



**CIEP**

Clingendael International Energy Programme

# CIEP Gas Day 2010

2 September 2010, The Clingendael Institute, The Hague



**CIEP**

Clingendael International Energy Programme

# Gazprom at a Crossroads: Competition or Cooperation

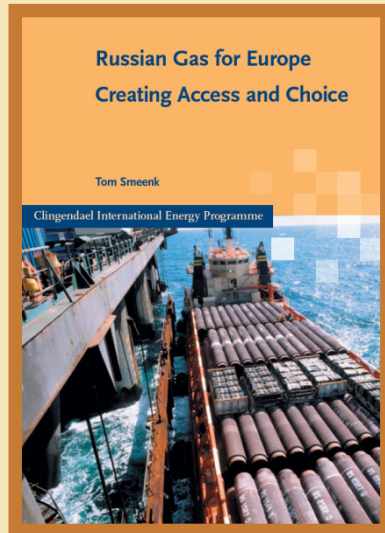
**CIEP Gas Day 2010**

Timothy Boon von Ochssée and Tom Smeenk  
The Hague, 2 September 2010

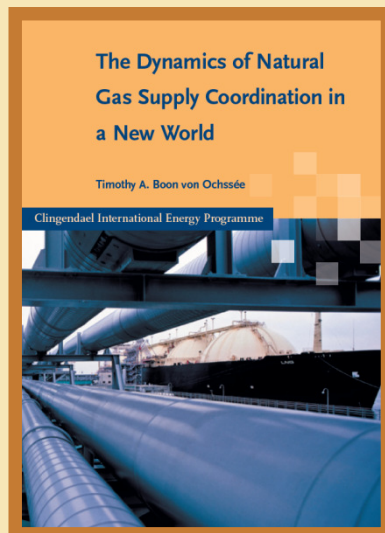
# Presentation overview

- **Introduction**
- **Russia's perception of the international political system and the role of gas**
- **The role for Russia of gas demand uncertainty and competition**
- **Competition: The role of Gazprom's gas infrastructure investments**
- **Market structure outcomes and the scope for cooperation between gas-exporting countries from a Russian perspective**
- **Conclusion**

## Our research project consists of two separate dissertations with their respective research objectives but using a joint research approach



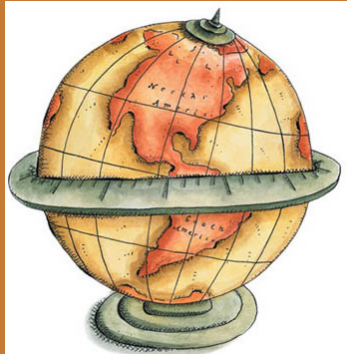
To identify, evaluate and extrapolate Gazprom's investment strategy regarding Russia's gas exports and export market behaviour, with a focus on European infrastructure projects, in a geopolitical context



To identify what shape and form of cooperation with other gas-exporting countries is feasible from a Russian vantage point, as well as to what extent and how it can strengthen Russia as a geo-strategic player in the structure of the post-Cold War international system

# Russia finds itself in changing world where gas plays an important role

## International political system



- Rise of a less strictly uni-polar world (e.g. rise of the BRIC countries)
- The end of the 'end of history' (Fukuyama and Kagan)
- The importance of relative economic power since end of Cold War

## Russia and the role of gas



- Russia looking to position itself in a changing system
- While oil revenues fuel Russia's finances today, gas revenues may do so in the long run
- Russia's perception of international affairs will determine its behaviour in the gas market
- Russia as a state versus Gazprom as a company

