

Liberalization of Hungarian Gas Market

7th Session, Group of Experts on the Supply & Use of Gas

Geneva, 26 January 2006

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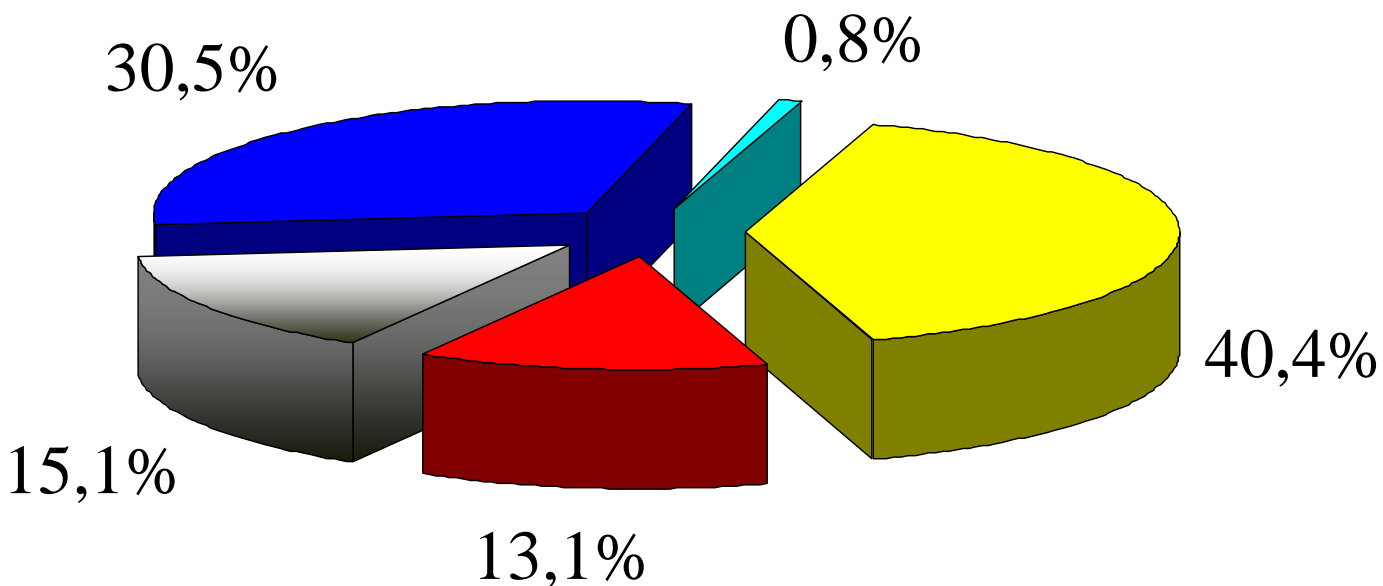
Senior Leading Advisor

