

The Energy and Climate Policy of the EU: Implications of the 2nd Strategic Energy Review of November 2008 and of its March Summit 2007

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Introduction I

- EU's March Summit 2007:
 - Sustainable **integrated** climate and energy policy with three 20% objectives (energy efficiency, renewables, emissions);
 - Energy action plan (diversification of resources and imports);
 - Common energy foreign policy (political solidarity and speaking with one voice);
- 22/06/2007: new EU Central Asia Strategy during the German presidency (interested in a „*peaceful, democratic and economically prosperous CA*“):
 - Defining European strategic interests in CACR;
 - Finding and offering new concrete prospective areas for cooperation;
 - Improving already existing approaches and instruments by making them more efficient;
- 2nd Strategic Energy Review (13 November):
 - „**EU-Energy Security and Solidarity Action Plan**“
- Forthcoming PCA negotiations with Russia

Introduction II

- Three recent events and developments enhancing CACR strategic importance for EU:
 - 08/2008: Russian Georgian War – implications for European energy security;
 - Autumn 2008: Global Financial Crisis – Impacts on:
 - world economy,
 - global energy demand and prices (revenues), and
 - energy, foreign and domestic policies of producer states.
 - 10/2008: GAS-OPEC Russia, Iran and Qatar (controlling 60% of global gas reserves)? – Impacts

The EU's Gas Challenge I

- **Increased Use of Natural Gas (Forecast until March 2007):**
 - Gas share of the EU's total primary energy demand is increasing from 24% to 29-32% in 2030 as the result of the EU's climate policies and phasing out nuclear power (like in Germany);
 - Gas imports today to 93% just from 3 countries (Russia, Norway and Algeria);
 - Gas supply interruptions cannot be compensated (oil tankers can be re-routed) → need for EU gas storage system and management.
 - Gas import dependency rising from 50% in 2000 to <80% in 2020;
 - **EU-Import demand in 2030: rise from present 315 bcm to 488 bcm (North America: > 200 bcm and China/India > 100 bcm).**
 - **But:**
 - IEA had already decreased gas demand from 530 to 488 in 2005/2006;
 - Renaissance of nuclear power and coal during the last years;
 - Price explosion of oil and gas makes other resources cheaper;
 - One-third of demand highly uncertain!

Energy Challenges of the EU II

■ Key Question:

- Can Gazprom/Russia provide simultaneously enough gas
 - (1) to meet its commitments to Europe,
 - (2) satisfy its growing demand, and
 - (3) supply China and others?

■ Forthcoming Russian Gas Crisis:

■ **failing investment in the exploration of new gas fields:**

⇒ a deficit of gas supplies is expected to Russia and Europe of up to 100 bcm per year in 2010-2015 compared to actual demand;

- Russian exports 2030: 275-280 bcm (Russia-RES 2003)
249 bcm (IEA-WEO 2004)
- EU demand 2030: 488 bcm.

Diversification of EU-Oil and Gas Imports I

■ Russia:

- hardly in the position to increase its total gas exports beyond 200-250 bcm by 2020/25;
- Will partly also go to East Asia/China.

■ EU:

- geographically surrounded by many gas-exporting countries within a range of 3,000-3,500 km, which can be connected by pipelines.
- However, most of them are considered as politically unstable.

■ EU-March 2007:

- 20% of the PEC from renewables and
- 20% improve of energy efficiency.
- **Net Result:** much lower gas import demand than 490 bcm by 2030.

Diversification of Non-Russian Gas Pipeline Projects:

Project	Supplier	From	To	Capacity (Bcm)	Investment (M €)	Foreseen Start-Up
Medgaz	Algeria	Hassi R'Mel	Spain	8-10	1300	End 2008
Galsi	Algeria	Hassi R'Mel	Italy	8-10	1200	2009-2010
ITG-IGI	Caspian	Greece	Italy	8-10	950 (IGI)	2011
Langeled	Norway	Ormen Lange	UK	22-24	1000	2006-2007
Nabucco	Caspian	Turkish Border	Austria	25-30	4600	2010
<p>Total additional non-Russian gas supply capacity via pipelines to Europe: 71 – 84 bcm</p>						

Diversification of EU-Oil and Gas Imports II

■ Europe – LNG-Option:

- Europe's present combined LNG import facilities can handle up to 76 bcm a year – a fourth of its imports;
- a growing share of EU gas imports will be shipped as LNG which would offer a better crisis stability for gas imports;
- today Europe accounts just 8% of the world's LNG consumption and 15% of European gas imports (in 2005 with a 21% increase from 2004);
- By 2010/2015, up to 18 new LNG terminals will have been built, with a combined capacity of 59 bcm);

■ Norway:

- Increased production from Norway to the EU. Exports will rise from 84 bcm to 125-140 bcm annually.

