The EU in its New Role as Climate Spoiler: The Bet on Gas as the New „Bridge Fuel" and the Contribution of the Fossil Fuel Industry

Dr. Susanne Peters

Webster University Geneva

RSC 25 Alumni conference

June 2017

Thesis Statement

- For more than a decade the EU was the uncontested global leader in climate action and environmental protection
- But since 2012 EU has started to abandon its leadership role
- EU Rationale: focus on *energy security* and *competiveness*

I instead argue:

- This rationale was a pretext for the development of shale gas in Europe
- Commission here followed the interests of the energy industry
- While on shore *shale* gas in the EU not materializing, natural gas is going to be "locked in" as the new "bridge fuel" for decades to come
- Conclusion: bad idea, because natural gas is very climate change effective

Table of Content

1. Shift in EU Climate Action Leadership

For couple of years around 2010 the EU's climate action took on decisive leadership role:

- In 2007 the Commission suggested far-reaching and legally binding legislation for climate change and energy policy
  - Three targets were enacted for 2020:
    - 20% of energy generation only by renewables
    - 20% cut in Greenhouse Gas (GHG) emissions (compared to 1990)
    - 20% improvement in energy efficiency

- 2011 *Roadmap 2050:* achievement of a EU wide decarbonized economy through a 80-95% reduction of GHG Emissions

- We have seen lately: Retreat from this leadership role

1. Shift in EU Climate Action Leadership

I see this shift expressed in three decisions (2014/15):

- 1. In comparison to the new 2030 goals the EU watered down its 2020 goals considerably:
  - While the reduction of emission was doubled up to 40%
  - The targets for shares of renewables *and* efficiency had only increased from 20 to 27%, and, *most of all – they were not legally binding anymore*
- 2. EU Commission renounced on a ban on extracting shale gas through the environmentally damaging method of "hydraulic fracking"
- 3. Energy Union's recommendation of constructing the Southern Gas Corridor and additional LNG terminals – lock-in of gas for decades
-

1. Shift: EU Retreat from Sustainability

"Energy" as a concept is comprised of three core dimensions – "energy trilemma"

1. Security of supply
2. Competitiveness
3. Sustainability

EU since 2012: rather priority was given to

1. Energy Security
2. Competitiveness

At the expense of sustainability

2. Energy Security & Competitiveness

EU indeed explains this new focus of its energy policy and offers two rationales:

1. Energy Security: Moved to the top of the agenda because of changed geopolitical landscape in Europe
2. Competitiveness: Considerable gas price gap between the US and the EU

Competitiveness::