HUNGARIAN ENERGY OFFICE



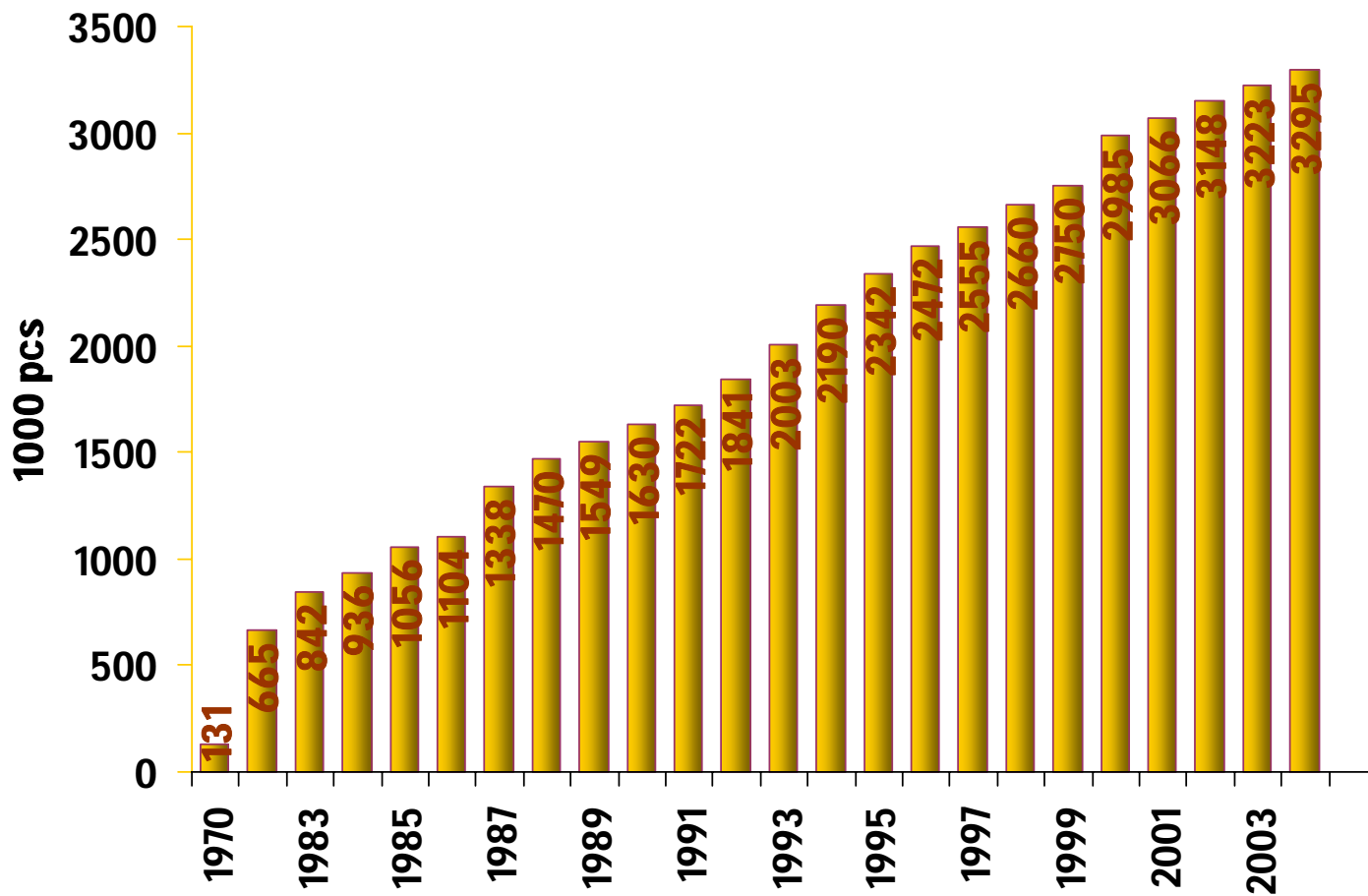
Structure of Energy Sources

Hungary 2004



■ solid ■ crude oil and products ■ LPG ■ natural gas ■ primary electricity

Number of Household Consumers



Transmission and Storage

HAG pipeline

- From Austria
- Entry at Mosonmagyaróvár
- Capacity: 4.4 bcm p.a.
- Peak cap.: 12 mcm/d at 15°C

Total MOL storage

- Peak cap.: 44.4 mmcm/d
- Mobile: 3,380 mmcm
