

„Energy Security of Bulgaria”

„Mapping out opportunities in a CEE environment”

András Deák, Center for EU Enlargement Studies, CEU

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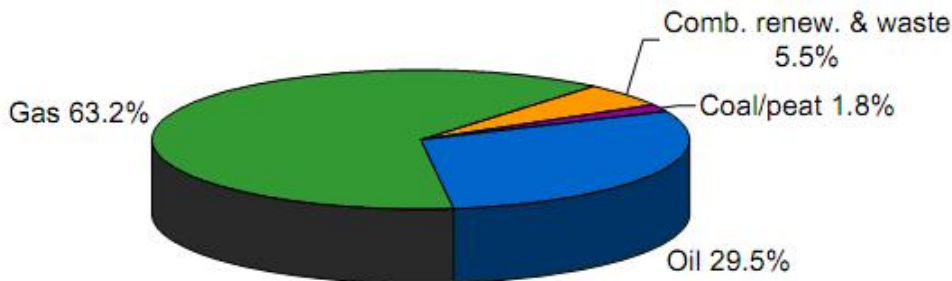
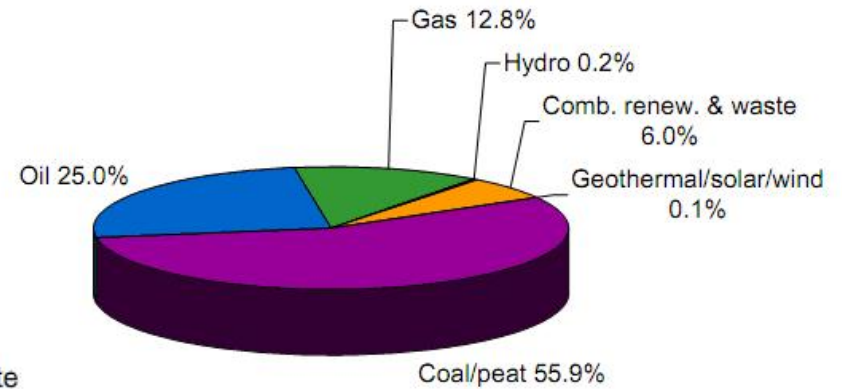
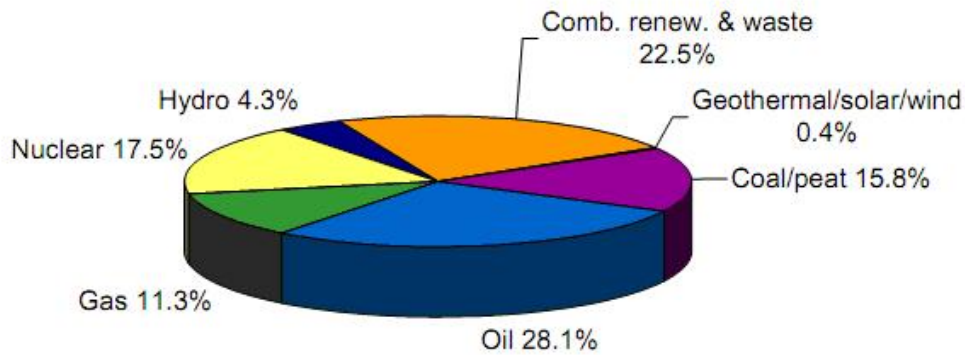
- 1. Energy security in general**
- 2. Russian energy dependence in new EU member countries**
- 3. Visegrad cooperation and EU10 co-operation potential**

Differentiate between qualitative and notional dependence – What is your problem with dependency?

Energy dependencies in some selected countries, 2008

	Member state (2008)	Gross energy consumption (Mtoe)	Net imports (Mtoe)	Energy Dependency		Member state (2008)	Gross energy consumption (Mtoe)	Net imports (Mtoe)	Energy Dependency
1	Cyprus	2,6	3	100%	16	Finland	37,8	20,9	54,60%
2	Malta	0,9	0,9	100%	17	EU27	1825,2	1010,1	53,80%
3	Luxembourg	4,7	4,7	98,90%	18	Slovenia	7,3	3,8	52,10%
4	Ireland	15,5	14,2	90,90%	19	France	273,1	141,7	51,40%
5	Italy	186,1	164,6	86,80%	20	Bulgaria	20,5	9,5	46,20%
6	Portugal	25,3	21,6	83,10%	21	Netherlands	80,5	37,2	38%
7	Spain	143,9	123,8	81,40%	22	Sweden	50,8	19,8	37,40%
8	Belgium	60,4	53,5	77,90%	23	Estonia	5,4	1,9	33,50%
9	Austria	34,1	24,9	72,90%	24	Romania	40,9	11,9	29,10%
10	Greece	31,5	24,9	71,90%	25	Czech Rep.	46,2	12,9	28%
11	Latvia	4,6	3,2	65,70%	26	USA	2283,7	634,4	27,78%
12	Lithuania	8,4	5,5	64%	27	UK	229,5	49,3	21,30%
13	Slovakia	18,8	12	64%	28	Poland	98,3	19,6	19,90%
14	Hungary	27,8	17,3	62,50%	29	China	1993,3	184,7	9,30%
15	Germany	349	215,5	61,30%	30	Denmark	20,9	-8,1	-36,84%

Dependency is a matter of management – What is your solution to the problem?