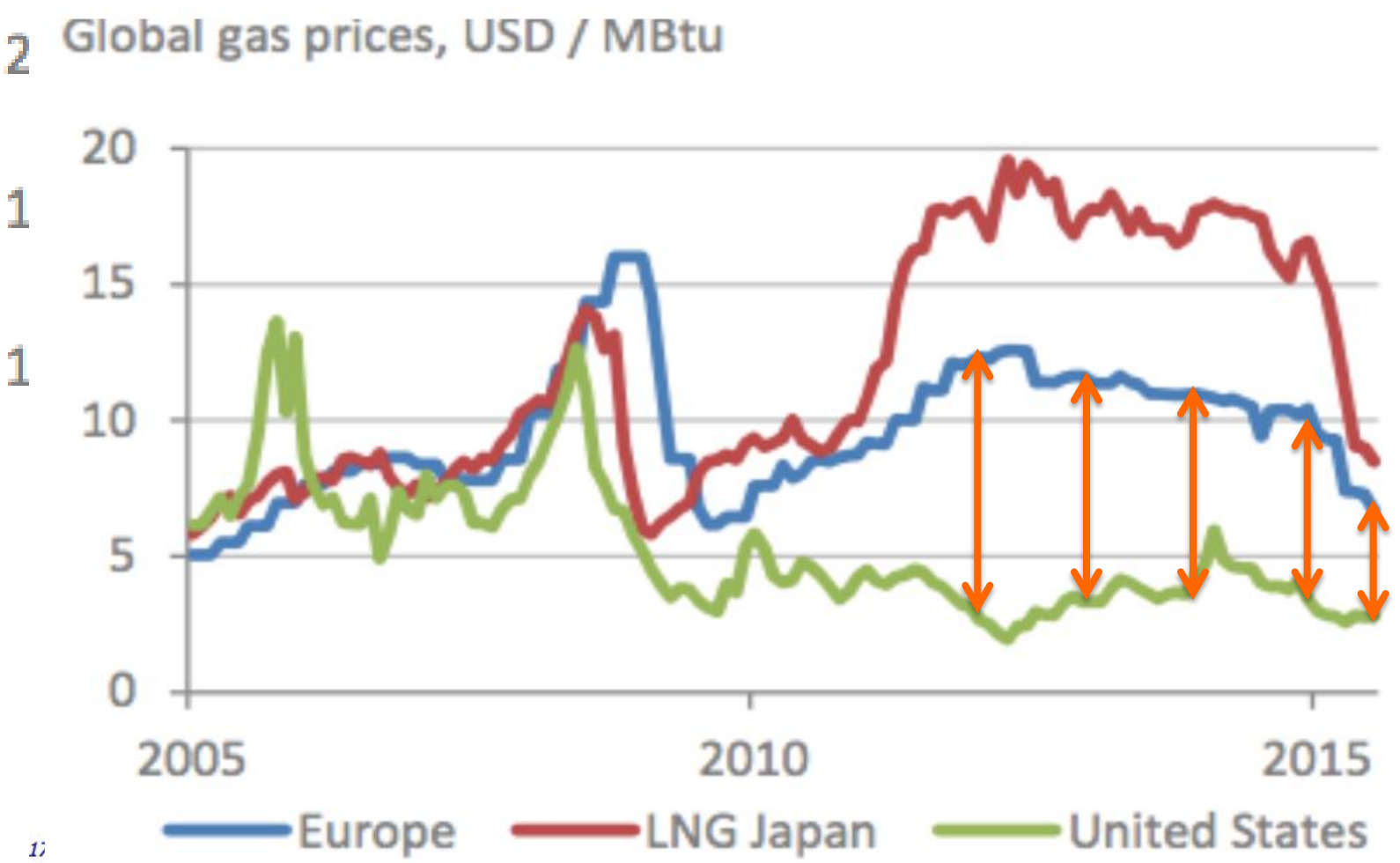
- Around 2012 EU gas import prices were 2.5 times higher than the domestically produced shale gas in the US
- Concern: EU loosing market shares to the US, in particular in energy intense industries like chemicals, iron and steel

- Not a legitimate concern because the price gap is narrowing

2. Competitiveness: Gas price gap

Webster UNIVERSITY

Global gas prices, USD / MBtu



Source: IMF

2. Energy security: EU Gas imports 2016

Partner	Value (Share %)	Net mass (Share %)
Russia	39.7	38.2
Norway	34.1	35.8
Algeria	15.2	14.3
Qatar	5.1	5.8
Nigeria	2.1	2.1
Libya	1.4	1.5
Others	2.4	2.3

Table 2b: Extra-EU imports of natural gas, shares (%) of main trading partners, 2016