- Cushion gas: 4,636 mmcm

Brotherhood pipeline

- From Ukraine
- Entry at Beregdaróc
- Capacity: 10 bcm p.a.
- Peak cap.: 29.5 mcm/d at 15°C

Hajdúszoboszló

- Peak cap.: 19.2 mmcm/d
- Mobile: 1,400 mmcm
- Cushion gas: 2,133 mmcm

Kardoskút–Pustaszőlős

- Peak cap.: 2.3 mmcm/d
- Mobile: 200 mmcm
- Cushion gas: 260 mmcm

Algyó–Maros-1

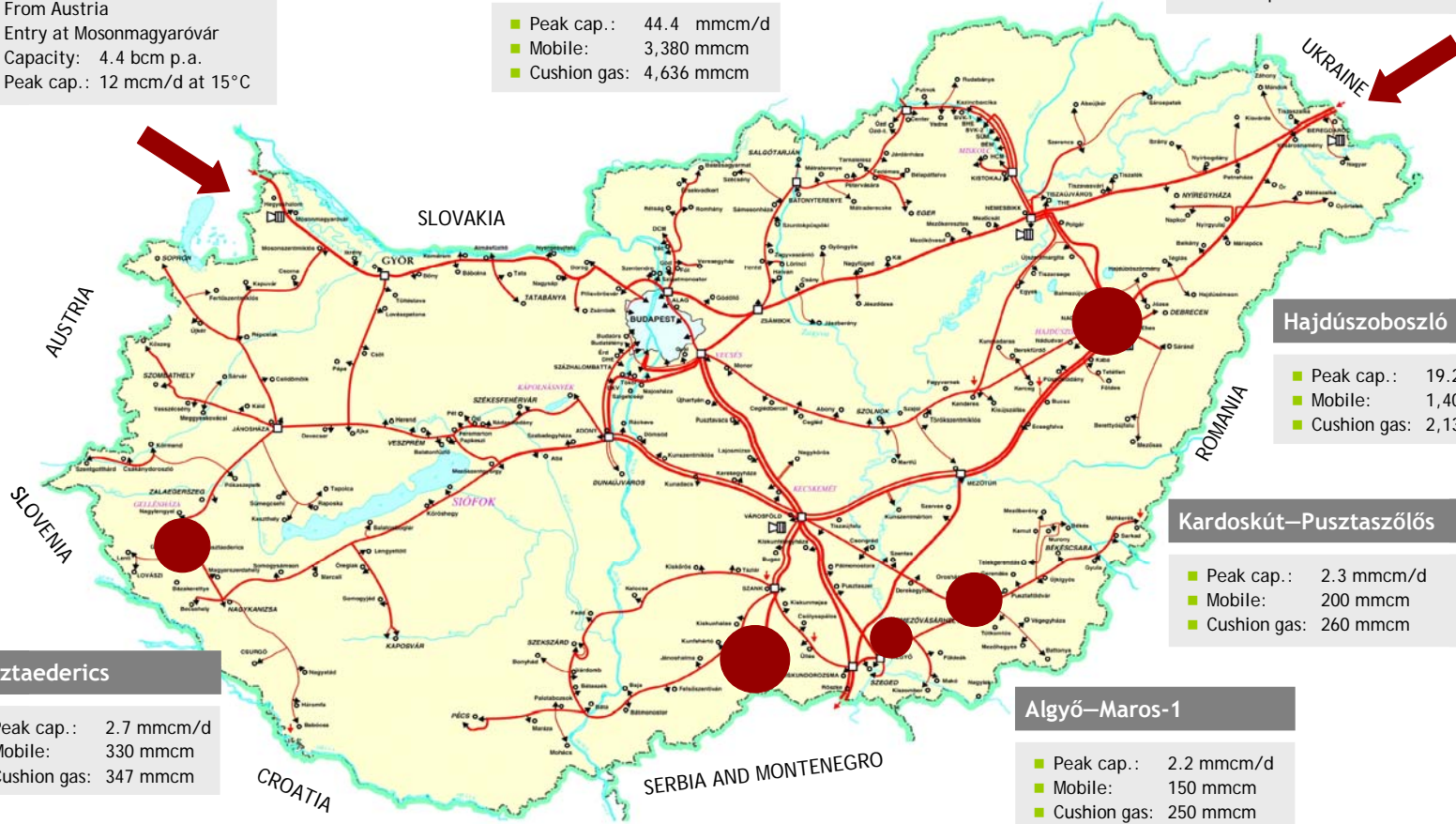
- Peak cap.: 2.2 mmcm/d
- Mobile: 150 mmcm
- Cushion gas: 250 mmcm