Size, quality of governance matter

– What can your country solve alone and what not?

EU10 provides 2,45% of global energy consumption (2008)

EU10 total gas imports equals to 61% of German imports (2007)

EU total gas imports from Russia is less than Russian gas supplied for domestic electricity generation.

Gazprom revenues almost two times bigger than Bulgarian GDP.

Challenges before EU10:

1. High level of oil price exposure – low energy efficiency, low level of GDP, strong oil-link to gas pricing, high marginal CH-cost growth patterns, oil price in the range of high and extreme until 2020.

Potential consequences: lower growth rates, social tensions in some particular countries, macroeconomic disbalances

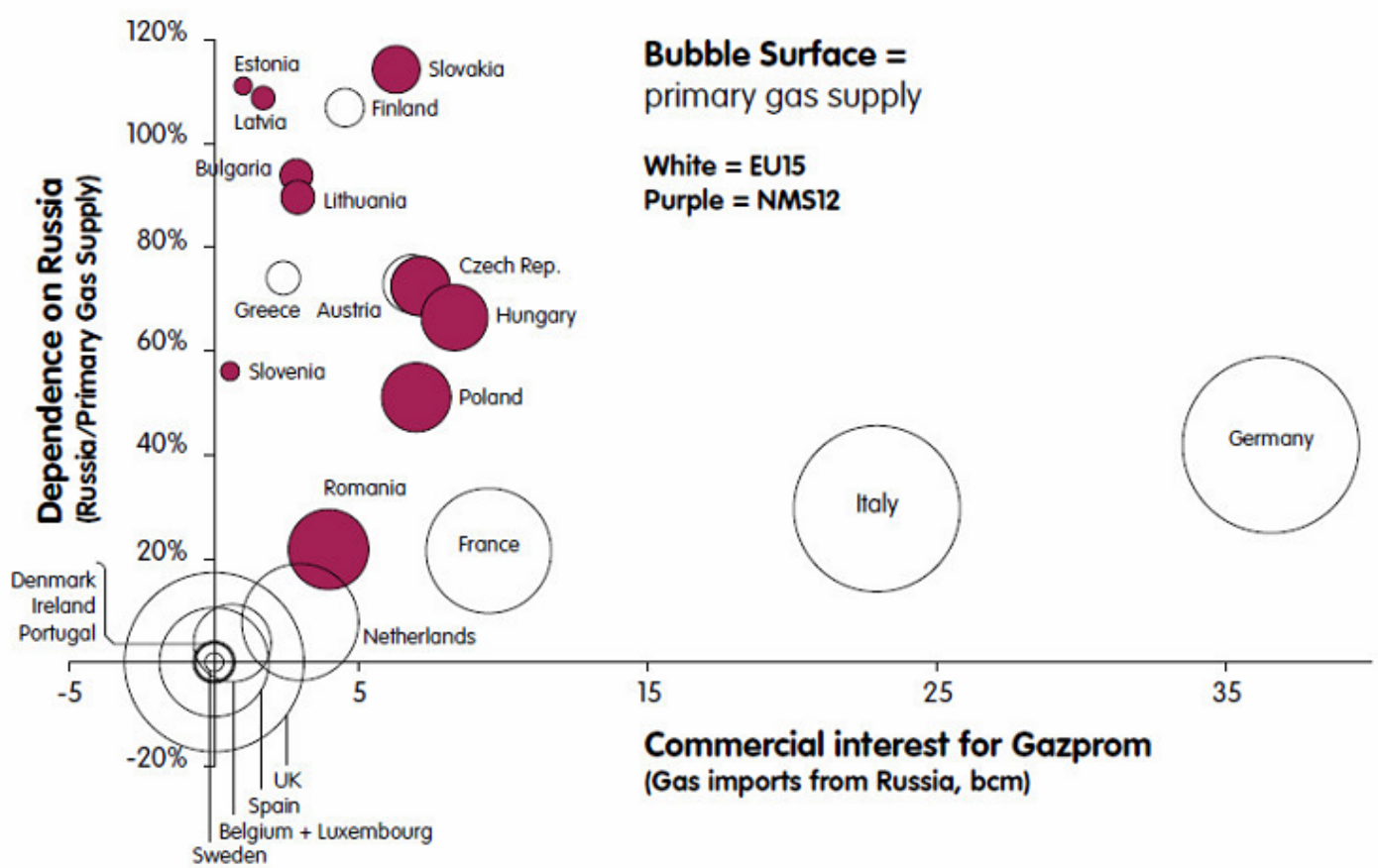
GLOBAL SOLUTION NEEDED, low national or regional influence.

