

1st Session of UN Group of Experts on Gas

Natural Gas System in Hungary



UNITED NATIONS

Geneva

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Tamas Korosi

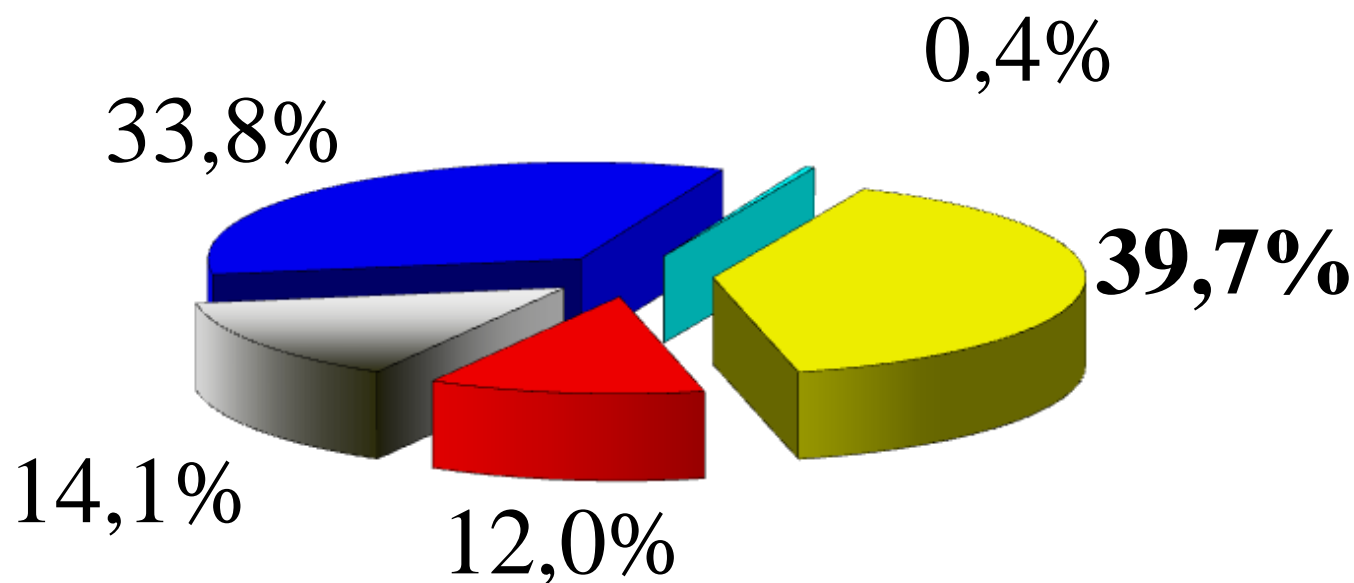
Senior Leading Advisor