Pusztaderics

- Peak cap.: 2.7 mmcm/d
- Mobile: 330 mmcm
- Cushion gas: 347 mmcm

Zsana

- Peak cap.: 18.0 mmcm/d
- Mobile: 1,300 mmcm
- Cushion gas: 1,647 mmcm



Transmission and Storage

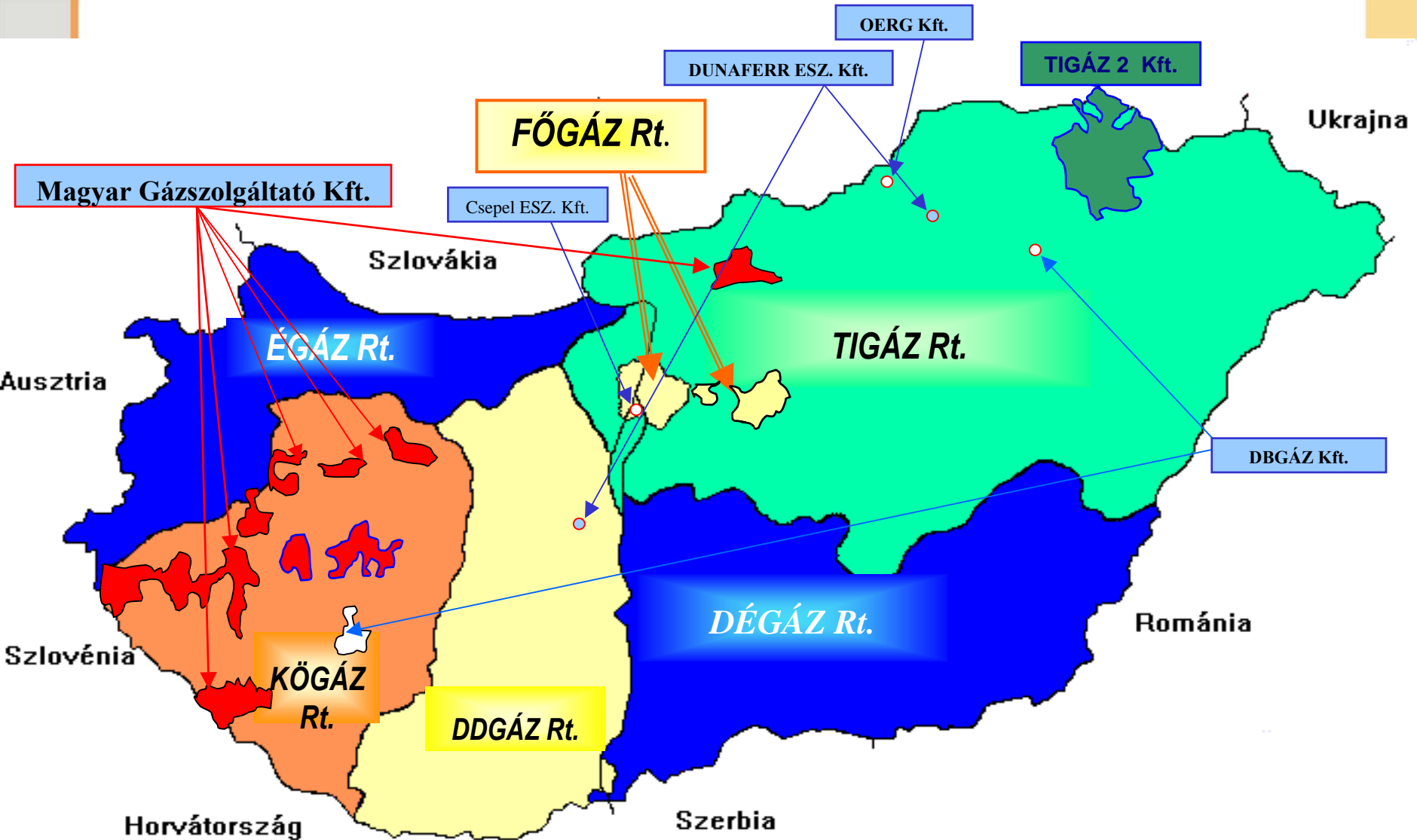
The infrastructure investments carried out over the past 15 years to develop natural gas system:

Transmission		2004	Built in the past 15 years
Pipeline length	km	5269	1510
Gas delivery stations, meterig directions	pieces	392	237
Built in power of compressor stations	MW	110	30

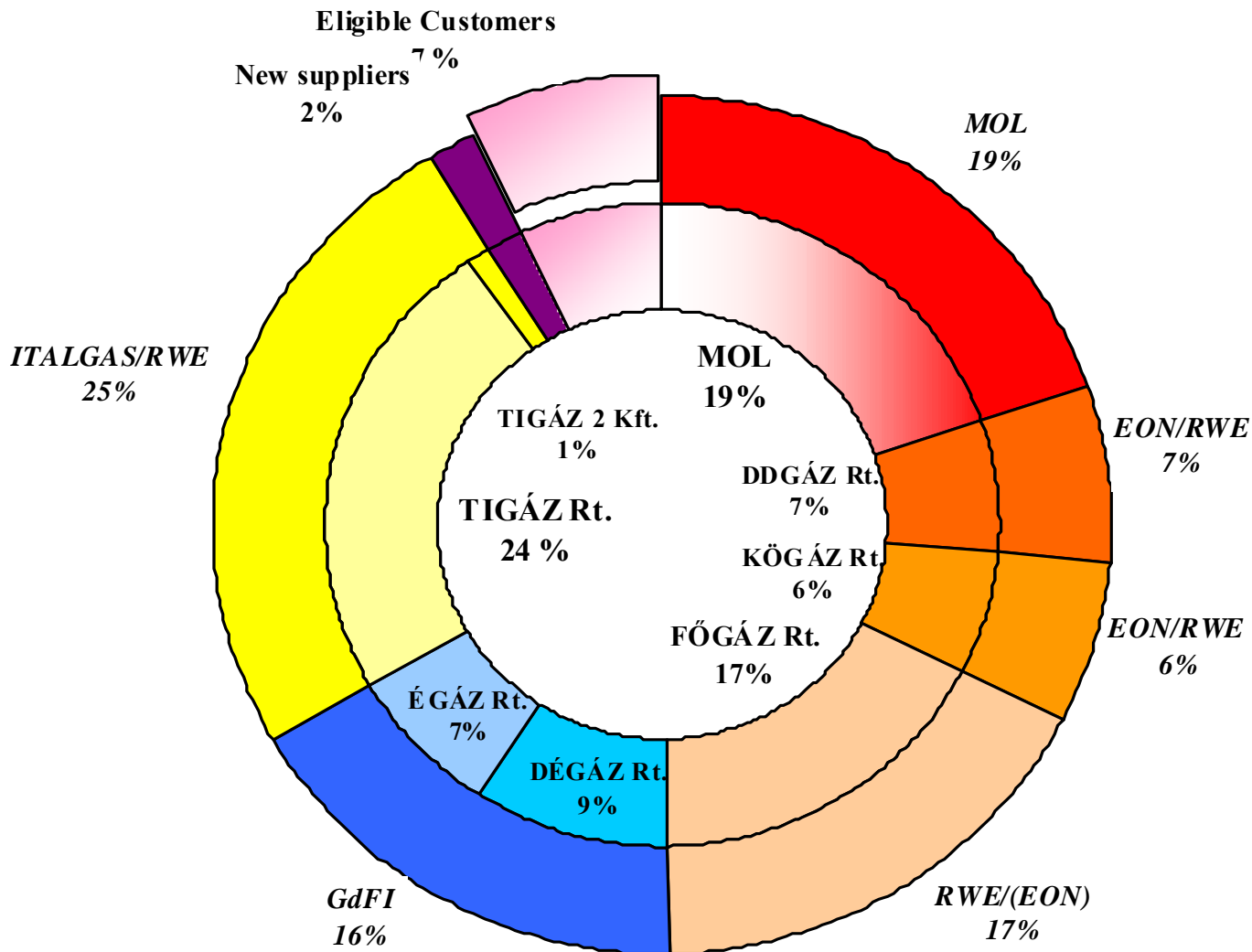
Underground Gas Storage		2004	Built in the past 15 years
Working (mobil) gas capacity	MMcm	3340	2180
Max. withdrawal capacity	MMcm/d	44,7	30,9

Planned increases of storage capacity		2004	2005	2009
Mobil gas,	MMcm	3340	3340	3940 (?)
Max. withdrawal rate	MMcm/d	44,7	47,7	53,7 (?)

