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Turkmen natural gas trade –  
Problems of the past and future prospects

16th Meeting of the REFORM Group - Climate policy after Fukushima  
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# Turkmen gas trade – the early years

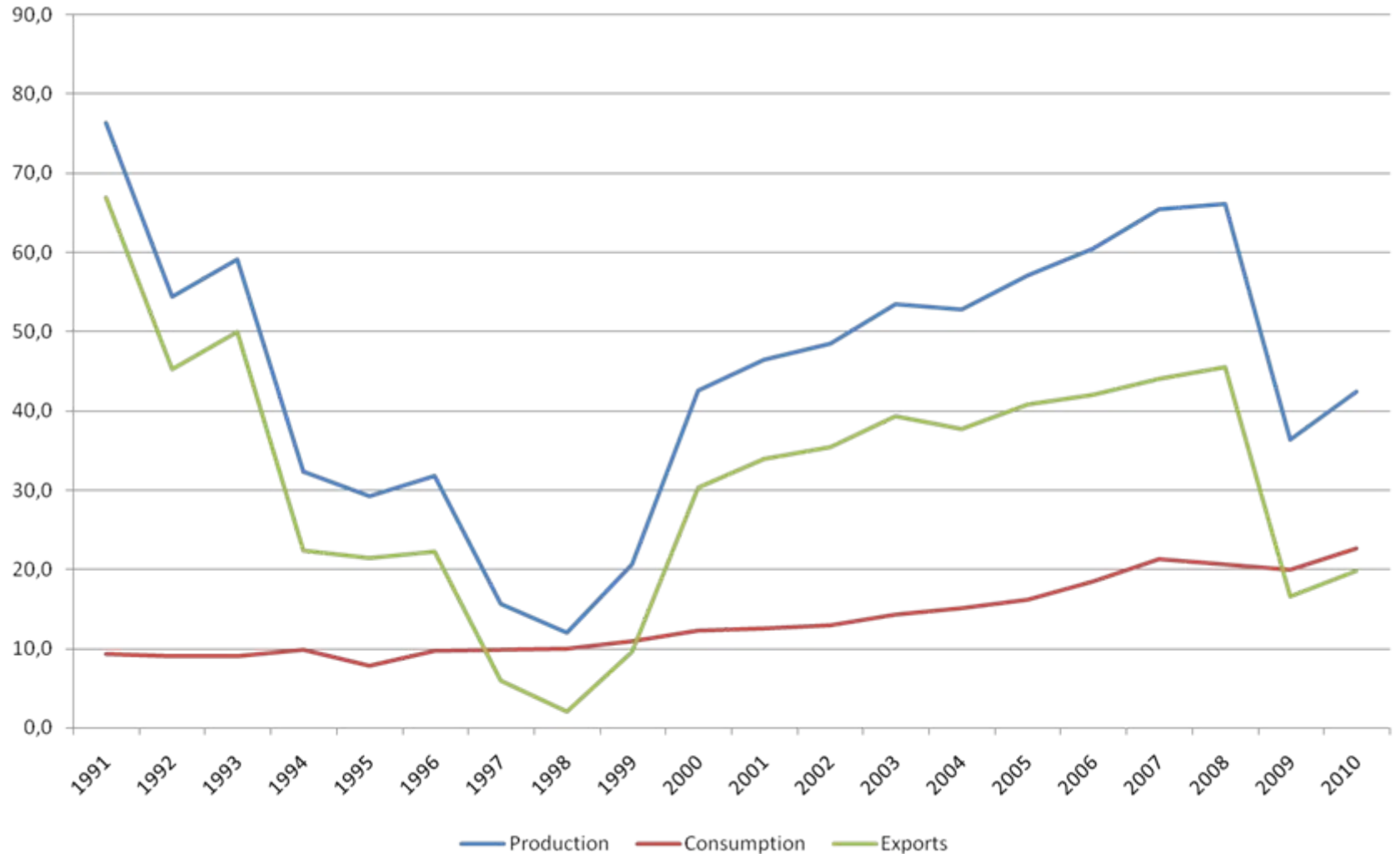
- Transition of the CIS-states and their economies
- Reorganisation of trade between the states of the CIS
- Dependence on the Russian pipeline-system
- Turkmen gas exports to the lucrative European markets blocked by Russia from 1994
- Dependence on the CIS as purchaser of Turkmen gas, in particular Ukraine
- Lack of payment of customers in the CIS, in particular Ukraine