2. Energy Security: Crisis with Russia

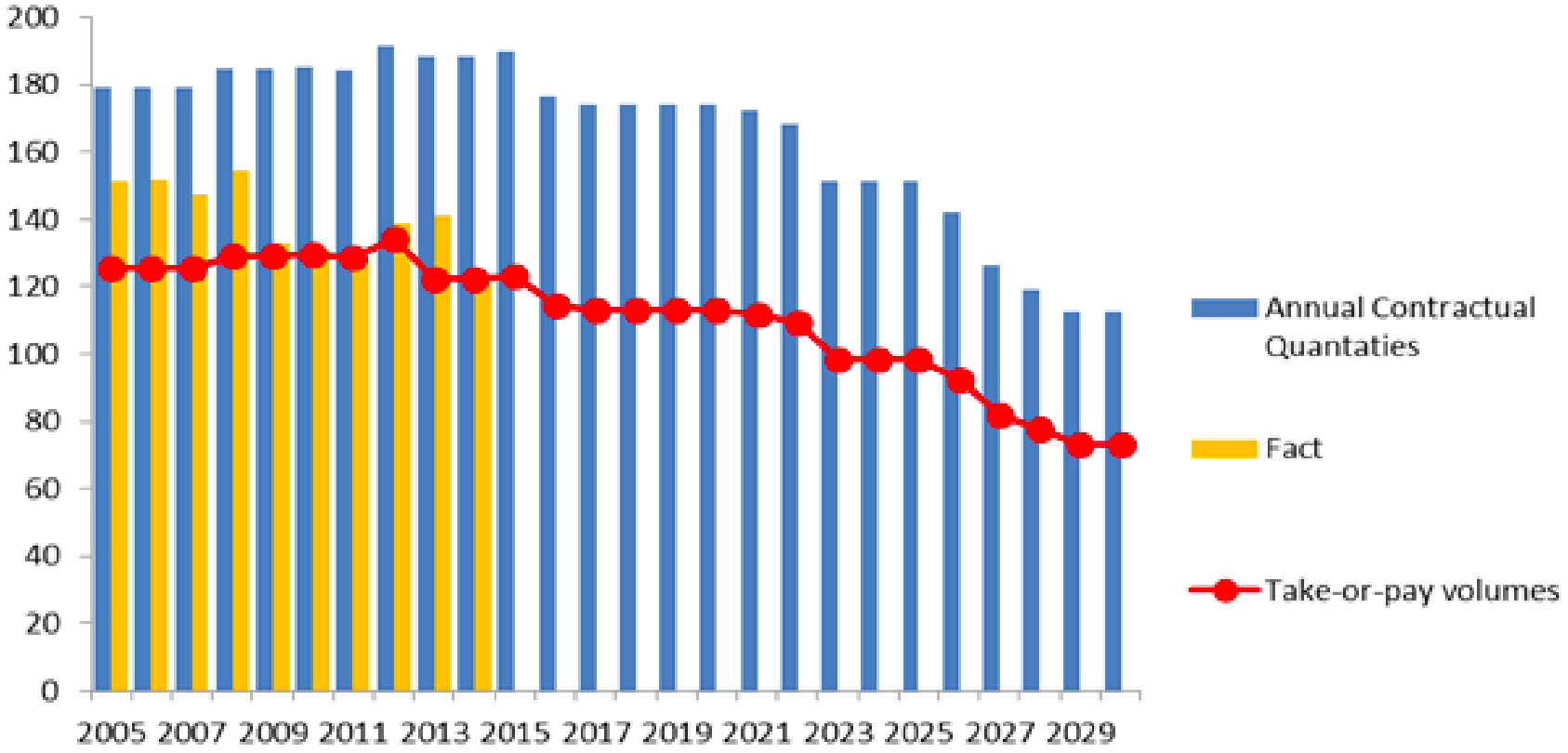
- Europe saw several gas delivery crisis in 2006, 2009, 2014
- EU drew the conclusion: it is time to get rid of dependency on Russian gas

Conclusion ignores interdependency between Russia and EU:

- Russia needs the EU as customer because only EU offers competitive prices
- Russia needs Western technology
- Contracts ran until 2029 and can not be ignored

2. Energy Security: Contracts run until 2029

Graphik 1: Vertragsmengen und tatsächliche Liefermengen von Gazprom nach Europa, bcm



Quelle: Cedigaz, NEXANT, Russian Custom Service, ERI RAS.

2. Replacement for Russian gas

Summary: Rationale of competitiveness and energy security not conclusive

Still both rationales constituted the background for establishing the *Energy Union* in 2014

Donald Tusk, now President of the European Council, explained:

"We need to wean ourselves of Russia's stranglehold"

Strategy to get get rid of the dependency on Russian gas entailed:

1. Promotion of shale gas
2. Diversification of gas suppliers (LNGs, Azerbaijan & Turkmenistan)

3. Shale Gas Potential in Europe

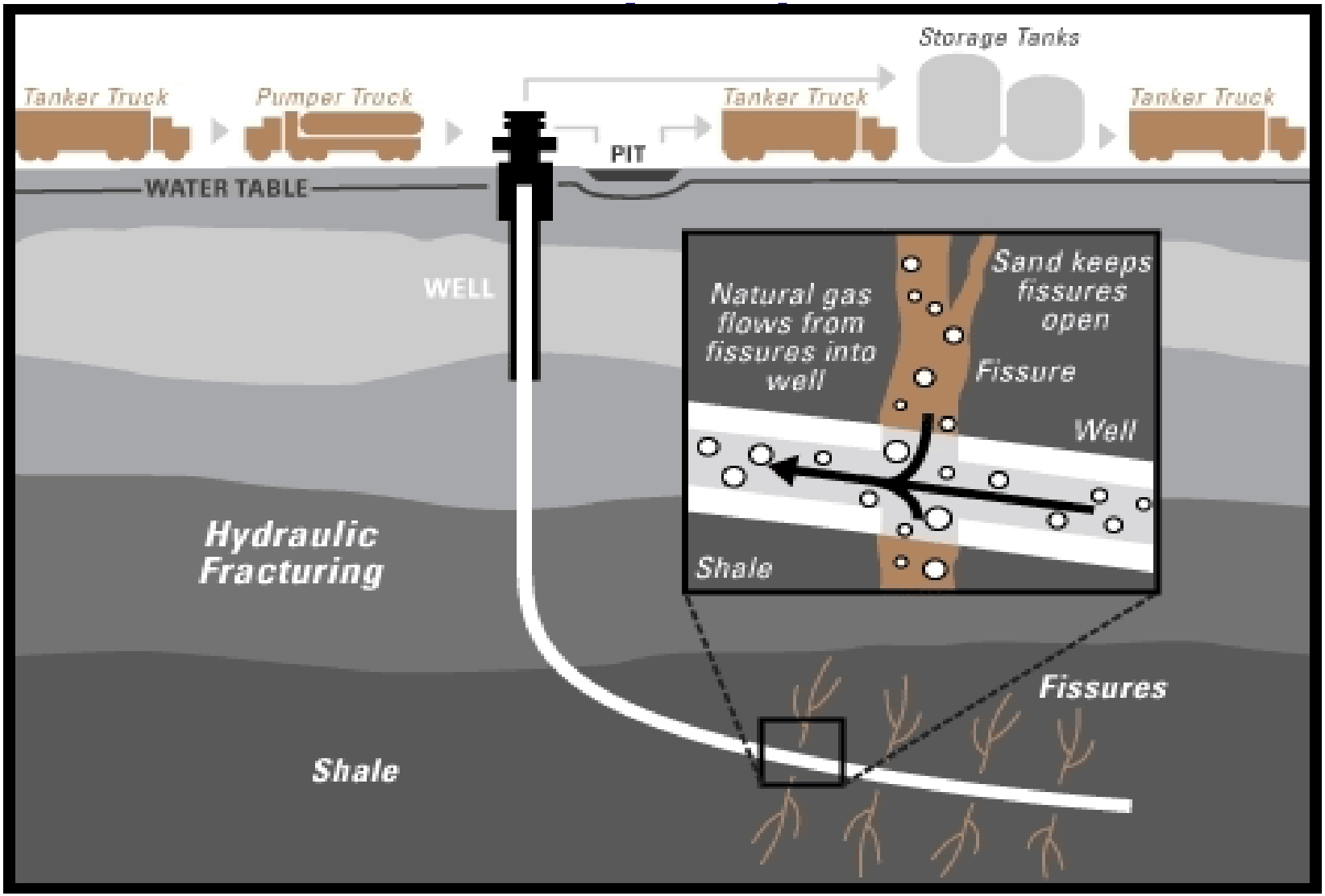
- There is large shale gas potential in 10 EU countries (Norway and UK excluded)

3.1.Shale Gas Potential Europe

3.1. Fracking Shales

Shale

3.1. Hydraulic fracturing



3.1. Fracking: Environmental damage

Environmental problems:

- Enormous depletion of water resources (one well uses 11-34 million liters of water, 35.000 wells) water supply corresponds of 1 to 2 cities of 2.5 million inhabitants for a year
- Use of up to 1000 different types of chemicals, cancer
- Problem of disposal of waste water – recycle
- Poisoned air – contaminated water is sprayed into the air
- Induces earthquakes
- Problem is leakage of methane into the atmosphere (can be partially mitigated by new techniques)
- Contamination of groundwater with methane

”

3.1. EU Commission's Decision on Shale Gas

- Between 2012 and 2014 the Commission was captivated by the question whether and how shale gas extraction in Europe should be legislated

- In January 2014: Commission decided to only *recommend minimum principles* on fracking and it *renounced on any ban* on this controversial extraction method

- That is surprising in view of the EU's role as a climate action leader, because shale gas is under suspicion to contribute significantly to climate change

- Why did the Commission do this?