2. Russian gas supply dependence – security concerns over physical supply, higher price levels

National and regional policies can significantly contribute to the management of these problems.

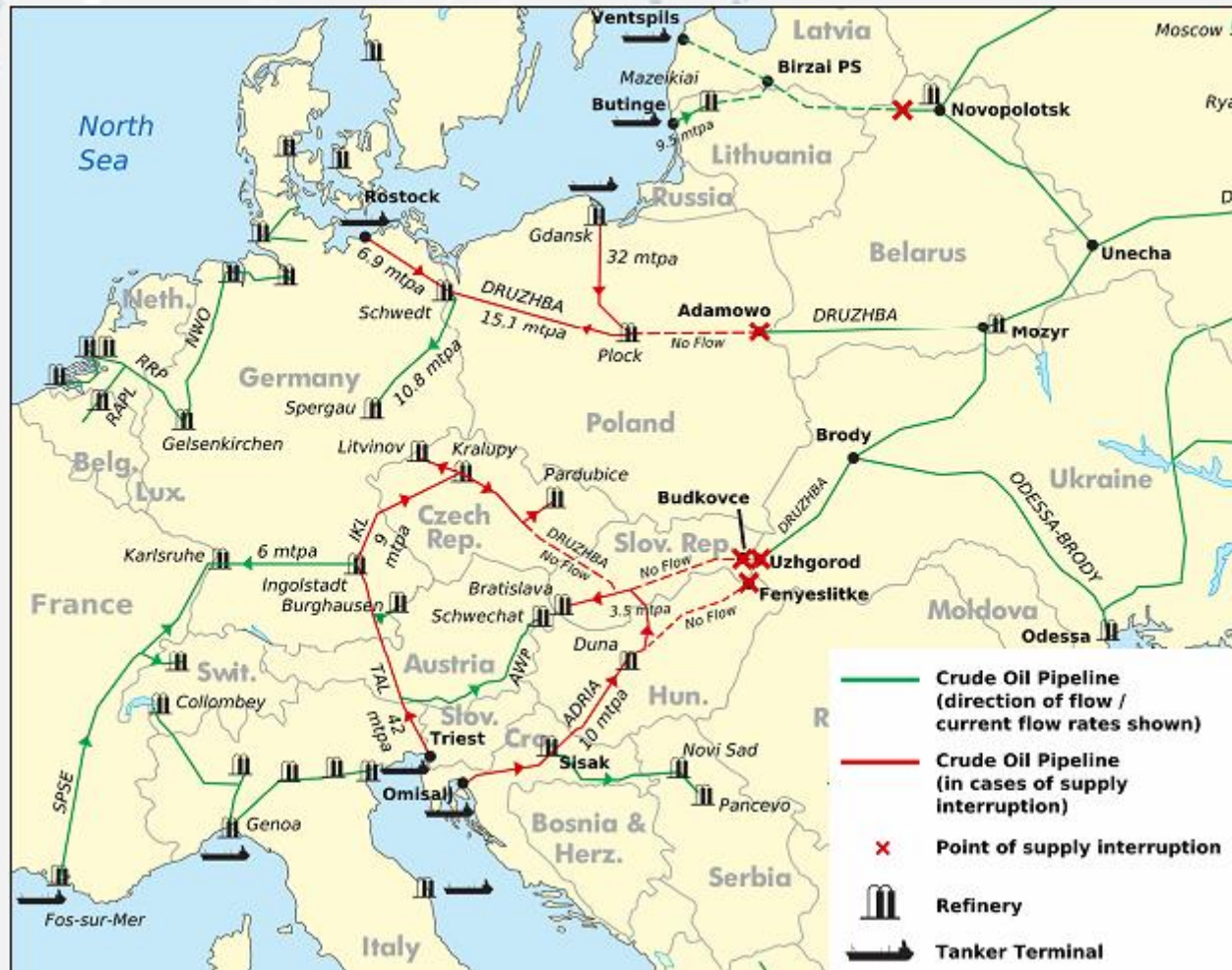
Gazprom has a gas market dominance – Russian behaviour is fully understandable in the light of its positions in EU10. As long as we do not test them in a more competitive environment, we do not test its real quality as an exporter.

