



Contribution of the US in solving the supply security issues

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Price Regulation

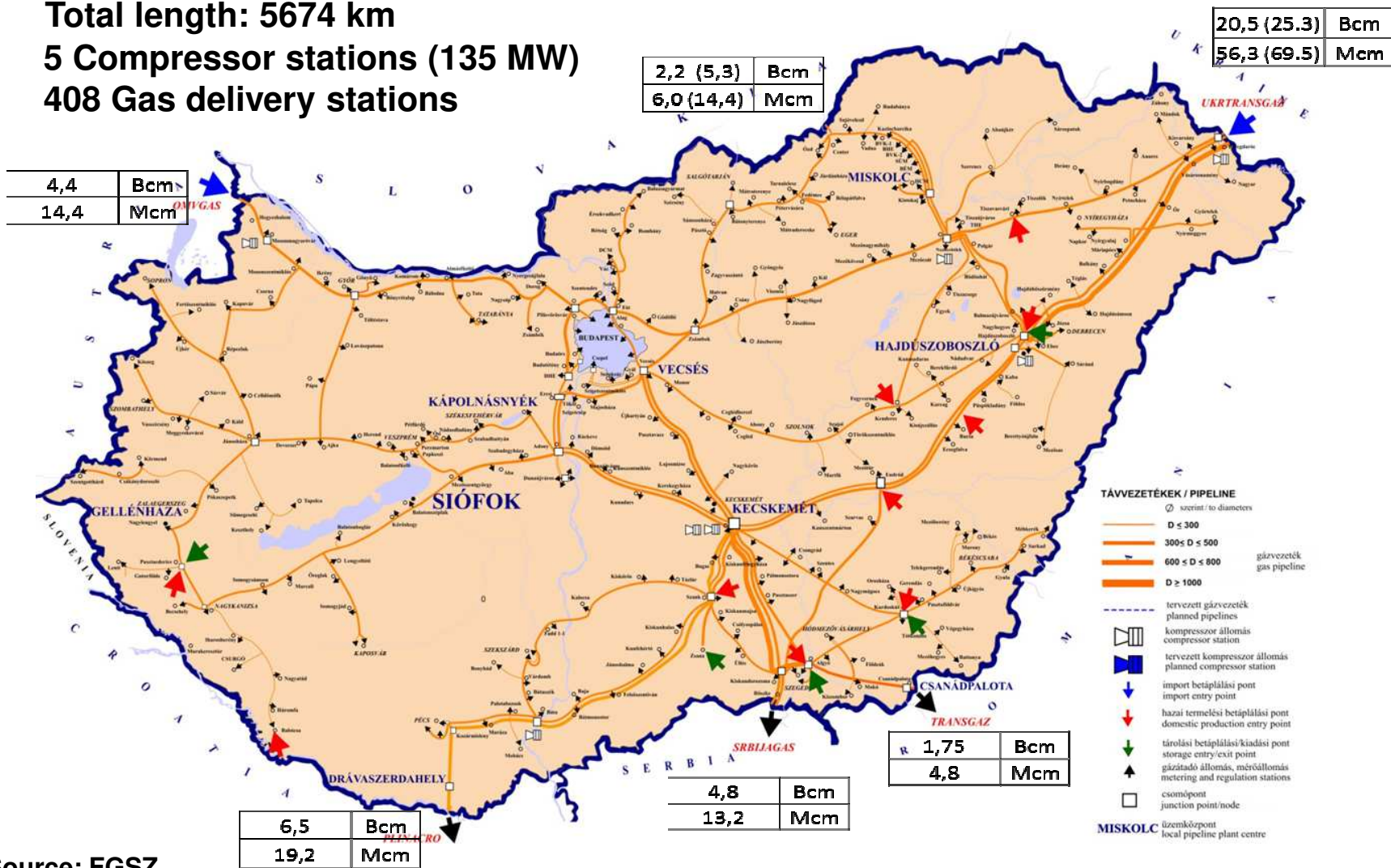
22. November 2018

Contents

- Hungarian transmission, distribution system and storages
- Consumption
- The price regulation, Legal framework
- Tariff calculation
- Safety storage
- Obligatory storage



- Total length: 5674 km
- 5 Compressor stations (135 MW)
- 408 Gas delivery stations