HUNGARIAN ENERGY AUTHORITY



Role of Natural Gas in Hungary



■ solid

■ LPG

■ primary electricity

■ crude oil and products

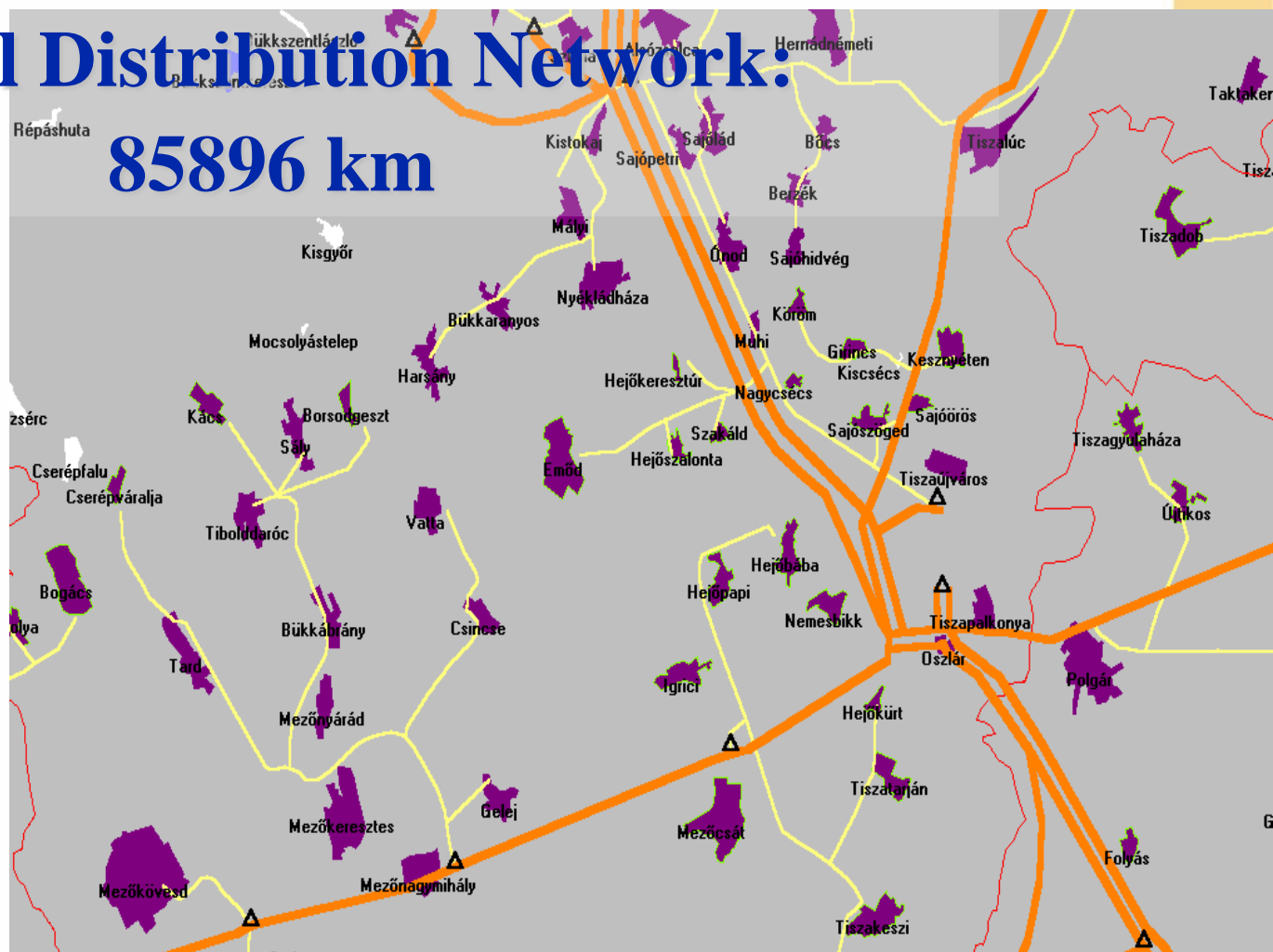
■ natural gas

Gas Distribution

National Distribution Network:

85896 km

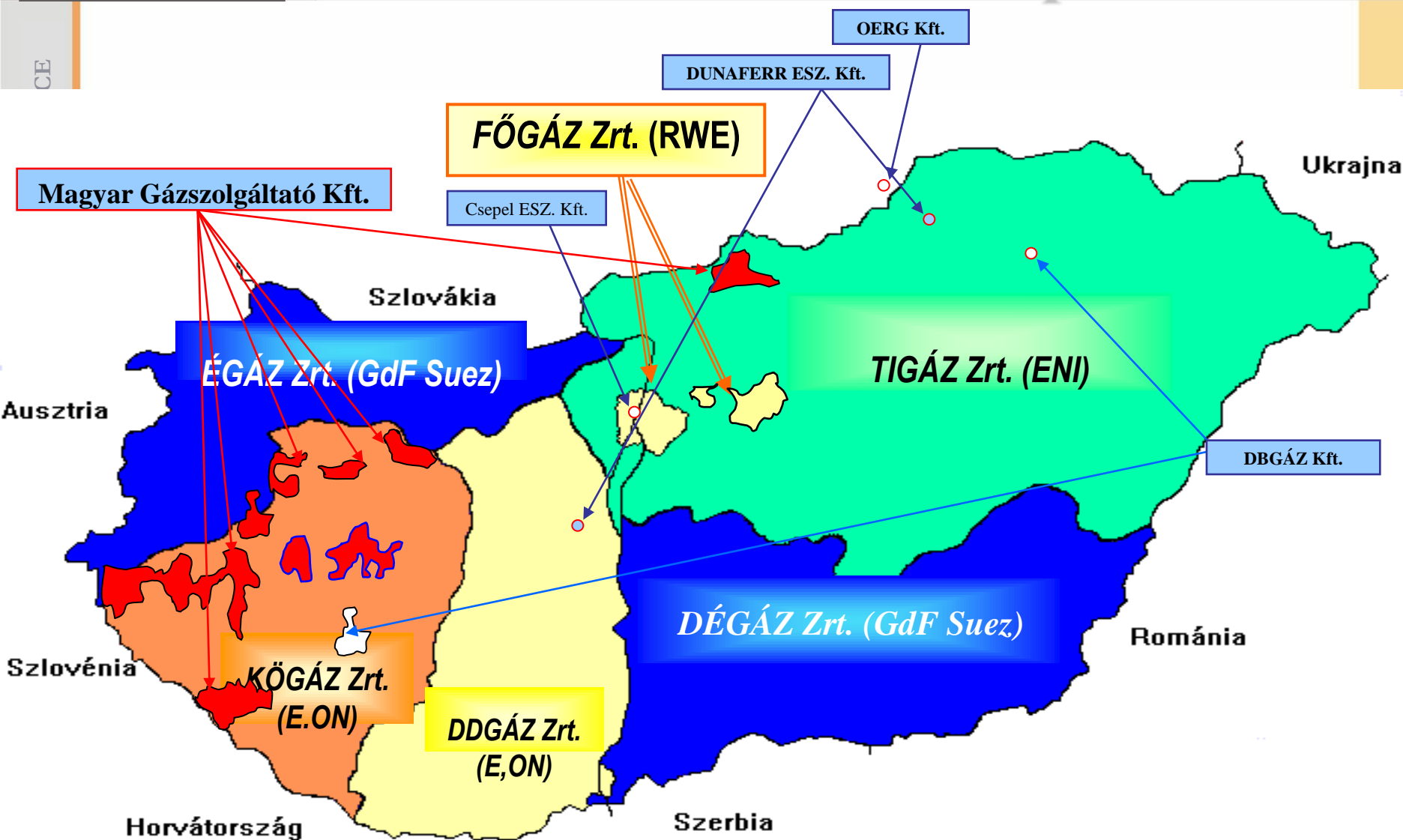
Settlements
Connected:
92.3 %



Number of Settlements: 2917