3.1. Commission and shale gas: Lobby groups

The explanation I offer here is that the Commission has given the energy lobby in Brussels a significant voice

That did not happen behind closed doors, but rather as an integral part of the EU's "consultation process" which was started decades ago to establish more "participatory democracy", all to mitigate its "democracy deficit"

But in her 2013 study on this EU's "consultation process" Kohler Kohl concludes that participatory democracy in the EU is a "myth"

I confirm this finding in my analysis, though for different reasons

3.2. Commission's shale gas decision

Background:

- Commission is understaffed, it needs expertise
- 30.000 lobbyists in Brussels help here, and in particular energy companies have a large presence in the city, but also many non-governmental organizations (NGOs)
- For making the decision on shale gas the Commission set up a "European Science and Technology *Network* on Unconventional Hydrocarbon Extraction".
- Participants: energy companies, industry associations, NGOs, MEPs, representatives of EU and non-EU governments
- That indeed corresponded to a tri-sectoral network, comprising civil society, governmental agencies and industry
- No website, informal, only registration necessary

3.2 Commission's shale gas decision

With the Commission's decision to only recommend some safety standards for fracking, it seemed as if one sector had won: the energy industry

Argument: Commission bended institutional rules of this "open consultations process" to make it serve as an access point for the energy lobby

4. Commission's shale gas decision

Power in this "Network" was very unequally divided:

1. The energy industry was overwhelmingly represented with 70%, while civil society with NGOs only with 10%
2. Moreover: the two working groups were *chaired* by representatives of the energy industry
3. Two NGOs left the "Network" under protest and *Friends of the Earth* complained to the EU ombudsman
4. EU ombudsman: as an "expert group" certain rules would have had to be followed, i.e. balance in the group's composition
5. February 2016: Commission decided to disband the "network"

3.3.Research on networks and lobbyism

Potential helpful research: “network analysis” and research on “interest groups” and “lobby group”

1. Network analysis assumes, that a “network” is composed of equal players, who interact; so if the energy industry won, they had the better arguments (except A. Bosce)

2. “Lobby” and “interest groups” research had run a huge project on EU lobbying, called “INTER-EURO”: analysis of 125 legislative proposals, submitted between 2008 and 2010

- Very functional, conclusion business wins and looses
- Heike Kluever: lobbying success depends on “information supply”, “economic power” and “citizen support”, but “citizen support” does not really apply to the Commission

3. Commission's shale gas decision

Webster UNIVERSITY

Further contributing to EU decision:

This “pro-fracking” campaign was unfolding on two levels:

1. Commission was lobbied through the “Network” *and* bilateral meetings between Commission and Industry and NGOs - Imbalance: Fossil Fuel Industry covered 74% of meetings, Industry for Renewables only 6%, NGOs and others 20%

2. Commission was also campaigned by the UK government: Cameron sent a letter to Barroso, pledging not to regulate fracking

3. Decision obsolete: no on-shore fracking

So far there is not much "fracking" going on in the EU:

- Only for exploration, no commercial drilling yet
- Five European countries have imposed bans or moratoriums
  - France, Bulgaria, the Netherlands, Luxembourg and the Czech Republic
  - Romania (Clinton), mass protests led to Chevron's departure
- Poland disappointed: Exxon, Chevron, Marathon withdrew

Difficulties:

- EU region is much more densely populated than the US
- Shale gas is 50% deeper in the ground than in the US

IAOG: "This is a long-term industry" – Have to watch the UK

4. Lock-in of gas as „bridge fuel"

While domestic shale gas production is failing as one of the Energy Unions' diversification strategies, it still bets on *natural gas* as the fuel for the future

Further diversification strategies of the Energy Union are:

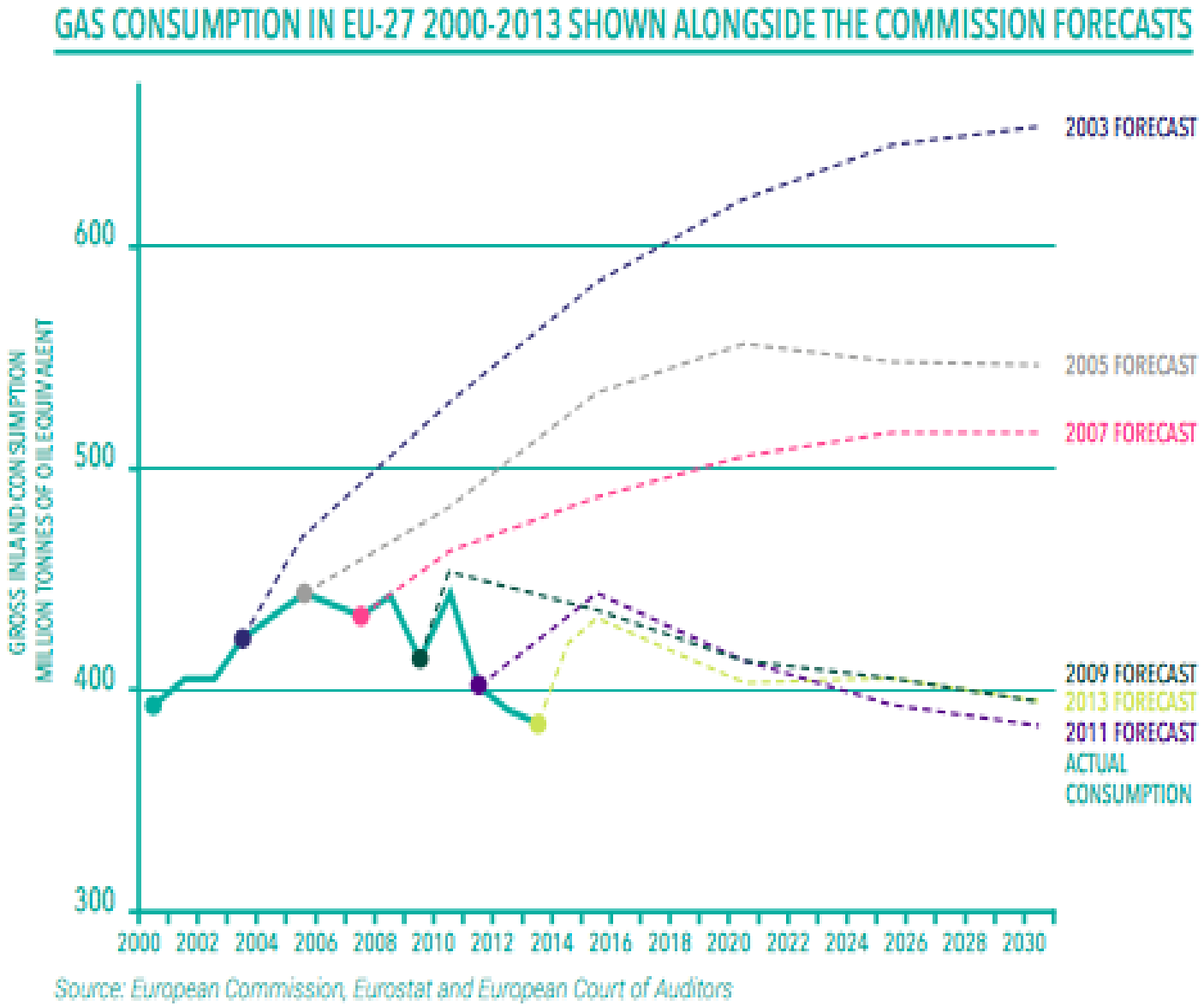
1. Southern Gas Corridor: new gas pipeline, supplying Europe with gas from the Caspian region
2. New LNG terminals

Southern Gas Corridor:

- 3500 kms, crossing seven countries, costs of approx. 45 $ billion
- Support: European Bank for Reconstruction and Development and European Investment Bank

4. Southern Gas Corridor

4. Gas consumption always overstated



4. Lock-in of gas as a „bridge fuel"

EU does not have a system in place to issue its own data

Commission uses the service of ENTSOG: *European Network of Transmission System Operators for Gas* - lobbying organization representing the gas infrastructure industry

ENTSOG keeps on exaggerating gas demand and the need for new gas infrastructure

Fact: gas consumption in EU-28 dropped by 14% since 2010

2015: European Court of Auditors criticized the Commission for using external sources and constant overestimation of gas consumption

5. Gas as „Bridge Fuel" – Climate Killer

Gas supposedly good for climate change, new role as "bridge fuel",

Certainly positive that gas drives out coal, because gas emits around half as much CO_2, as coal, but gas is a climate killer:

- It is still fossil fuel: it emits 10 times more than solar energy and even 45 times more than wind energy
- Methane leakage: Gas consists mainly of methane - methane is leaking through the production and transportation of gas
- Over a period of 20 years, methane warms the climate 86 times as much as CO_2, - then it breaks down in the atmosphere