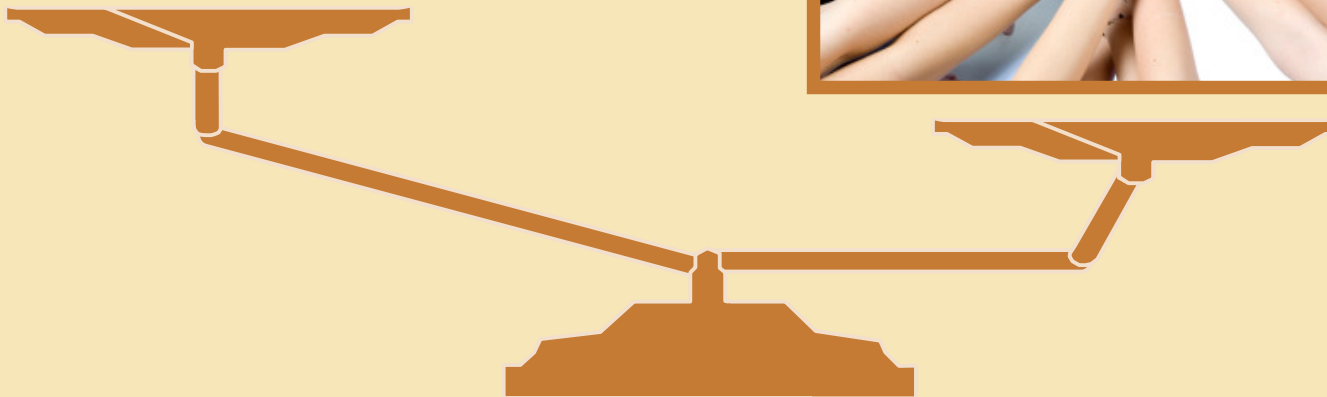
Source: CIEP analysis.

# Russia and Gazprom have to strike a balance between cooperation and competition with other gas-exporters

## Competition with other gas-exporters



## Cooperation with other gas-exporters

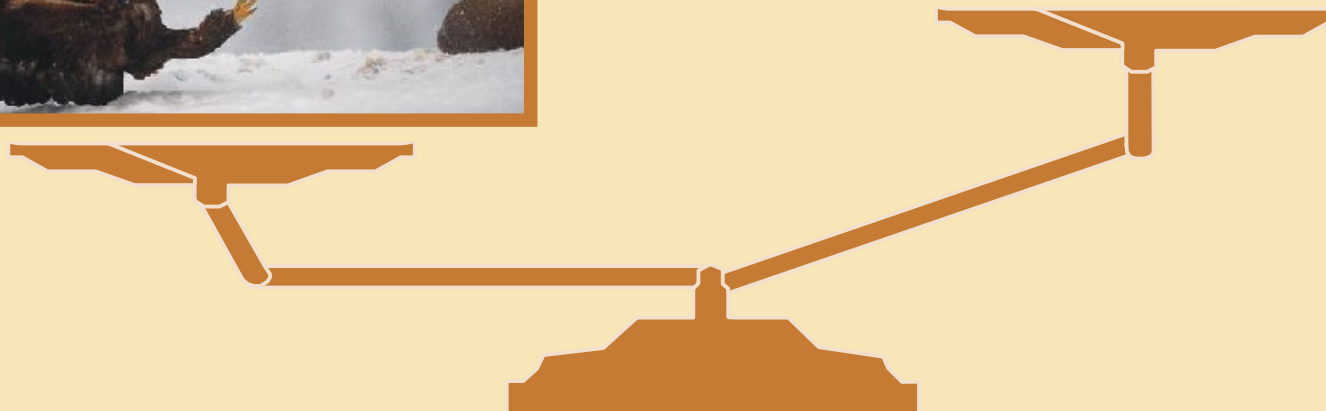


# Russia and Gazprom have to strike a balance between cooperation and competition with other gas-exporters

**Competition with other gas-exporters**



**Cooperation with other gas-exporters**



# In planning new investments, Russia must act in an uncertain and competitive European gas market

## Competition from other suppliers



- Traditional pipeline suppliers
- Pipeline suppliers from the Caspian region (including Iran)
- LNG
- Indirect impact of unconventional gas in the US

## Uncertainty in demand



- Government policies
- Regulatory uncertainties
- Uncertain economic development
- Presence of substitutes

Source: CIEP analysis.