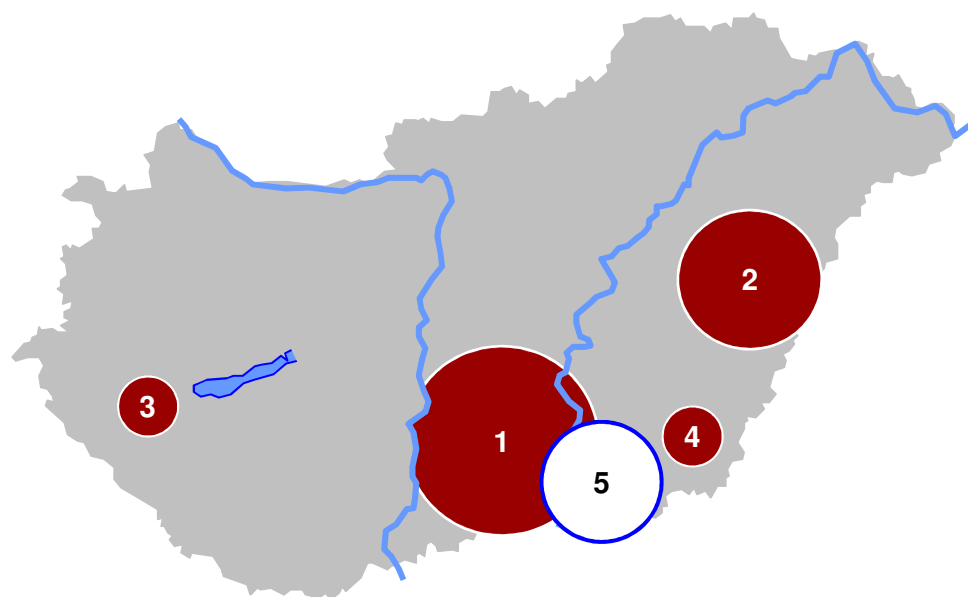


Source: FGSZ



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Storage Capacities



- Commercial storage units
- Strategic (Security) storage unit

Storage Unit	Working gas capacities [MMm ³]	Peak withdrawal capacities [MMm ³ /d]
① Zsana	2 170	28.0
② Hajdúszoboszló	1 440	20.8
③ Pusztaderics	340	3.1
④ Kardoskút	280	3.2
⑤ Strategic UGS Szőreg-I.	1 200	20.0
Szőreg-I. commercial	700	5.0
TOTAL	6130	80.1

