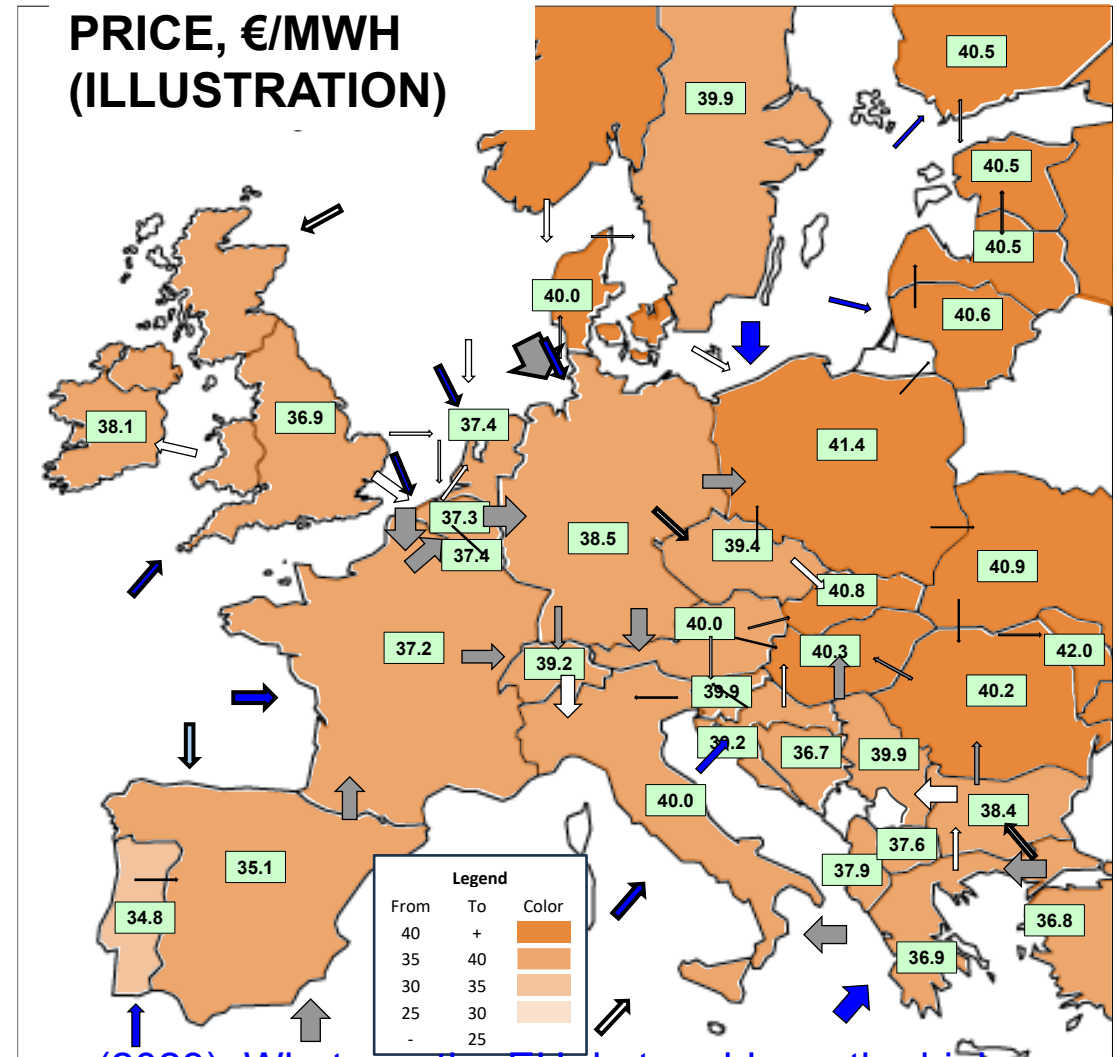
# Natural gas long-term contracts to Hungary as of 2025

- MVM-Gazprom contract: 4.5 bcm/yr 2021-2036
- Alternative sources and contracts:
  - [Krk LNG terminal booking](#) 1.0 bcm/yr 2021-2028
  - [MVM-ENGIE contract](#) 0.4 bcm/yr 2028-2038
  - [MVM-Shell contract](#) 0.2 bcm/yr 2021-2027
  - [MVM-Shell contract](#) 0.2 bcm/yr 2026-2036
  - [Shah Deniz stake](#) 1.5 bcm/yr 2030-
- Missing volumes may be met with future long-term contracts or short-term agreements

# European Gas Market Model – major characteristics

- EU (26) + Energy Community CPs (7) + UK + CH + TR + BY + AM = 38 countries are modelled
- Trade is based on long term contracts and spot trade within the modelled and with exogenous countries and global LNG market (NO, RU, LNG)
- LNG market representation is linked to Asian LNG prices
- Physical constraints are interconnection capacities (transmission tariffs are also included)
- Trade constraints: TOP obligations with flexibility
- Domestic production and storage facilities are included
- Main output:
  - Competitive prices by countries; price modelled for each 12 months (in boxes)
  - Natural gas flows and congestions on interconnectors (arrows)