# Towards an approach that accounts for gas market demand uncertainty and moves by potential competitors...

## Real-option game model: Core (strategic) investment indicators

Market demand uncertainty



Real-option approach

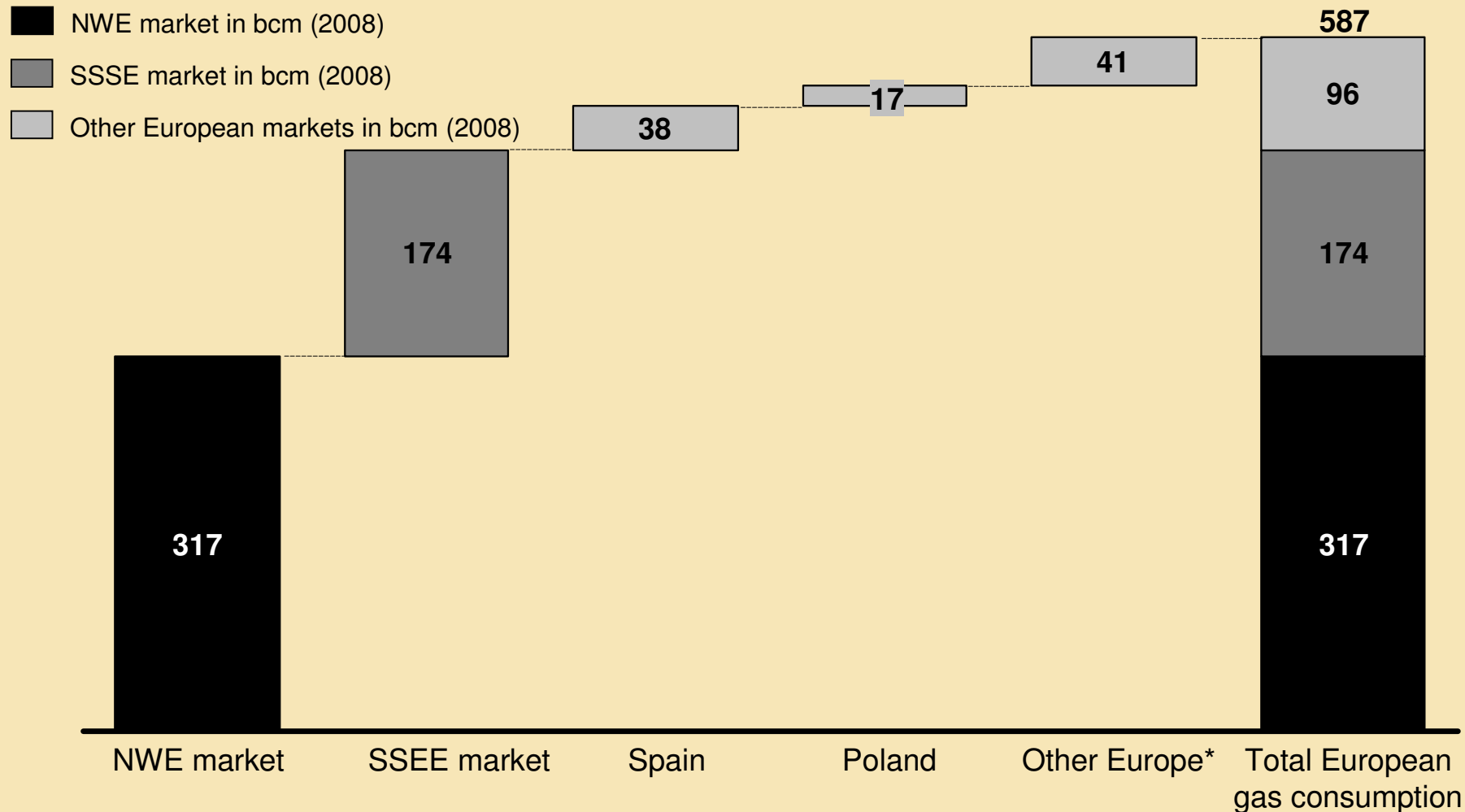
Position vis-à-vis competition



Game theory

Source: CIEP analysis, based on Smit and Trigeorgis (2004); Victor *et al.* (2006); De Jong (1989).