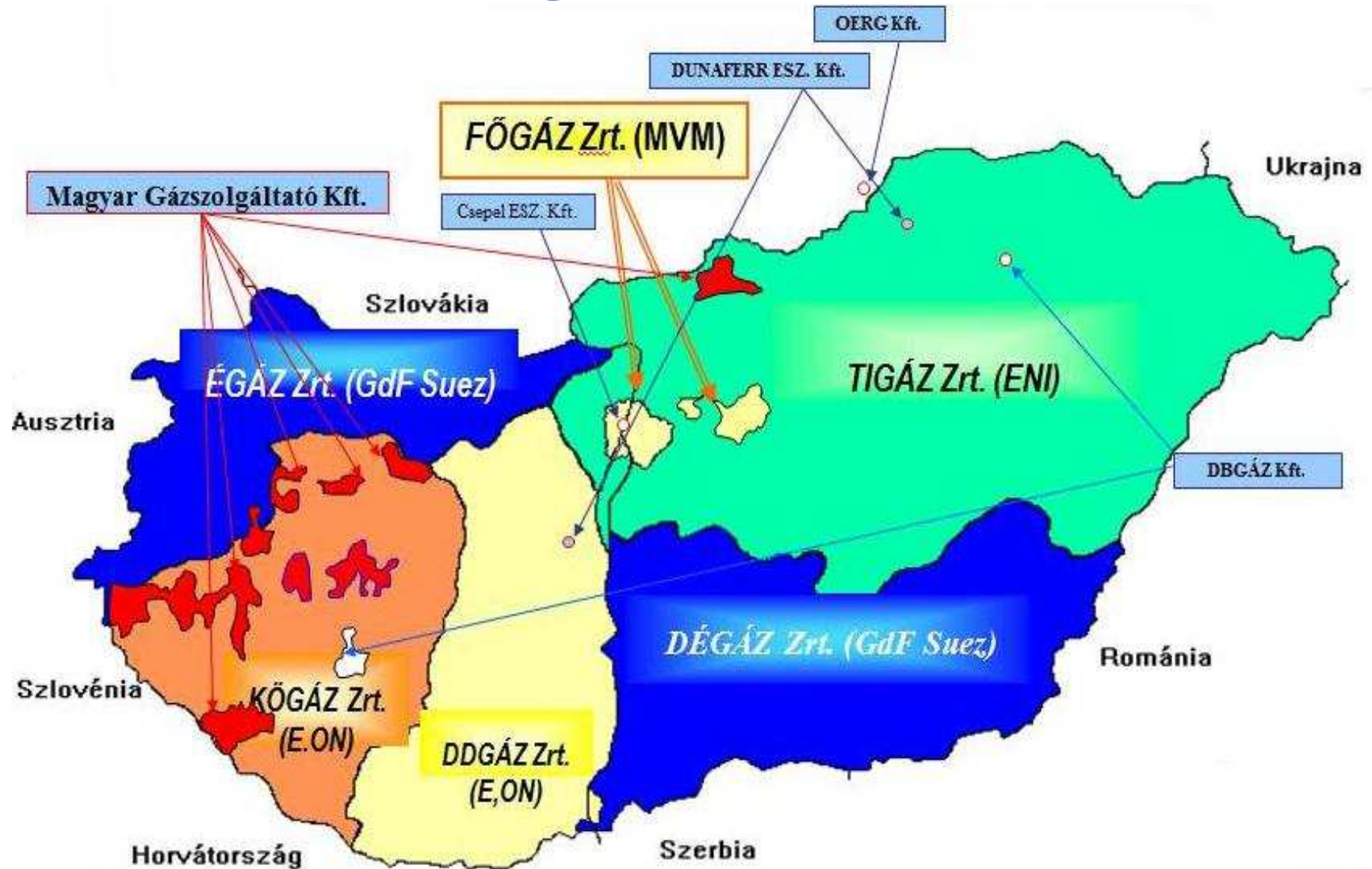
Total injection capacity: 45.9 MMm³/day

Source: HEA



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Natural gas distributors