Size of Gas Market and Dependence on Russia, 2006



Source: Noel/ECFR 2008 repr.

A succesful market structure – oil exports from Russia. Both alternative supply routes and strategic reserves are present. Consequently Russian exports remain competetive, secure and provides beneficial synergies for CEE.



Two main considerations for Gazprom:

Russian is a high fixed cost producer – harsh climate at production locations, long and land-locked transit routes.

Concerns over demand security – transport investments locked in, no short or mid-term flexibility at export destinations, volatile demand.

Consequences: Both investment needs and risks are relatively high in global comparison. Long payback period combined with high demand uncertainty.

How to share the costs and risks between producer and consumer?

Specifics of Russian long-term gas contracts:

1. Oil-price linked price setting – price levels cartellized by OPEC, gas-OPEC exists.

Price risks are taken by consumers.

2. Extreme long duration (15-25 years) and low swing (us. 15%) in take-or-pay clauses – inflexible contract structure.

Demand risks are also taken by importers.

3. Export price differentiation through destination clauses (in the past) and infrastructure bottlenecks.

Gazprom devolves as much risks as it can to consumers. No effective risk sharing in the current Gazprom contractual system. No problem with Russian gas, but with its conditions.

Gazprom pricing correlates with its pricing power and access to domestic margins:

Gazprom estimated sales and prices with some selected countries				
	2010		2009	
	Supplies from Gazprom, bcm	Average price USD/1000cm	Supplies from Gazprom, bcm	Average price USD/1000cm
Germany	33,99	271	31,36	294
Italy	13,05	331	19	321
Poland	9,93	336	9,02	333
France	9,81	306	10,07	297
Hungary	6,94	348	7,6	306
UK	6,79	191	7,28	260
Austria	5,59	304	5,44	259
Finland	4,78	271	4,36	250
Bulgaria	2,65	310	2,64	n.a.
Romania	2,27	304	2,04	294
Greece	2,11	357	2,06	n.a.
Ukraine	36,5*	255*	26,8	233
Belarus	21,6*	172*	16,8	151

Source: Vedomosti, based on BP, IEA, OIES and national data

„Distant markets” – UK, France

„Western synergies” – Germany, Austria, Finland

„Sell and go” – Italy, Poland, Hungary, Greece

„Ambivalent partners” – Bulgaria, Romania

„Tough love” – Ukraine, Belarus, Turkey

Potential challenges to existing Gazprom status quo:

1. Domestic production (shale gas, renewables) – low direct impact in Europe until 2020, significant supply pressure on the global scale.
2. Alternative supply routes (4th Corridor) – low impact with high probability, high impact for EU10 with low probability.
3. Rise of LNG and accompanied structural changes on the European gas markets

Decouples gas and oil prices, highly competitive, still progressing technology, oversupply at least until 2015. LNG transforms gas markets to similar to that of oil in 20 years.

**How Gazprom is going to adapt its policies to the new environment?
How EU10 can accommodate to and benefit from these trends?**

Gazprom responses in Western and CEE markets

	"Western" contracts (EON, GdF, Wintershall)	Central European markets	Post-Soviet markets
Take-or-pay	Allowing make-up gas (us. 3 years), recontracting under negotiations in some cases	Reportedly providing make-up in some selected cases, no negotiations	Unilateral concessions at Ukraine, annual negotiations
Pricing	Swing at spot prices	No concessions	no concessions
Strategy	Decreasing spot priced Gazprom gas	No more cheaper gas (related also to Ukrainian contract)	no concessions

Trade-off between future increase in export volumes and preserving price formula.

In the evolving European gas market a real chance to change Gazprom's conditions is present.

Preserving take-or-pay, shortening contract duration and more flexible pricing is an affordable and accessible solution for EU10.

How can new members enhance the overspill of Western gas market dynamics:

1. Increasing interconnectivity – improves security of supplies, optimizes national allocations and prices.
2. Harmonizing regulatory policies – increases scale of economies, decreases investment and regulatory risks („one-ticket policy”).
3. Tackling with oligopol actors – Enhanced transparency and regulation both on national and EU level.
4. Bringing/letting alternative supplies into the region.

Regional market provides more security of supplies, optimizes capacity allocations, decreases investment risks – Oil market is a regional one!

Potential energy problems and pitfalls in EU10:

1. Low quality of national energy policy, no independent information at decision making.
2. No co-ordination at energy planning – „Nuclear renaissance in CEE”
3. Low management capabilities – „Olkiluto example”
4. Regional projects without regional harmonization – „South Stream”, LNG
5. EU 20-20-20 implemented exclusively in national regulatory, budgetary frameworks.
6. Energy efficiency programmes, same patterns, different solutions – „house insulation”

Thank you for your attention!