Distribution Companies



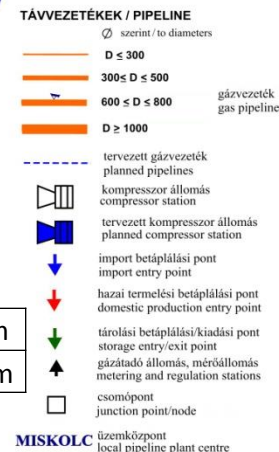
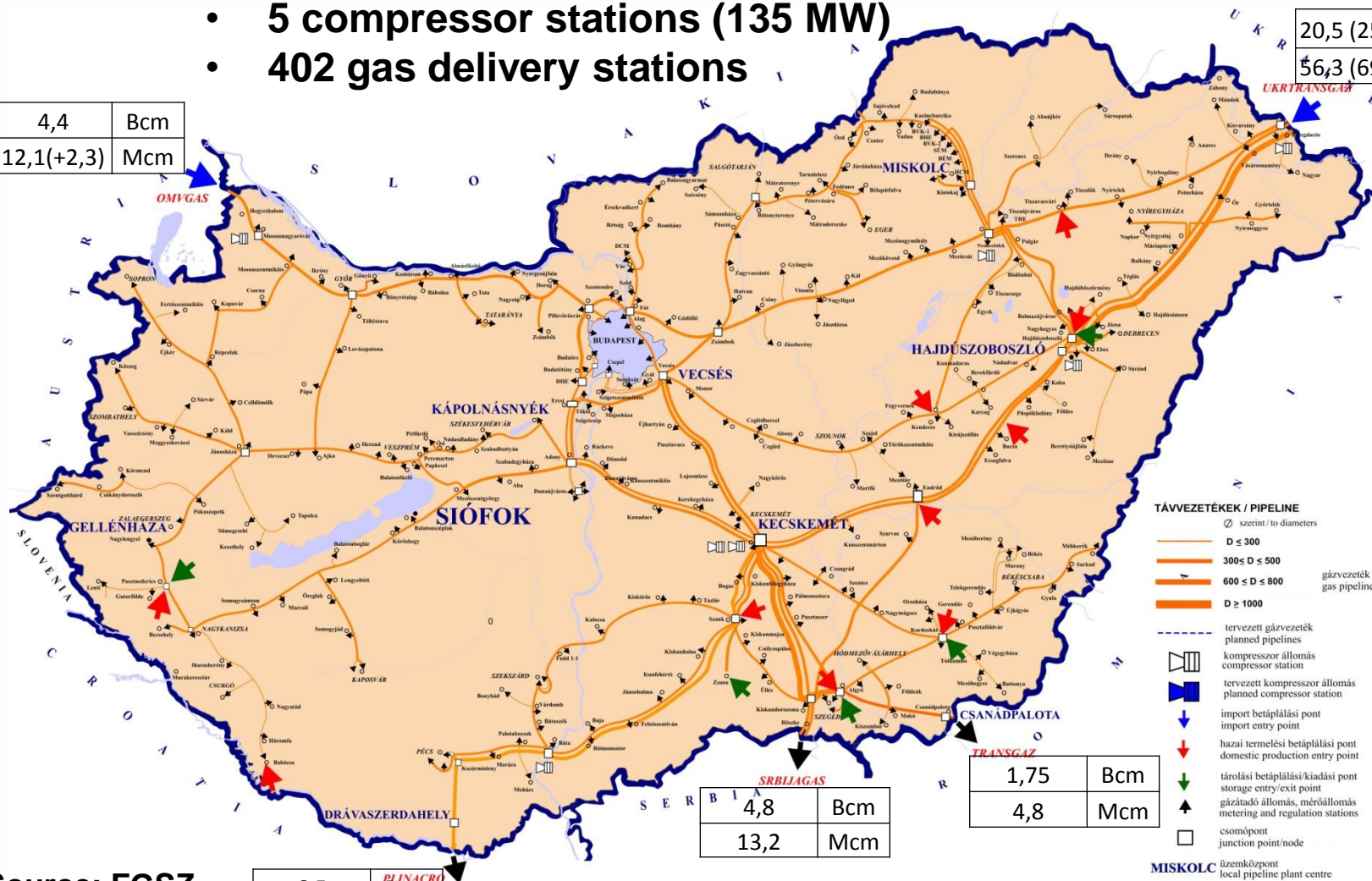