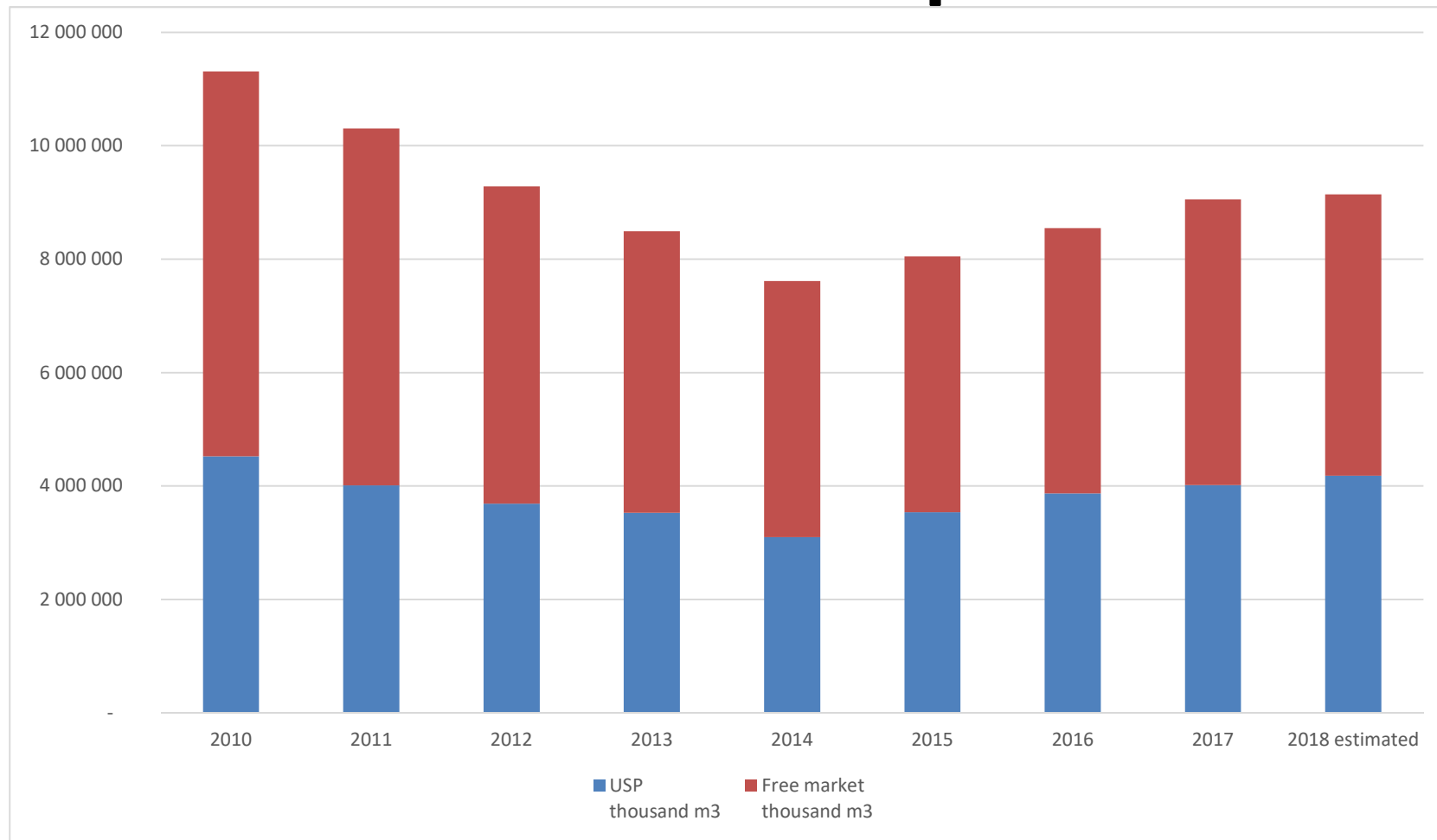
Settlements Connected: 2917; 92.3 %

Distributor system length: 85896 km

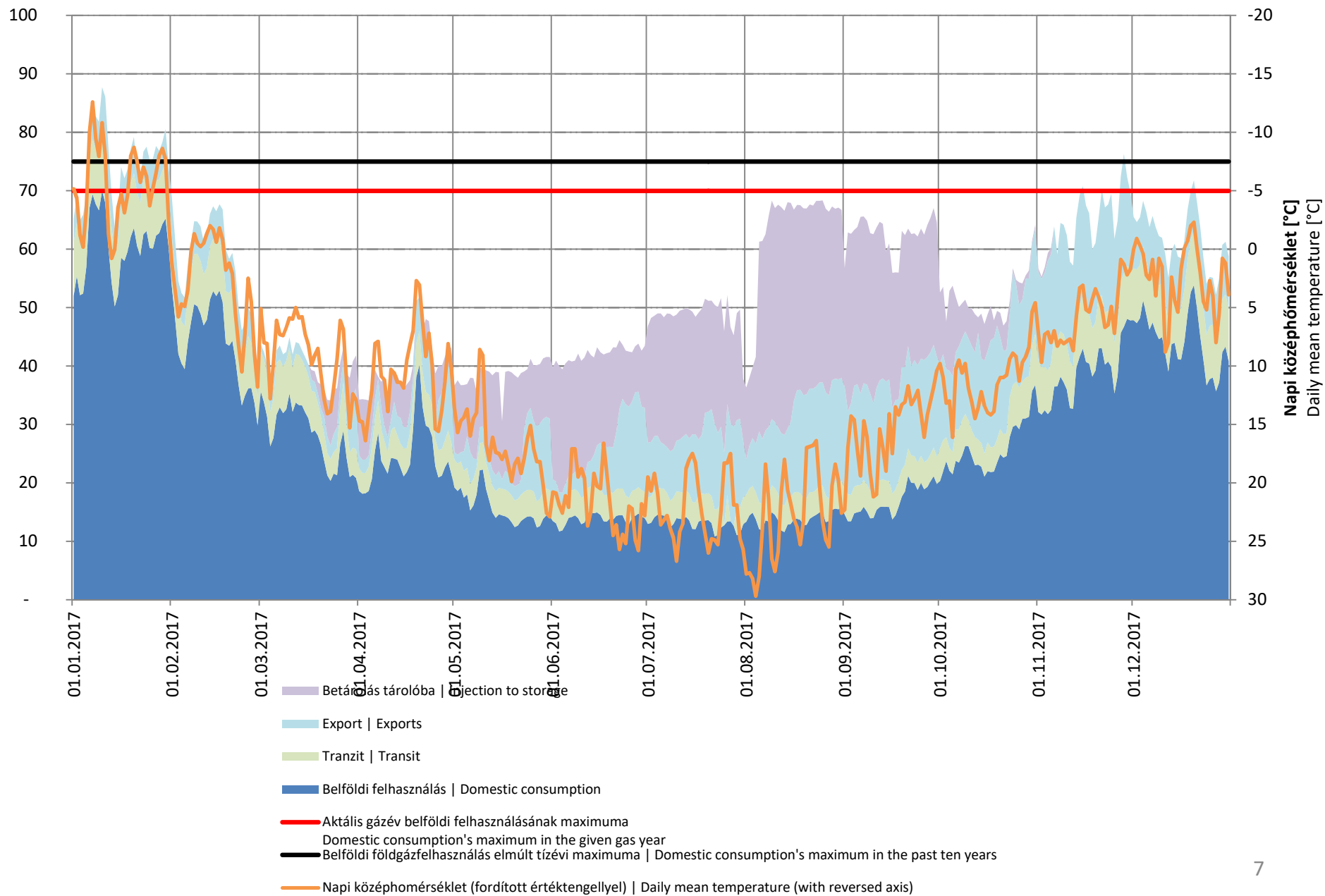