6. Conclusion

1. EU Lobbying
   - Lobbying activity has to be made more transparent - we need to watch out for imbalances
   - EU should also get their own in-house research staff

- Research on the EU lobbying:
  - More focus on lobbying as part of the "democracy deficit"
  - We need to understand better how it is working – need more qualitative studies – less quantitative studies

6. Conclusion

2. EU Policy level:

EU should return to its previous focus on renewables, because:

- they are getting cheaper and cheaper
- can replace gas by 100%
- make EU member states independent
- it would liberate the EU of having to closely cooperate with authoritarian regimes like e.g. Azerbaijan

- If the EU does not follow this path, China will take over soon

- Back up slides

4. Nordstream II: Shell, Wintershall, Engie

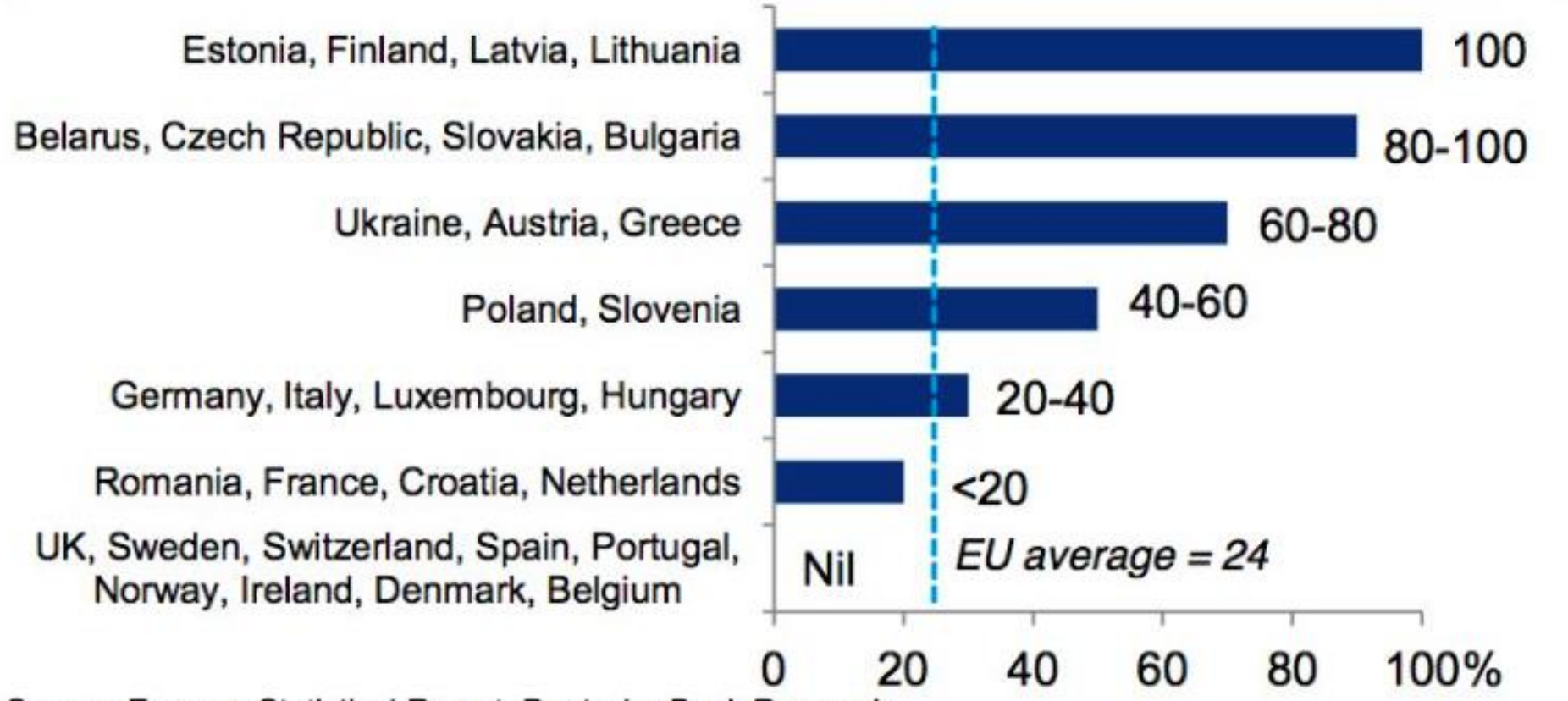
V. Energy Security: Share of Gas Imports