Existing transmission system

- Length: 5532 km
- 5 compressor stations (135 MW)
- 402 gas delivery stations

4,4	Bcm
12,1(+2,3)	Mcm

20,5 (25.3)	Bcm
56,3 (69.5)	Mcm



Source: FGSZ

6,5	Bcm
19,2	Mcm

4,8	Bcm
13,2	Mcm

1,75	Bcm
4,8	Mcm

Interconnection capacities

- **HAG (western import)** 14.4 Million m³/day (5.26 Bcm/year)
- **Brotherhood (Russian import)** 56.3 Million m³/day (20.5 Bcm/year)
+ 12 Million m³/day is booked for transit (4.38 Bcm/year)
to Serbia and Bosnia- Hercegovina
- **Romanian Interconnector (operated since July 2010)**
4.8 Million m³/day (1.75 Bcm/year)
→ 12.0 Million m³/day (4.4 Bcm/year)
Export in 2012: 453 Million m³
- **Croatian Interconnector (operated since March 2011)**
19.1 Million m³/ day (6.5 Bcm/year)
Export in 2012: 64 Million m³
- **Slovakian Interconnector (project ongoing)**
6 Million m³/ day (2.2 Bcm/year)
→ 14.4 Million m³/day (5.3 Bcm/year)

Strategic Storage

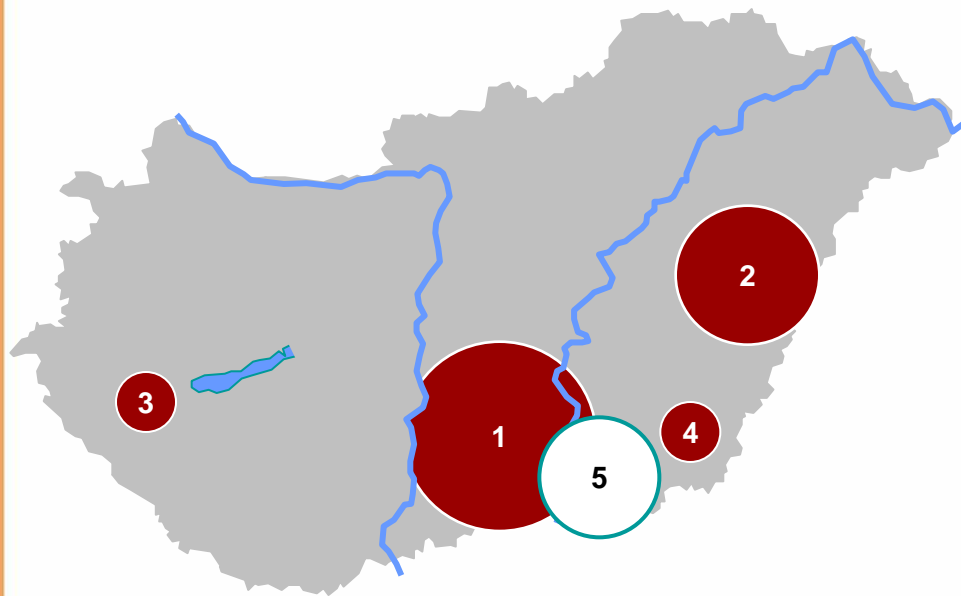
In accordance with the Act 26 of 2006 on the **Security Storage of Natural Gas**:

- A new strategic storage facility had been constructed until 1 January 2010 (Algyő gas-field, at the Szőreg-I layer in Southern Hungary)
- Working gas capacity: **1.2 Billion m³**
- Withdrawal capacity: **20 Million m³/d** (for min. 45 days)
- For the exclusive supply of household and communal consumers, only in emergency situation

In the same facility MOL had got a license and made a development for commercial storage with

- Working gas capacity: **700 Million m³**
- Withdrawal capacity: **5.0 Million m³/d**

Storage Capacities



- Commercial storage units
- Strategic (Security) storage unit

Storage Capacities

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 Puszttaederics	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



Total Capacities of the Gas Network [MMm³/day]