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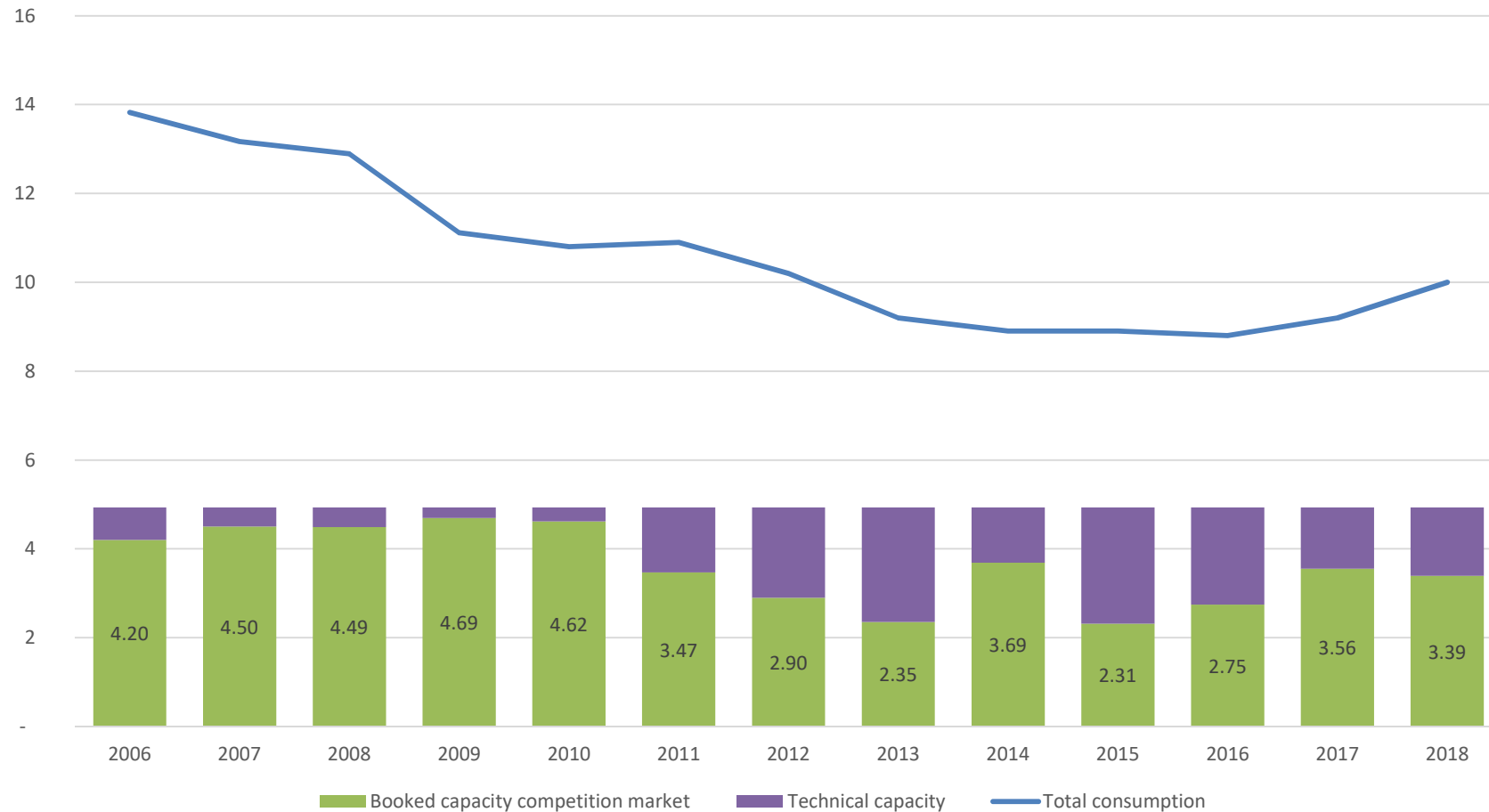
The share of the USP and the free market consumption