Natural gas distribution companies



Market Concentration

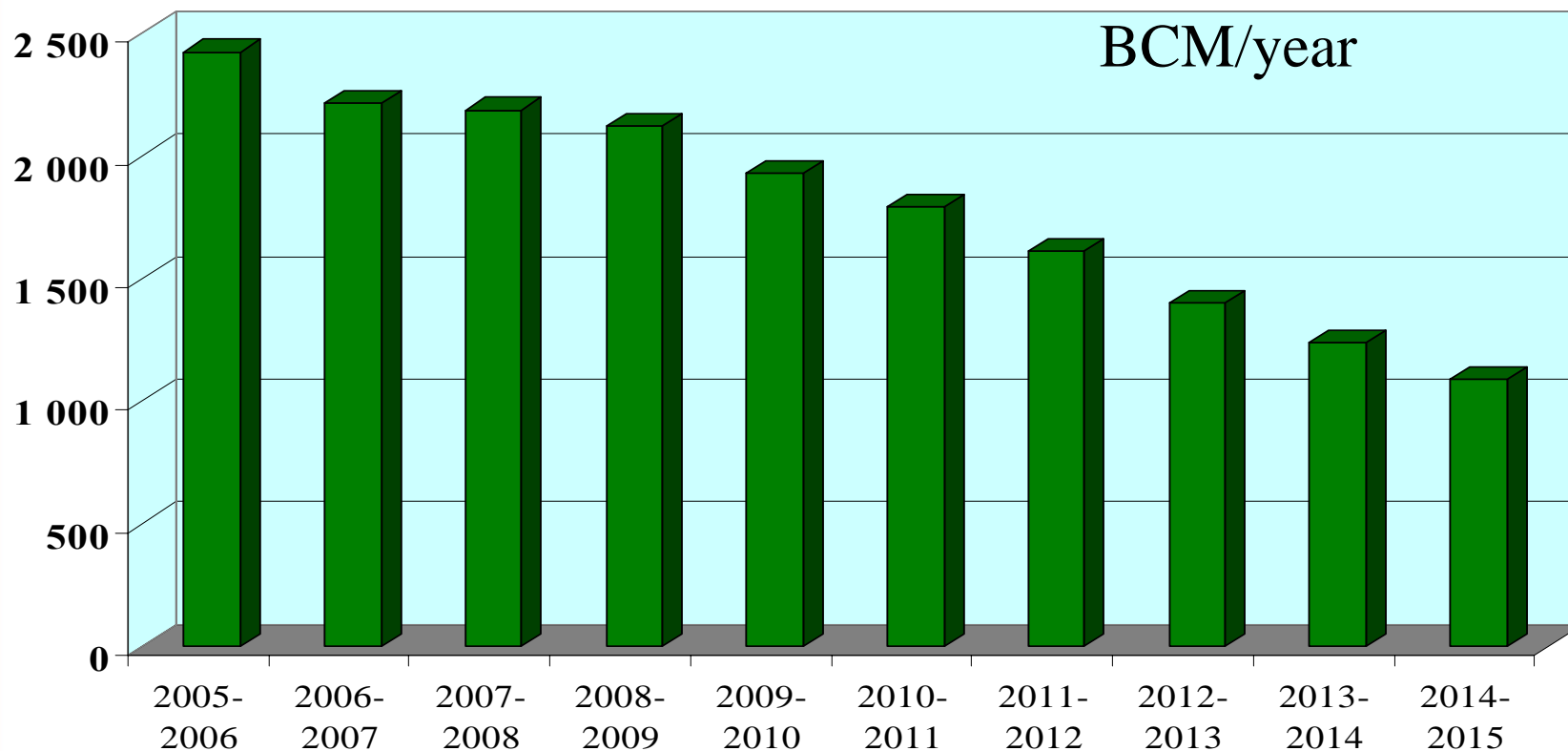


Natural Gas Supply 2005

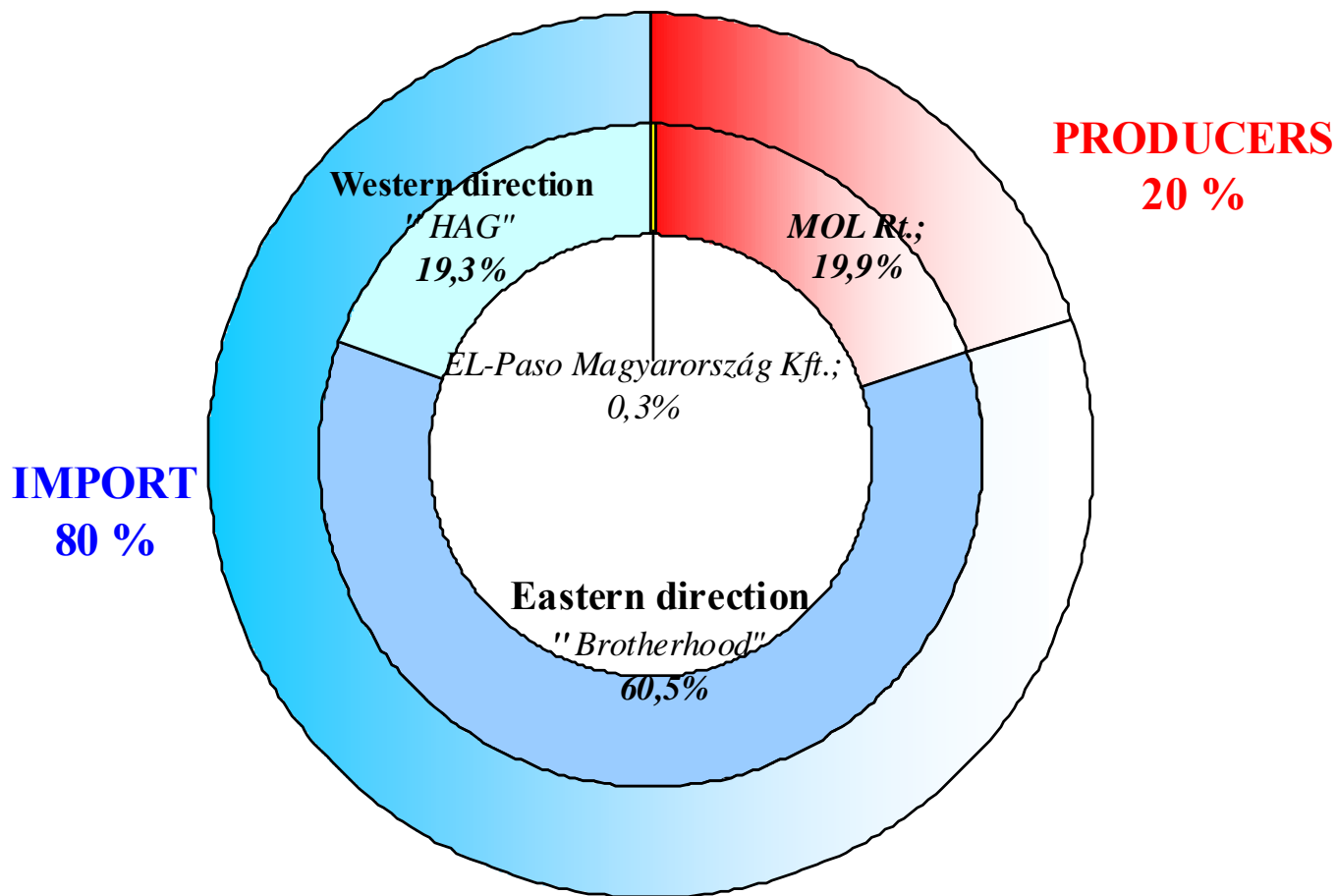
	bcm
Sources of Hungarian Supply	14,27
domestic production:	2,80
import (diversified):	11,47
Eastern direction:	8,63
Western direction :	2,84

Domestic Natural Gas Production Forecast

2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
2 423	2 215	2 187	2 120	1 930	1 789	1 611	1 401	1 236	1 088