# Turkmen gas trade – the intermediaries

- Respublika
  - Responsible for handling the Turkmen-Ukrainian gas trade in 1994
  - Lacking payment
  - Unprofitable barter-deals
  
- Turkmenrosgaz
  - Joint Venture established 1995 (Turkmenneftegaz 51 %, Gazprom 45 %, Itera 4 %)
  - Irregular/lacking payment
  - One-sided breakup by Niyazov in 1997
  - Annulment of the JV lead to the almost completely halt of Turkmen gas exports in 1998



# Turkmen gas production/exports



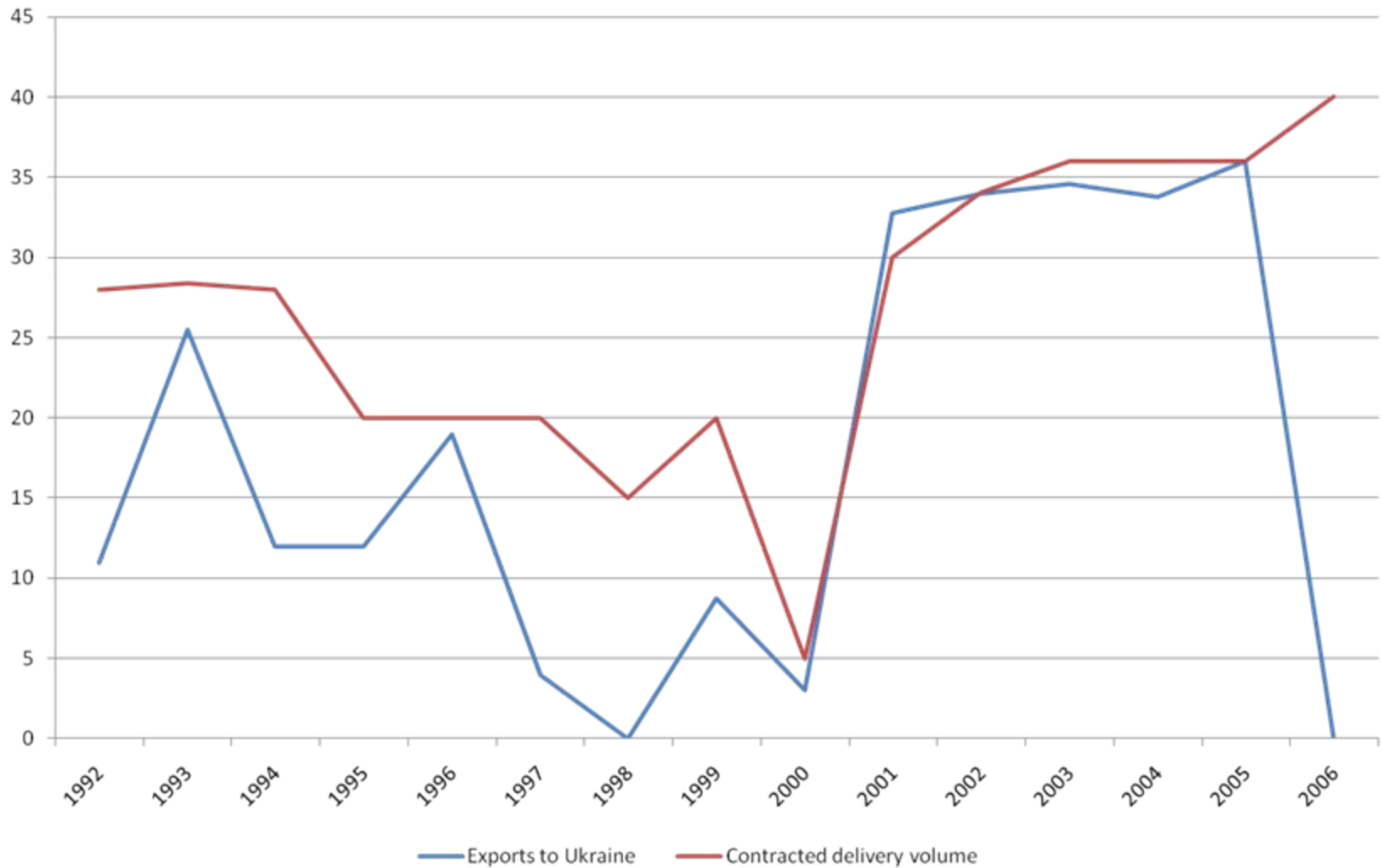
Source: Own preparation from data of BP Statistical Review 2011