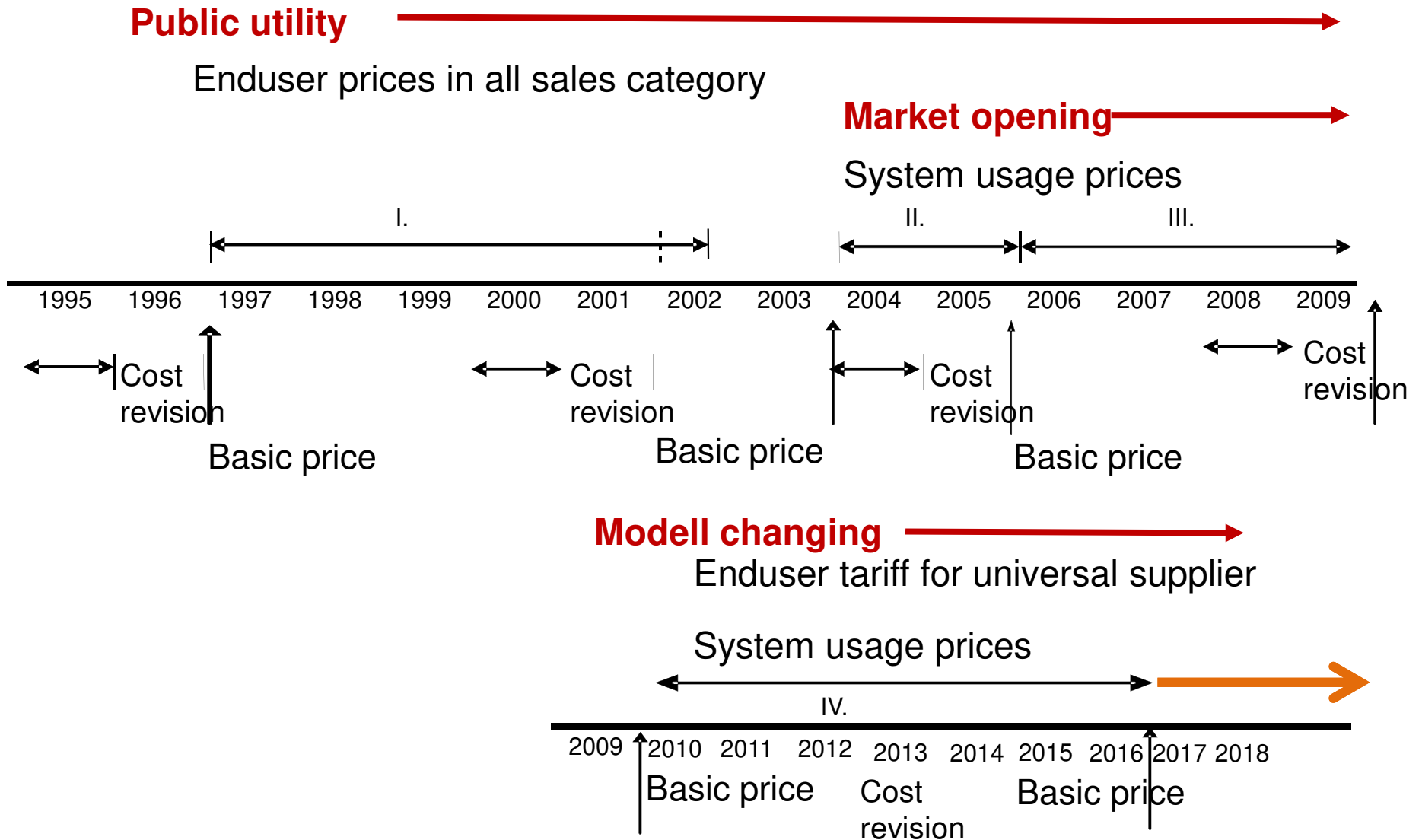
Mm3 **Napi földgázforgalom-struktúra**
Daily natural gas flow structure



Consumption and the commercial storage booked capacities



Price regulation periods in Hungary



Legal Framework

Regulated prices

- transmission, distribution and storage
- natural gas trade between the wholesaler and the universal supplier,
- End user price for universal supply (households, small consumers)
- the cost of connection to the gas system
- the cost of extra services that the consumers can ask for