Importance of Turkmenistan of EU

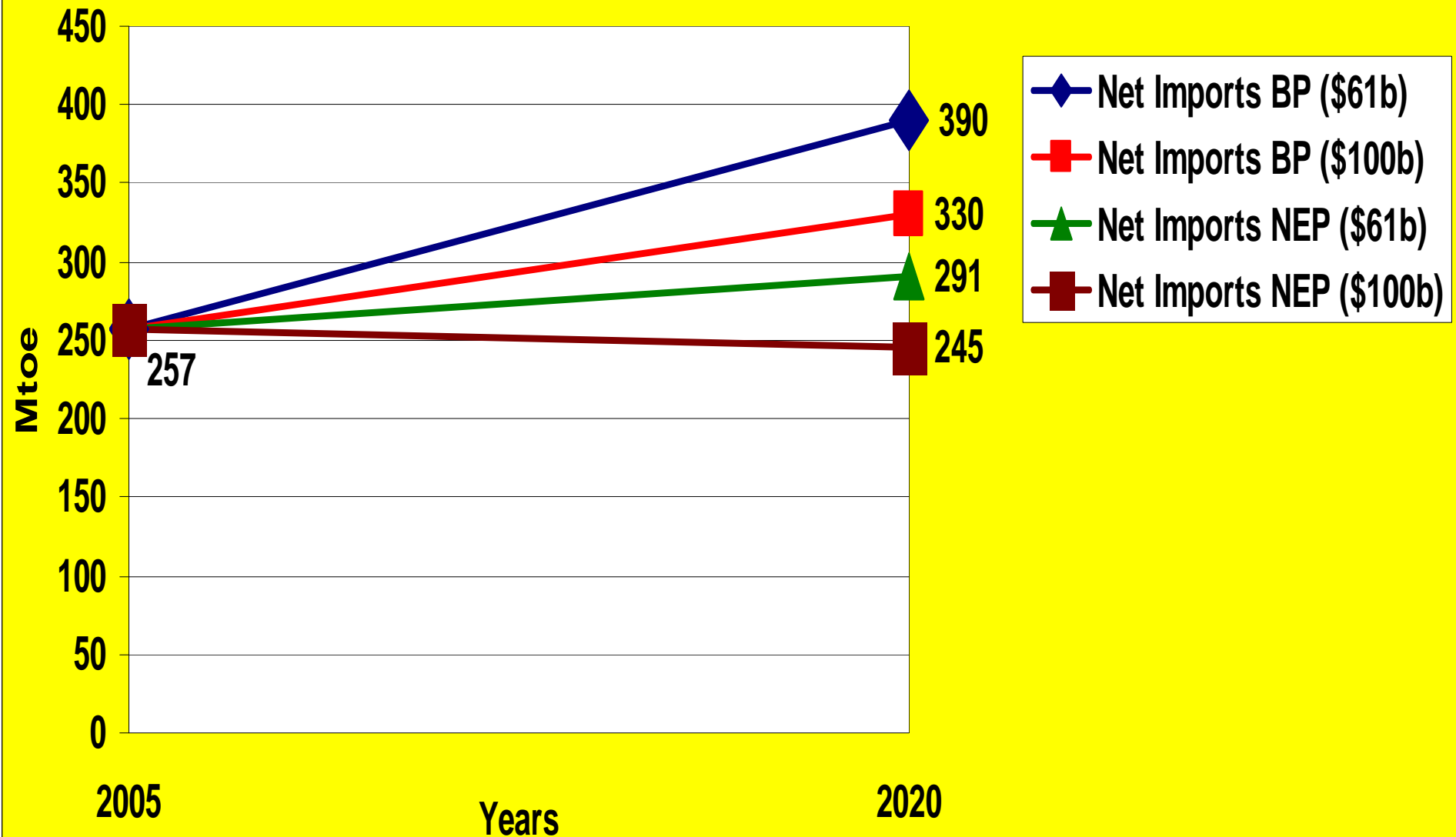
- Independent Survey of Some of its Gas Fields by the British firm *Gaffney, Cline and Associates (GCA)* – Preliminary Results of October 2008:
 - The *South Yolotan-Osman* Field in Southeastern:
 - is the fourth or fifth-largest gas field in the world (4-6 tcm with a high estimate up to 14 tcm \rightleftharpoons Russia: 48 tcm and Iran: 26 tcm in total);
 - Five times larger than *Dauletabad* as presently the largest of the country with some 1.4 tcm;
 - Confirmation that Turkmenistan (current production: 70-80 bcm) has more than sufficient gas to fulfill its existing contract commitments:
 - Russia: 50 bcm (aims to increase up to 70-80 bcm after 2009);
 - China: 40 bcm
 - Iran 8 bcm;
 - Government in 10/2008: increasing gas exports to 125 bcm annually by 2015.
 - Prospects for Nabucco (31 bcm) and White Stream (32 bcm; acquiring same EU priority status) Gas Pipelines?