# Turkmen gas trade – Ukraine

- Contract between Turkmenistan and Ukraine in 2001
  - Period 2002-2006
  - Volume totaling 250 bcm; in fact 32-36 bcm/year
  - Price: increased from 42 \$ per 1,000 m<sup>3</sup> in 2002 to 58 \$ respectively 44 \$ in 2005; abolishment of the barter-scheme in 2005
  
- Intermediaries
  - Itera; till end of 2002
  - Eural Trans Gas; 2003-2004
  - RosUkrEnergo, from 2005
  
- Annulment of the contract by Turkmenistan in 2006, Turkmen deliveries to Ukraine in fact stopped with begin of 2006



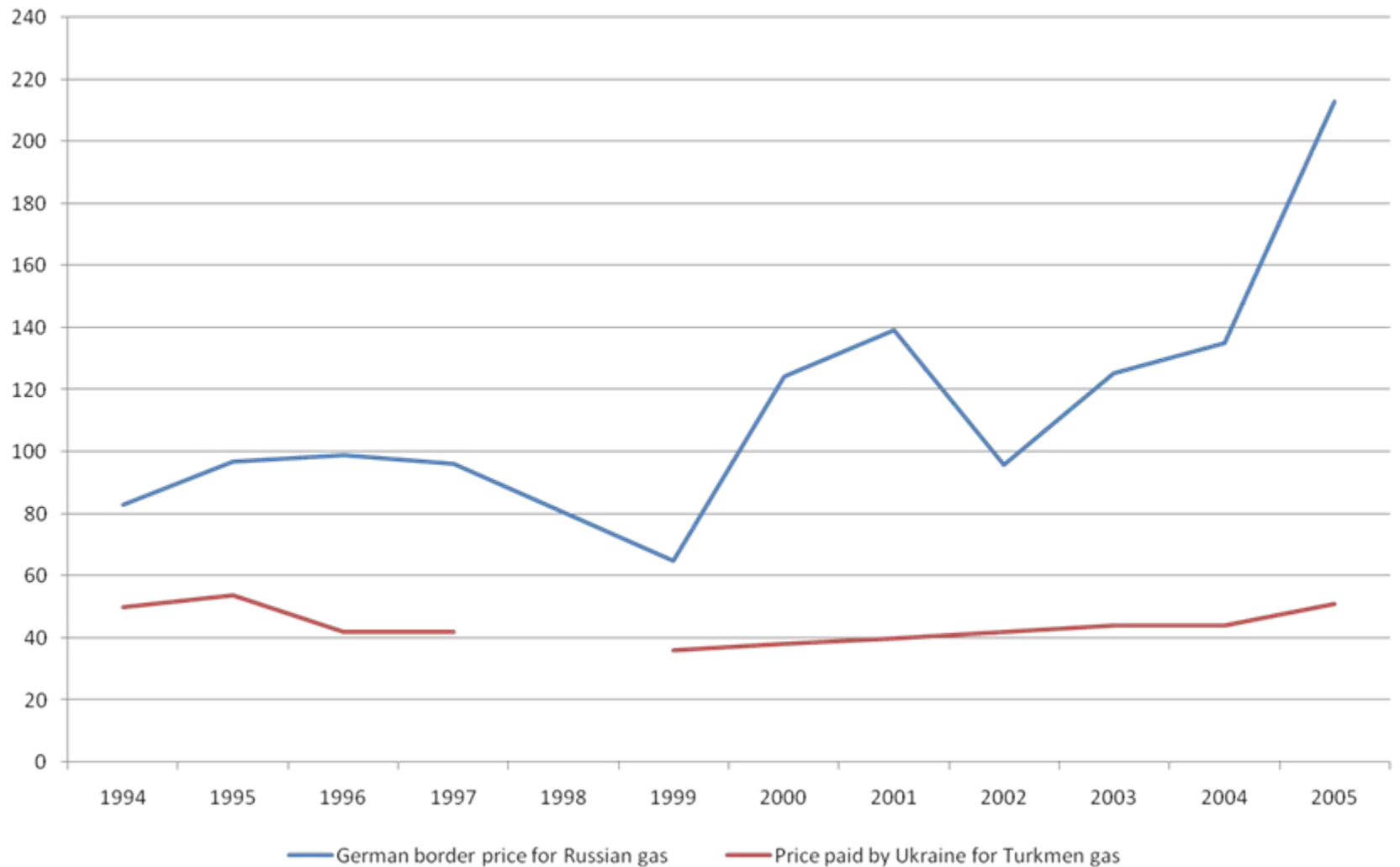
# Turkmen gas trade – Ukraine (bcm)