# The Northwestern and Southern and Central gas markets are responsible for 80 percent of European gas market

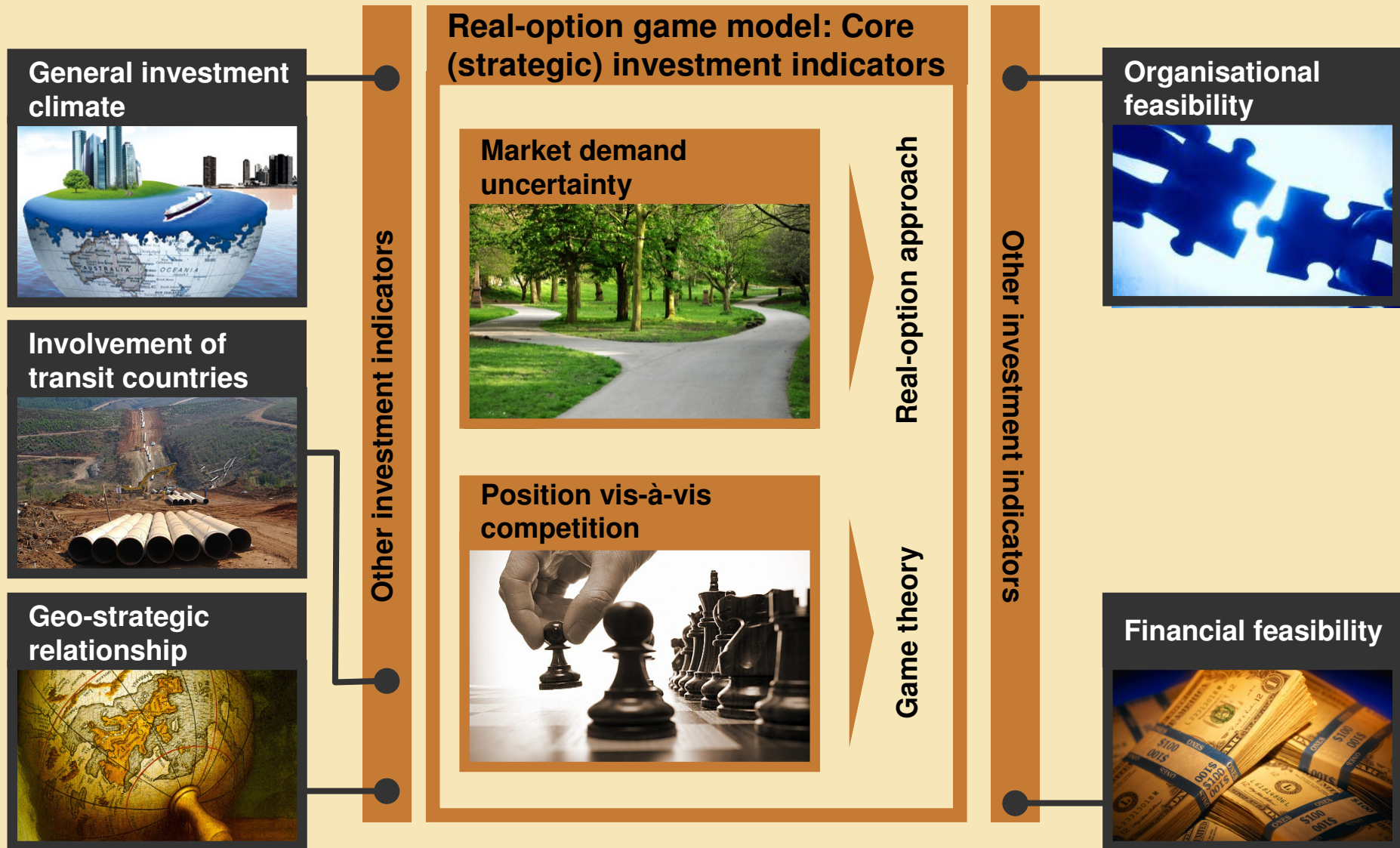


\* Czech Republic: 8.7 bcm; Norway: 6.7 bcm; Slovak Republic: 6.3 bcm; Portugal: 4.8 bcm; Finland: 4.7 bcm; Switzerland: 3.4 bcm; Lithuania: 3.3 bcm; Latvia: 1.7 bcm; Estonia 0.9 bcm; and Sweden: 0.9 bcm.