Gas Act

Principle of price regulation

The regulated price shall include,

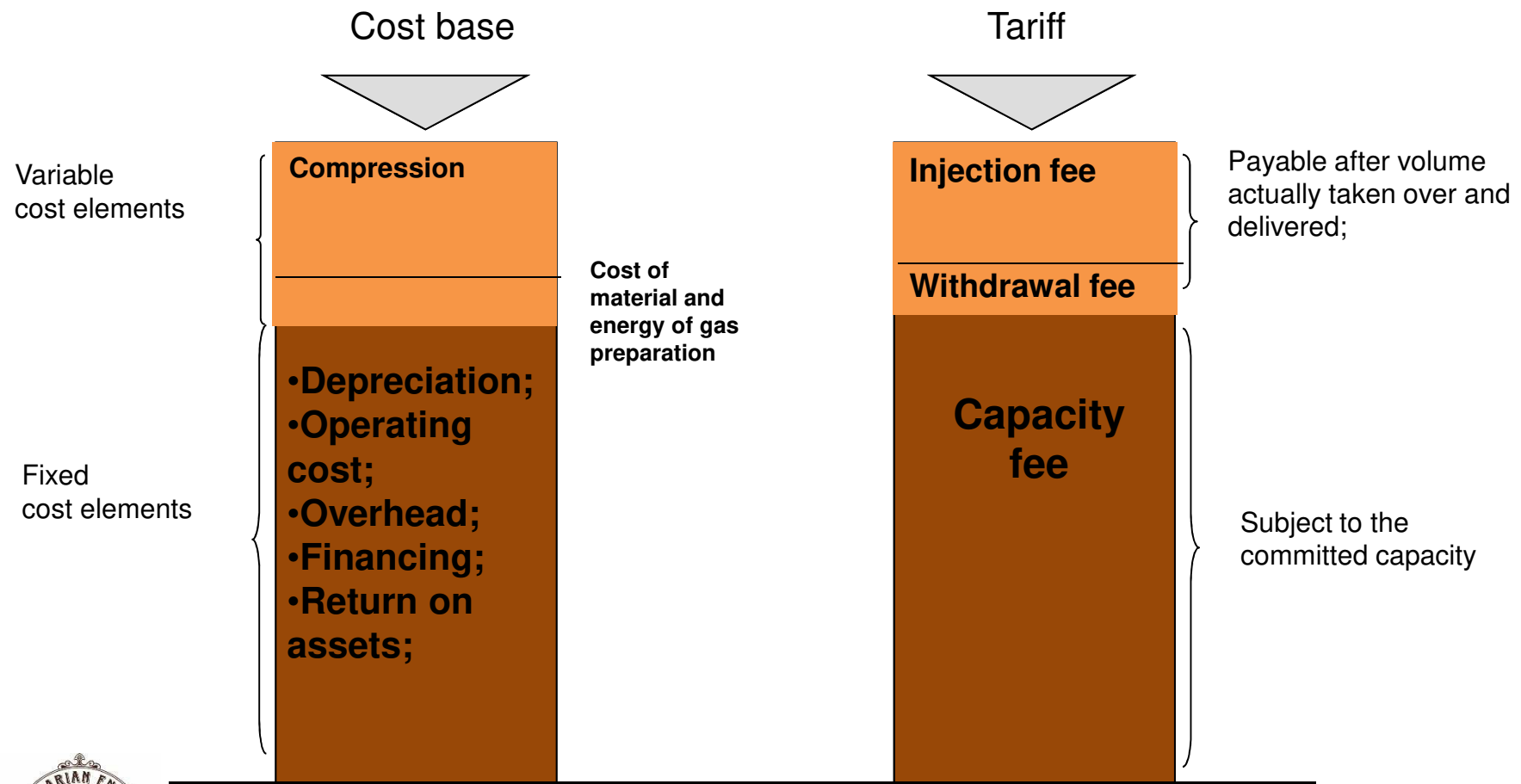
- the **costs of the justified investments** and
- the **costs** of the efficiently working licensees, as well as
- the **profit** necessary for long-term operation.