Share Of Gas Sources 2004

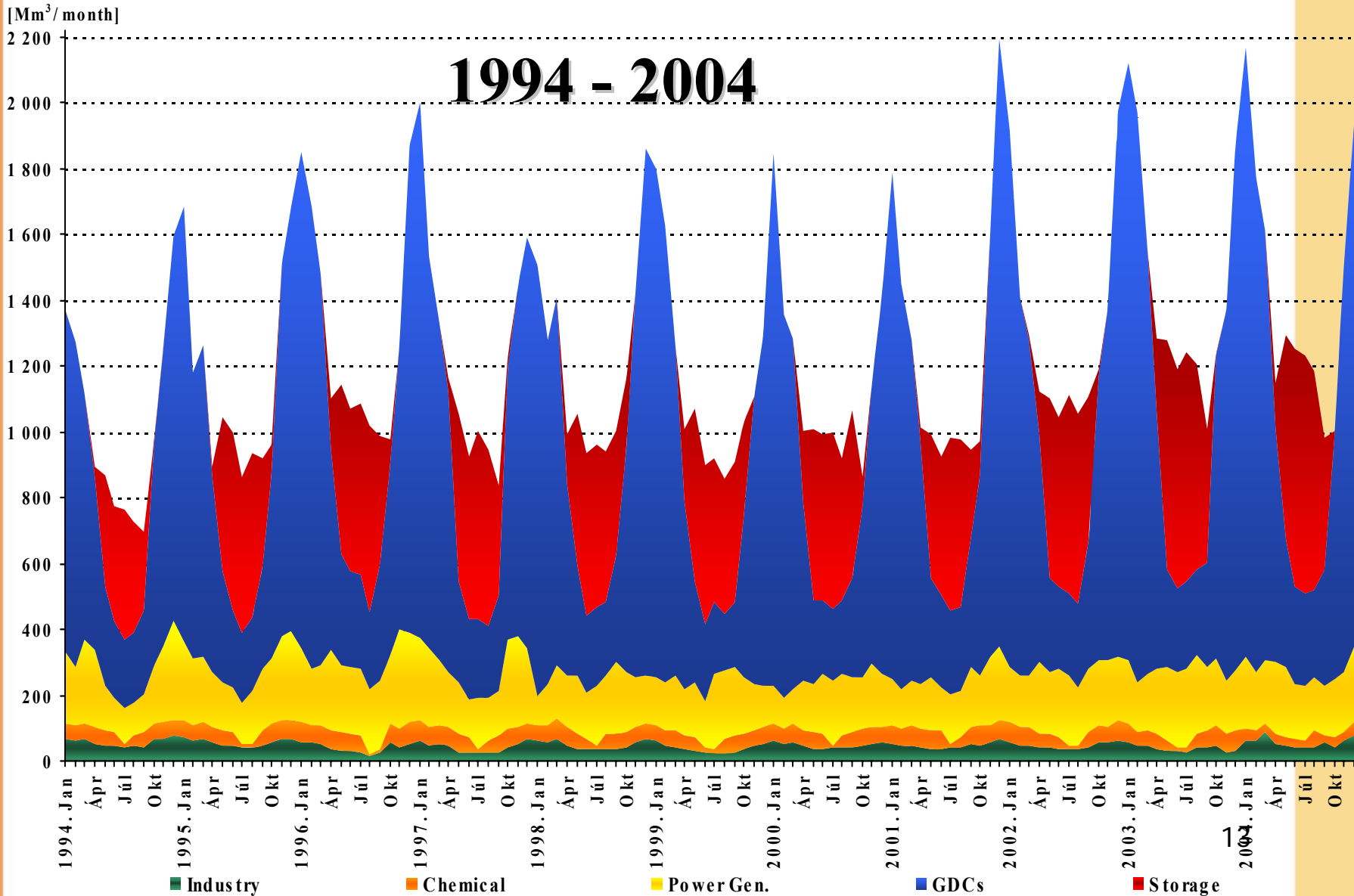


Natural Gas Demand

Seasonal variation:

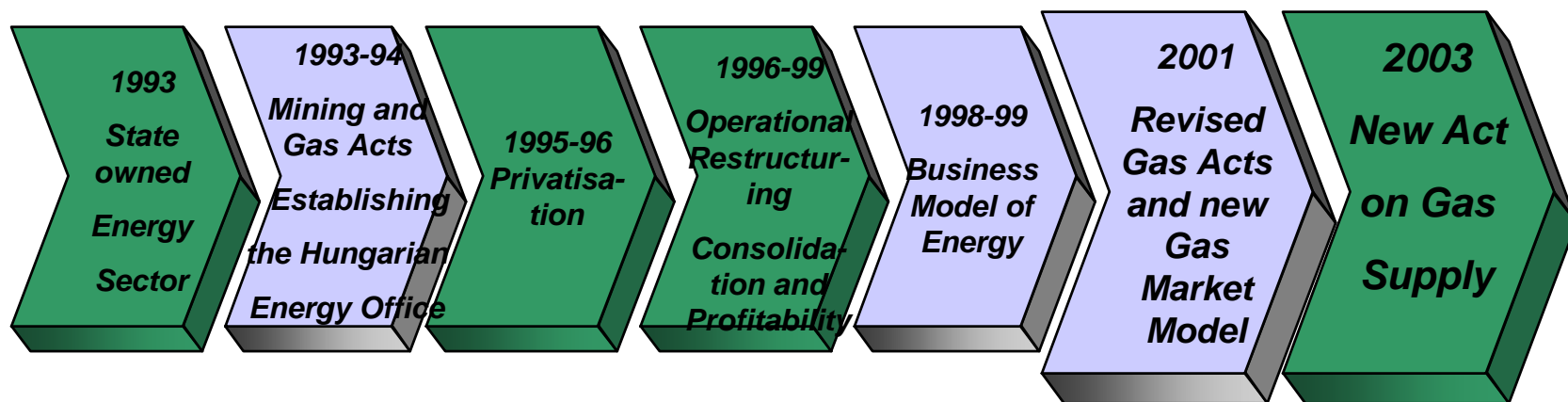
- Avg. summer (*June- August*)
consumption: **16.6 MMcm/d**
- Avg. winter (*December- Febr.*)
consumption: **65.9 MMcm/d**
- Maximum winter consumption:
(9th February) **91,7 MMcm/d**

Structure of Natural Gas Consumption

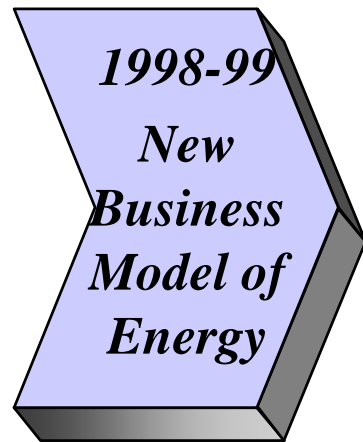


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Development of Hungarian Gas Market



Business Model of Energy



- EU directives adaptation
- Public service obligation for non eligible customers
- Unbundling the trade, production and transmission activities
- Strengthening the independence of regulator authority (Hungarian Energy Office)