## WHOLESALE GAS PRICE, €/MWH (ILLUSTRATION)



Detailed description of EGMM:

[Péter Kotek, Adrienn Selei, Borbála Takácsné Tóth, Balázs Felsmann \(2023\): What can the EU do to address the high natural gas prices?, Energy Policy, Volume 173:113312, ISSN 0301-4215, Annex 3](#)

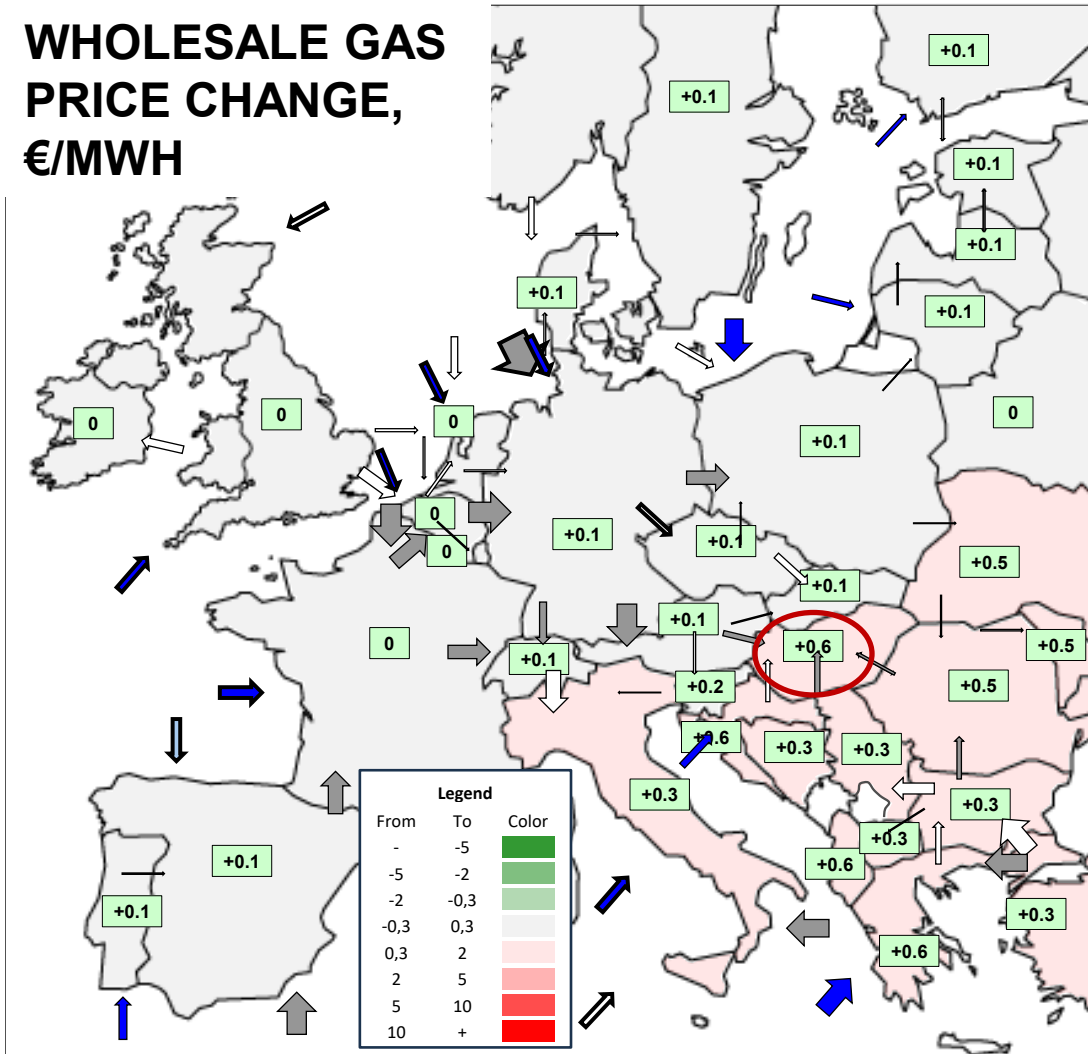
# Modelling the REPower Roadmap

- Imports of Russian gas prohibited from 01.01.2026, with transition period for existing contracts:
  - Short-term contracts concluded before 17.06.2025 may continue until 17.06.2026.
  - Long-term contracts may run until 01.01.2028.
  - Applies to pipeline gas and LNG both
- Modelling logic: scenario analysis with and without REPower Roadmap to identify effects i.e. a case when Russian gas is not constrained by 2028 vs. a case when Russian long-term contracts are not allowed.
- SC1: REPower roadmap in effect in the EU27
- SC2: REPower roadmap in effect in the EU27 + TurkStream flows from Russia to Balkans countries are halted
- Results are preliminary, but similar modelling exercise was done in 2024:  
[Future of Russia gas deliveries to Austria \(2024\)](#)