Who sets the tariffs

Tariffs and conditions of their application were set

- in a **ministerial decree** (on the basis of the recommendations of HEO) until 1st January 2012.
- From 1st January 2012 till 1st January 2013 **HEO sets the system usage tariffs in resolutions**
- From 1st January 2013 **HEO (HEA) sets the system usage tariffs in a Presidential decree**

Relation between cost base and tariff in the case of storage



Storage facility fee system

- The Storage facility capacity fee is calculated on the basis of the following formula :

$$TM = 0,1093 \times \left[\text{MAX} \left(1; 133,33 \times \frac{B}{M}; 70,31 \times \frac{K}{M} \right) + \frac{133,33}{\text{MIN} \left(133,33; \frac{M}{B} \right)} + \frac{70,31}{\text{MIN} \left(70,31; \frac{M}{K} \right)} \right]$$

- TM: storage facility capacity fee (HUF/kWh/year)
- M: mobile tie up of the system user in the storage facility (kWh)
- B: the entry into storage capacity tie up the system user (kWh/day)
- K: the withdrawal from storage capacity tie up the system user (kWh/day)
- 133.33 is the number of days belonging to even entry into storage,
- 70.31 is the number of days belonging to even removal from storage,



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ASSOCIATION

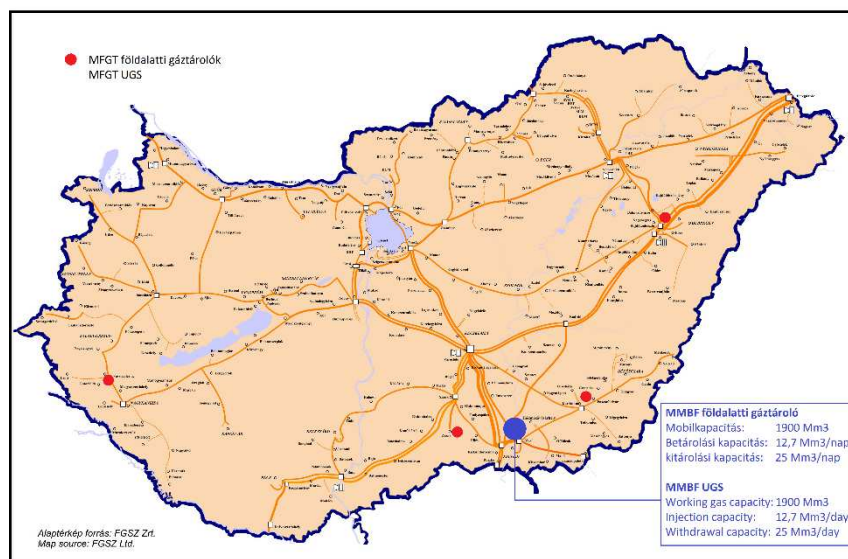


- Established in 1993 as Crude Oil and Oil Product Stockpiling Association
- 2006 – Russian- Ukrainian Gas Crisis – the scope of the association’s activities are extended to include natural gas
- 2010 – Commissioning of Underground Security Storage facility at Szőreg – HUSA holds a 48,99% ownership stake in the SSO

- Members (natural gas): Universal suppliers, Gas traders, Producers selling gas to end-users, End-users directly importing gas sources
- Duties: procurement of gas and oil stocks, the operation and commissioning of the necessary storage facilities
- Upkeep of HUSA and its security stocks is financed by membership contributions paid after unit of energy sold (e.g. in case of natural gas - 292,13 Ft/MWh)
- Natural gas sold to households is exempt from the contribution since 2013



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- Membership contributions are used to finance natural gas security stocks
- Strategic storage capacities and stocks: 1200 million m³
- The use of the strategic stocks is authorized in case of a gas crisis by the minister responsible for energy affairs
- The strategic stocks are used mainly to supply households
- Strategic stocks are also used to supply end-users in case of a gas supplier unexpectedly ceasing its operations until a supplier of last resort is appointed



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Obligatory storage

„The Universal Service Provider shall ensure the continuous natural gas supply of its contracted customers eligible for universal services in its service area for at least

- the level of the winter period with the highest heating degree days in its service area in the preceding 120 months and,
- the level of consumption at the daily mean temperature of -12 °C.
- In order to guarantee the aforementioned supply security level, the USP shall dispose contracted or optioned natural gas sources corresponding to the next gas year's consumption of its consumers by 31st of March every year. The USP shall dispose directly or indirectly of natural gas located in domestic storage by 1st October every year. The level of the stored natural gas stock must be at least 60% of the highest winter consumption in the service area in the last 120 months.”



**THANK YOU
FOR YOUR ATTENTION!**

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Questions?



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