Steps of Gas Market Liberalization

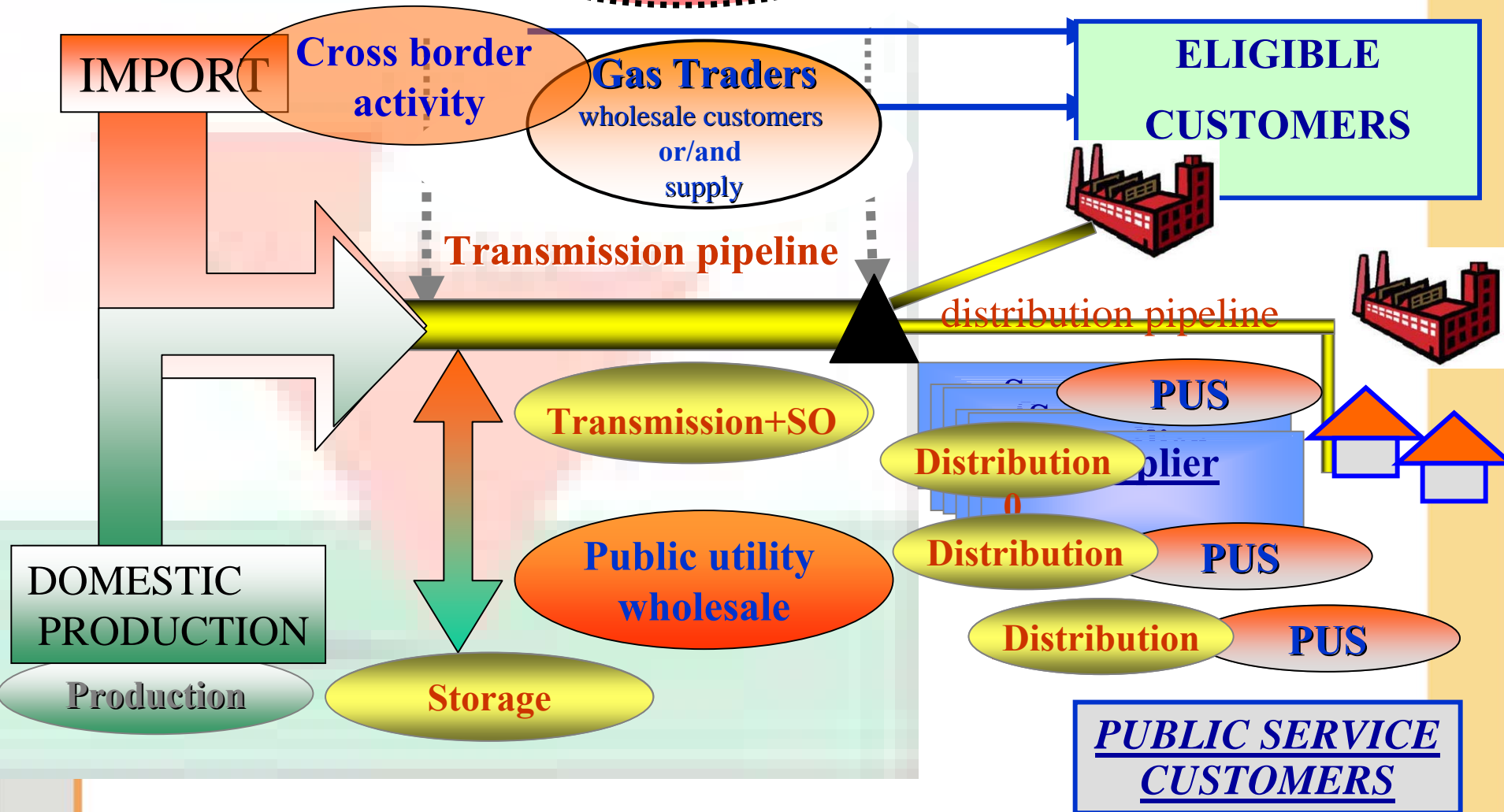
- 30 November 1998: Hungarian Government decided to fulfil the requirements of EU Gas Directive 98/30/EC, latest by the time of accession
- Liberalisation is based on the Business Model of Energy
- EU experiences as good preparatory background
- Detailed gas market model and the Gas Act first draft have been prepared in 2001
- New **Act on Gas Supply** had been approved by the Hungarian Parliament in June 2003
(Act XLII. of 2003)
- **Market opening at 1 January 2004.**

The development of hybrid market model

CONSUMERS DEMANDS

GAS SOURCES

Organised gas market



Results and experiences of market opening

- **Legal degree of market opening: 67%**
(180 000 eligible customers – every non-residential)
- **7 % of gas consumption traded on the free market**
(through bilateral contracts) in the first year
- **52 registered eligible customers** changed supplier
through **3 active traders** (from 14)
- **1 eligible customer (only) changed supplier without**
trader
- **Limited available cross border capacity for the free**
market segment at the eastern border
- **The local production is mostly at the incumbent**
wholesaler
- **Weak financial incentive of the eligible consumers**

Amendment of the Gas Act

After a long period of preparation and debate,
Hungarian Parliament approved the amendment of the
Act on Natural Gas Supply in June 2005:

Act LXIII. of 2005

On the base of 2003/55/EC Directives:

- **TPA – Reinforcement of non-discriminative access to the systems**
- **Reinforcement of consumer and environment protection measures**
- **Speed up of liberalisation:**
 - July 2004: all non-household consumers,
 - July 2007: all consumers are eligible
- **Biogas availability in the natural gas system**

Amendment of the Gas Act

On the base of domestic market experiences:

- **Facilitating of switching to the free market for eligible customers**
- **Quicker switching back availability to the public utility segment**
- **TPA – no priority for non eligible public utility customers**
- **Obligation on transmission and distribution licensees: to ensure free measurement instruments for eligible customers**

Thank you for your kind attention!

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