Partner	VALUE (Share %)	NET MASS (Share %)
Russia	41%	39%
Norway	32%	34%
Algeria	14%	13%
Qatar	7%	7%
Libya	2%	2%
Nigeria	2%	2%

Table 2: Share in Extra-EU-28 imports of natural gas (liquefied, gaseous state), main trading partners, 2013 -

V. EU dependencies on Russian gas

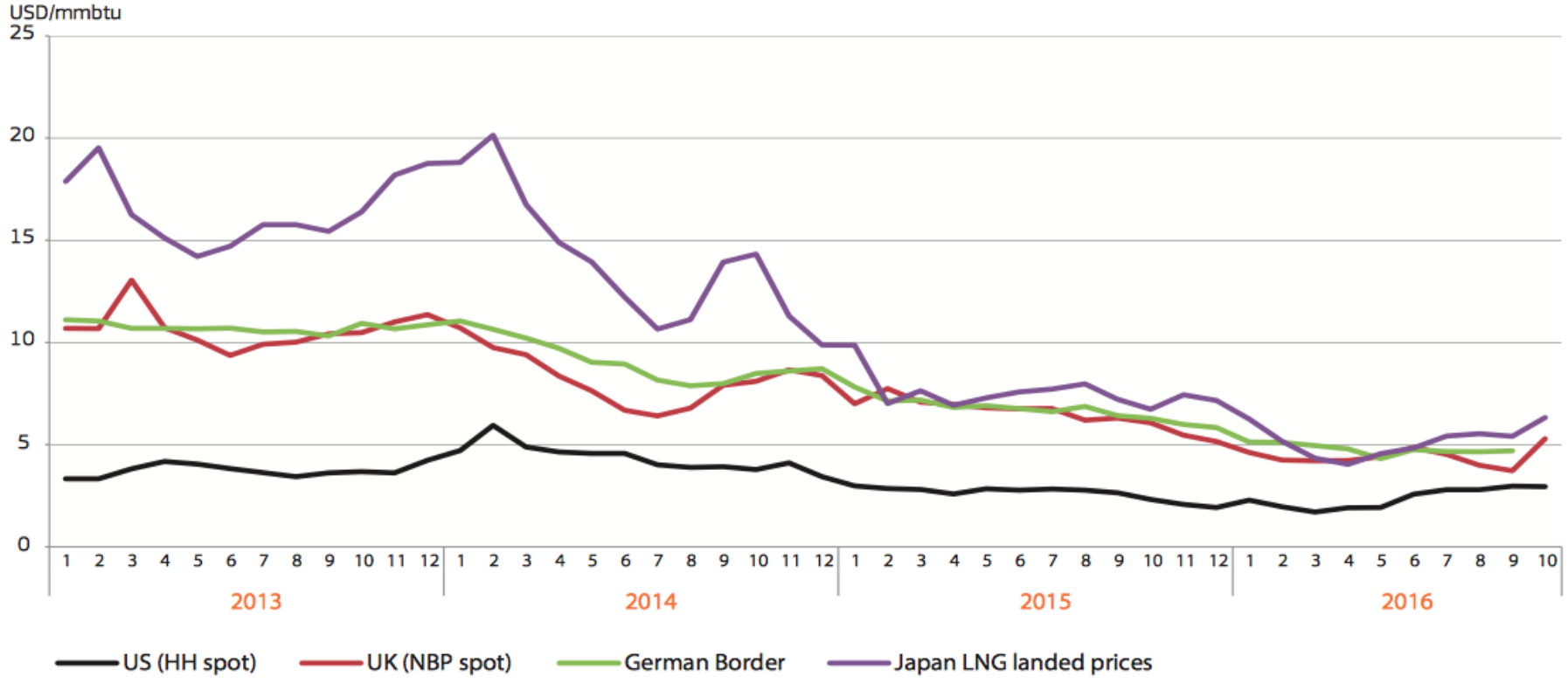
% of gas coming from Russia: European countries have different degrees of natural gas dependency on Russia



Source: Eurogas Statistical Report, Deutsche Bank Research

Gas prices are converging

FIGURE 16 – INTERNATIONAL COMPARISON OF WHOLESALE GAS PRICES



Sources: Platts, Thomson Reuters, BAFA