# REPower roadmap effects 2028

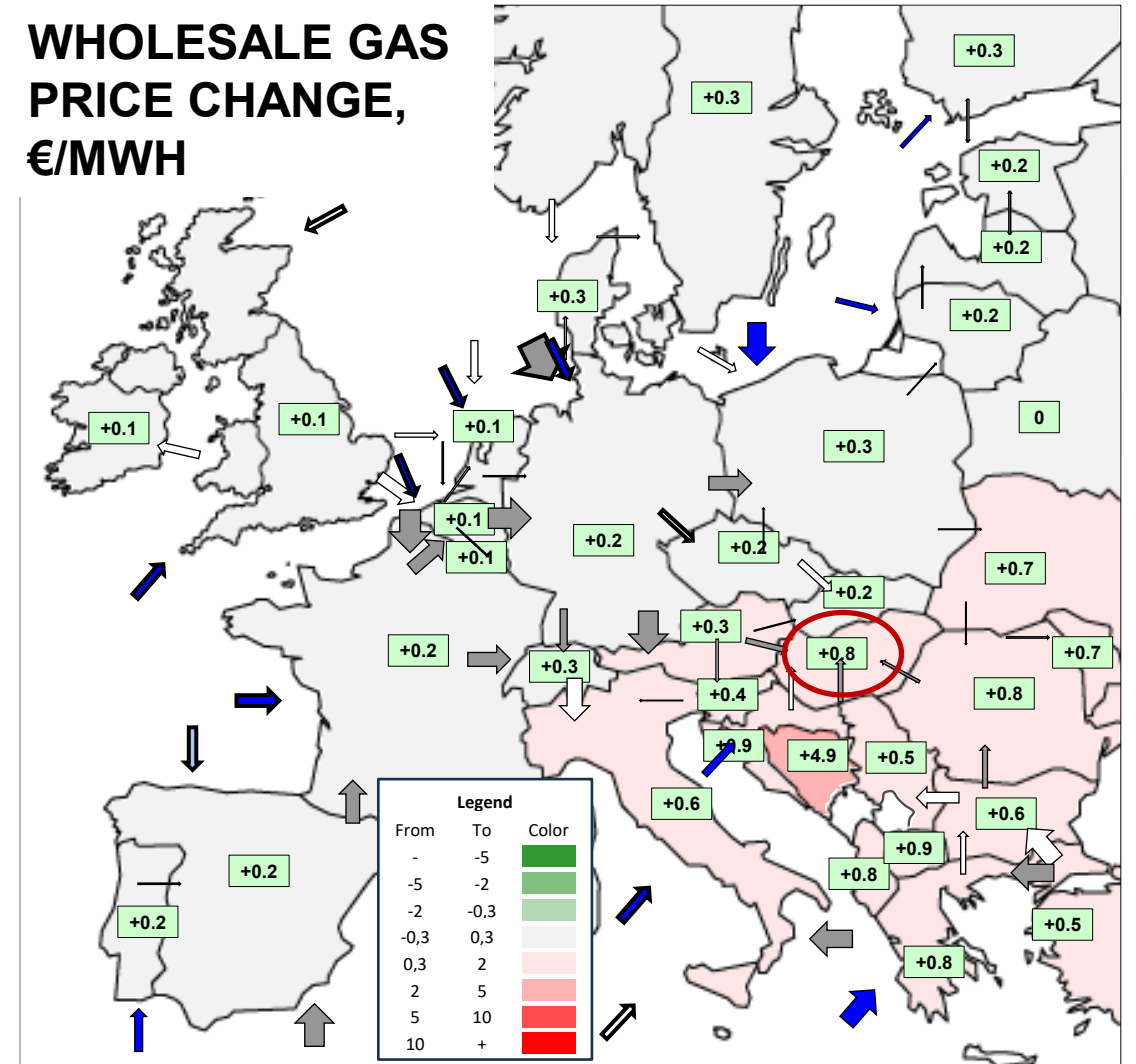
SC1: REPOWER effects in 2028, EUR/MWh

**WHOLESALE GAS PRICE CHANGE, €/MWh**



SC2: REPOWER and no TS effects in 2028, EUR/MWh

**WHOLESALE GAS PRICE CHANGE, €/MWh**



# Conclusions

- Capacity-wise there is no issue with supplying Hungary from alternative sources. Diversification strategy of the past has built a well-interconnected network and huge storage infrastructure is in place
- Despite the strong stance of the Hungarian government against the REPower plan, diversification of contracts has already begun (e.g. ENGIE, Shell contracts and Krk capacity bookings)
- Modelling suggests that the REPower Roadmap implementation will have negligible effect on prices and gas bills of consumers by 2028
- Strong resistance of Hungarian government towards Russian gas phaseout is mostly of political nature
- Our previous work on Russian gas phaseout also had similar results
  - [Future of Russian gas deliveries to Austria \(2024\)](#)
  - [Russian gas phaseout in Hungary \(2023\)](#)
  - [The possibilities of phasing out Russian gas in the Danube Region \(2022\)](#)
  - [Possibilities for phasing out Russian gas for the 2022/2023 and 2023/2024 winter from the EU energy supply \(2022\)](#)

**THANK YOU FOR YOUR ATTENTION!**

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