2nd Strategic Energy Review (11-2008) I

- **EU-Energy Security and Solidarity Action Plan:**
 - identified major weaknesses and problems;
 - *five key areas for joint cooperation and projects in the forthcoming years:*
 1. **Infrastructure needs and the diversification of energy supplies;**
 2. **external energy relations;**
 3. **oil and gas stocks and crisis response mechanisms;**
 4. **energy efficiency, and**
 5. **making the best use of the EU's indigenous energy resources.**
- **implementation of the EU's decisions of March 2007 and the November 2008 package might freeze the EU's oil and gas imports by 2020 at current levels.**

	2005	2020			
EU-27 Mtoe		Baseline Projection : Oil Price \$61/bbl	Baseline Projection: Oil Price \$100/bbl	New Energy Policy Projection: Oil Price \$61/bbl	New Energy Policy Projection: Oil Price \$100/bbl
Primary Energy Demand	1811	1968	1903	1712	1672
Oil	666	702	648	608	567
Gas	445	505	443	399	345
Solids	320	342	340	216	253
Renewables	123	197	221	270	274
Nuclear	257	221	249	218	233
EU-Energy Production	896	725	774	733	763
Oil	133	53	53	53	52
Gas	188	115	113	107	100
Solids	196	142	146	108	129
Renewables	122	193	213	247	250
Nuclear	257	221	249	218	233
Net Imports	975	1301	1184	1033	962
Oil	590	707	651	610	569
Gas Mtoe (bcm)	257 (298)	390 (452)	330 (383)	291 (337)	245 (284)
Solids	127	200	194	108	124
Final Electricity Demand	238	303	302	257	260

EU-Gas Imports: Baseline and New Energy Policy-Scenrios (2005-2020) - 2nd Strategic Energy Review (11-2008)



Implications and Perspectives I

- **Implementation of the EU's decisions of March 2007 and the November 2008 package might freeze the EU's oil and gas imports by 2020 at current levels – Implications:**

- EU member states and gas companies need to take care not to contract too much gas with long-term contracts;
- in particular careful with Russia's "pay and take" clauses, which prevent to sell Russia's imported gas to third parties, or
- need to re-negotiate those contracts with Moscow to ensure more flexibility enshrined;
- not all discussed pipeline plans will be realistic any longer. Consequently, pipeline competitions such as between Nabucco and the South Stream project may rather increase.
- Russia: Putin's energy (foreign) policy during the last years would be proved as counterproductive and self-defeating for Russia's long-term strategic interests in Europe.

Implications and Perspectives II

- what the EU needs most of all in the coming years is to have the common political will to implement all the decisions they have agreed upon → political credibility of its economic, energy and its Common Foreign and Security Policies (CFSP) at stake;
- But if the Nabucco-pipeline will not be implemented, the new EU member states in Eastern Europe will largely remain dependent on Russia.
- In this case, a common regional EU market is hardly realistic. It will rather be fragmented, undermining a liberalized European energy market.
- It would also have negative consequences for the EU's Common Foreign and Security Policies (CFSP) and speaking "with one voice" towards Russia.

**Thank you very much
for your attention!**