Note: Totals may not add up due to rounding.

Source: CIEP analysis, based on IEA (2009).

# ... However the approach also takes into account real-world factors



Source: CIEP analysis, based on Smit and Trigeorgis (2004); Victor *et al.* (2006); De Jong (1989).

# The South and Nord Stream pipelines are tools aimed at securing market share in Europe

xxx Year of start-up

x bcm Transmission capacity

## South Stream

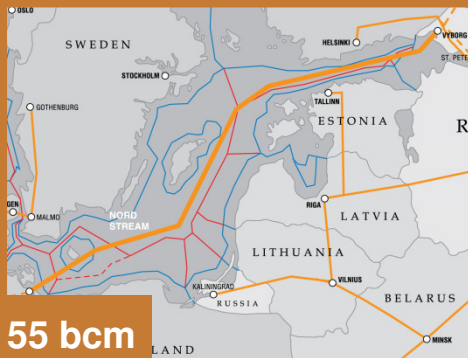
2015+



63 bcm

## Nord Stream

2011+\*



55 bcm

- Projects provide a first mover's advantage
- Reducing transit risks
- Increasing arbitrage opportunities
- Organisational feasibility of projects
- Despite TPA exemption for Nord Stream, risk of EU politics and/or regulation remains

\* From 2011 a transport capacity of 27.5 bcm/y, full capacity in 2012 (expected).

Source: CIEP analysis.

# Russia can drive Gazprom to become dominant or non-dominant in the European gas market

## Become dominant



- Russia as a state could aim for greater gas market share for geopolitical reasons
  - Herein Gazprom is a tool in the pursuit of geo-strategic objectives by establishing pipeline capacity
  - Strategically invest in additional upstream and infrastructure investments ('vertical energy diplomacy')
  - Geopolitical goals at expense of economic pragmatism
- 

## Become non-dominant



- Russia aims for a more balanced market share for economic reasons
- Gazprom is a tool for achieving economic security
- Economic pragmatism wins out over geopolitical designs
- Postpone (some of) its new upstream and infrastructure investments
- Not ruling out possibly new infrastructure projects to mitigate transit risks and improve security of demand

Source: CIEP analysis

# In order to avoid lower gas prices, Russia could choose to cooperate with other gas-exporting countries

## Risk of oversupply



- Gas oversupply is always a risk in either scenario
- Investment behaviour other gas-exporting countries outside of Russia's control
- In the long term, gas market oversupply could intensify price competition

## Gas-exporting country cooperation



- 
- Enduring price competition will encourage gas-exporting country cooperation
  - How do you jointly manage capacity?
  - Perhaps by jointly coordinating new investments within the GECF

Source: CIEP analysis

# Yet Russia seems to choose for competition with other gas-exporting countries and puts off open cooperation, for now

**Competition with other gas-exporters**



**Cooperation with other gas-exporters**



- Perception matters
- Gazprom always said to be dominant in European gas market, but faces great uncertainty, as do other gas-exporting countries
- Greater gas supply security and potentially lower prices for (European) gas consumers

Source: CIEP analysis



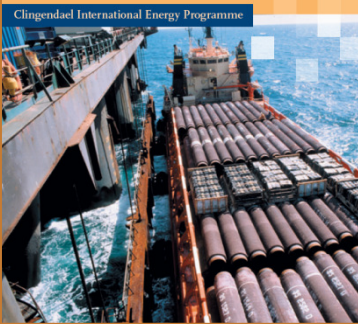
# CIEP

## Clingendael International Energy Programme

[www.clingendael.nl/ciep](http://www.clingendael.nl/ciep)

Russian Gas for Europe  
Creating Access and Choice

Tom Smeenk



The Dynamics of Natural  
Gas Supply Coordination in  
a New World

Timothy A. Boon von Ochsee