Domestic Production	10.5
IMPORT Western (HAG)	12.1
IMPORT Eastern (Brotherhood)	56.3
Romanian interconnector	4.8
Croatian interconnector	19.1
STORAGE	80.1
- Commercial UGS	60.1
- Strategic UGS	20.0
TOTAL	182.9*



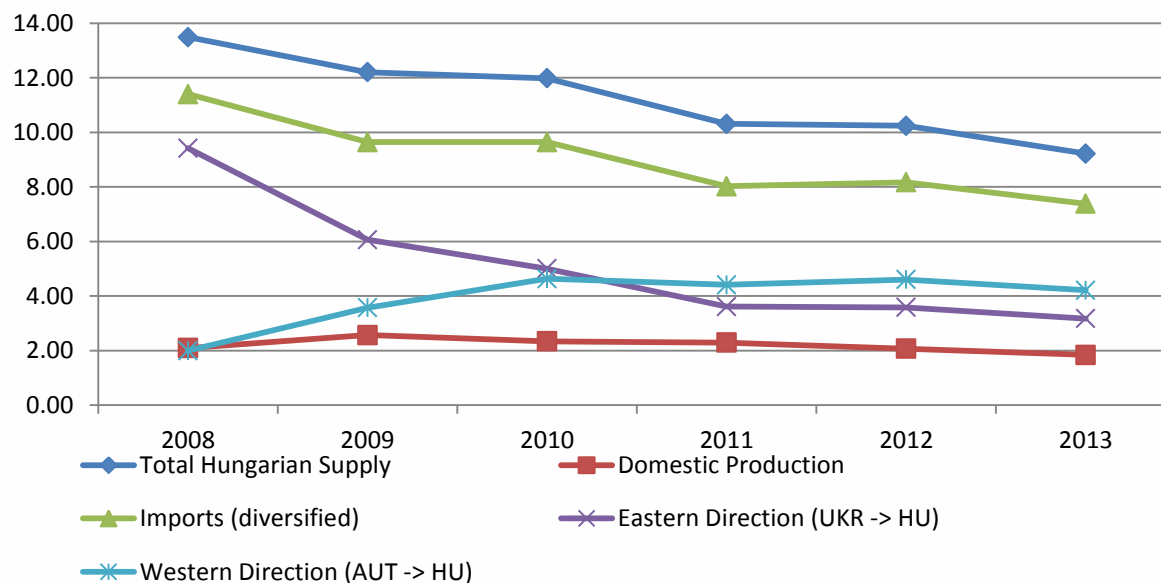
*** Enough to cover winter daily consumption down to -17 °C daily average temperature (no need to interrupt)**



Natural Gas Supply 2008-2013

	2008		2009	2010	2011	2012		2013	
	BCM	%	BCM	BCM	BCM	BCM	%	BCM	%
Total Hungarian Supply	13,49	100	12,20	11,98	10,31	10,24	100	9,22	100
Domestic Production	2,09	15,5	2,57	2,34	2,29	2,07	20,2	1,84	19,96
Imports (diversified)	11,40	84,5	9,64	9,64	8,02	8,17	79,8	7,38	80,04
<i>Eastern Direction (UKR -> HU)</i>	<i>9,42</i>	<i>82,6*</i>	<i>6,06</i>	<i>5,00</i>	<i>3,61</i>	<i>3,58</i>	<i>43,8*</i>	<i>3,17</i>	<i>37,14*</i>
<i>Western Direction (AUT -> HU)</i>	<i>1,99</i>	<i>17,4*</i>	<i>3,57</i>	<i>4,63</i>	<i>4,41</i>	<i>4,60</i>	<i>56,2*</i>	<i>4,21</i>	<i>42,9*</i>

* rate of given direction within overall imports





Traders & Universal Suppliers 2008-2012



2013:

No. of Universal Suppliers: 7

No. of Traders: 40



Thank you for your kind attention!

korosit@mekh.hu