Source: Own preparation from various sources



# Turkmen gas trade – Ukraine (\$/1000 m<sup>3</sup>)

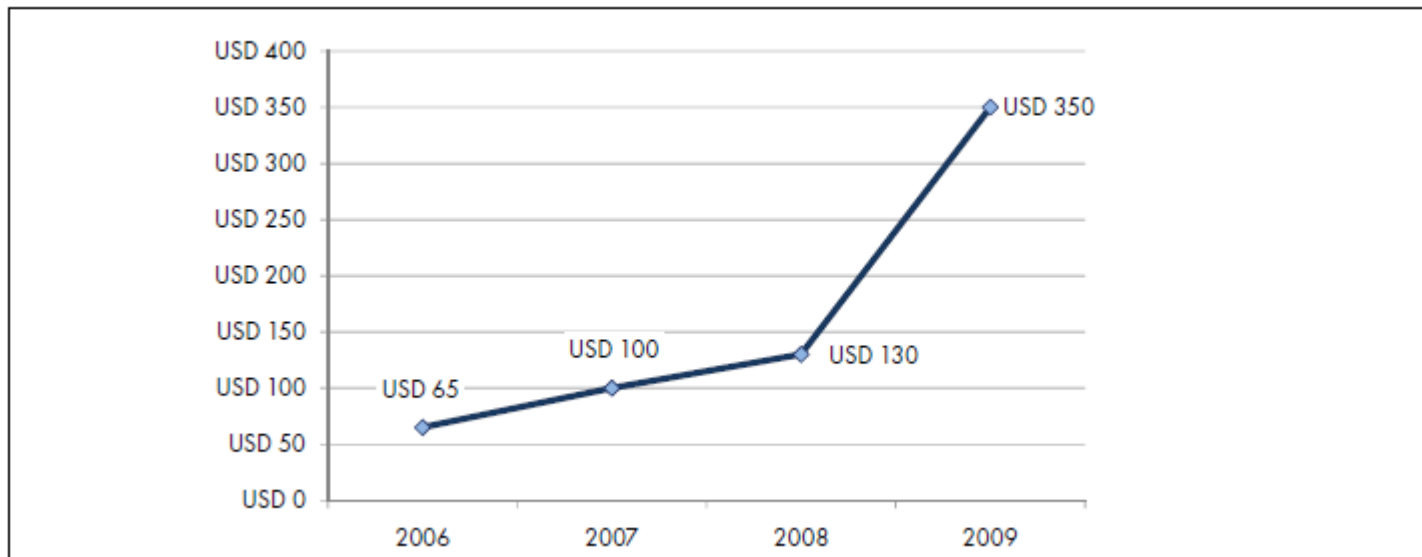


Source: Own preparation from various sources

# Turkmen gas trade – Russia

- Long term contract between Turkmenistan and Russia in 2003
  - Period: 2004-2028
  - Price increased from 44 \$ in 2004 to European market level 2009; abolishment of the barter-scheme in 2005

USD per 1000 m<sup>3</sup> of Natural Gas Paid by Russia to Turkmenistan



Source: Russian Analytical Digest No. 56 3/2009



# Turkmen gas trade – Russia

- Volumes as designated in the contract:

2004: 5-6 bcm	2005: 6-7 bcm
2006: up to 10 bcm	2007: 60-70 bcm
2008: 63-73 bcm	from 2009: 70-80 bcm
- Volumes in fact delivered: roughly 40 bcm/year in the period 2006-2008
- Since 2009 deliveries in the amount of ca. 10 bcm, caused by the decreasing demand due economic crisis and conflicts about the price

# Findings

Analyzing almost 20 years of Turkmen gas trade, two main points are getting obvious concerning the trade with Turkmenistan's main customers Ukraine and Russia:

1. Turkmenistan can't sell the volumes, it would like to sell
2. Turkmenistan got a significant low price for the delivered volumes



# Export Routes



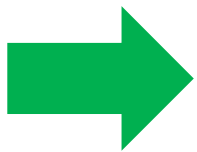
Source: IEA

## Future Prospects –

# Turkmen gas for the European Union?

# Delivery Commitments

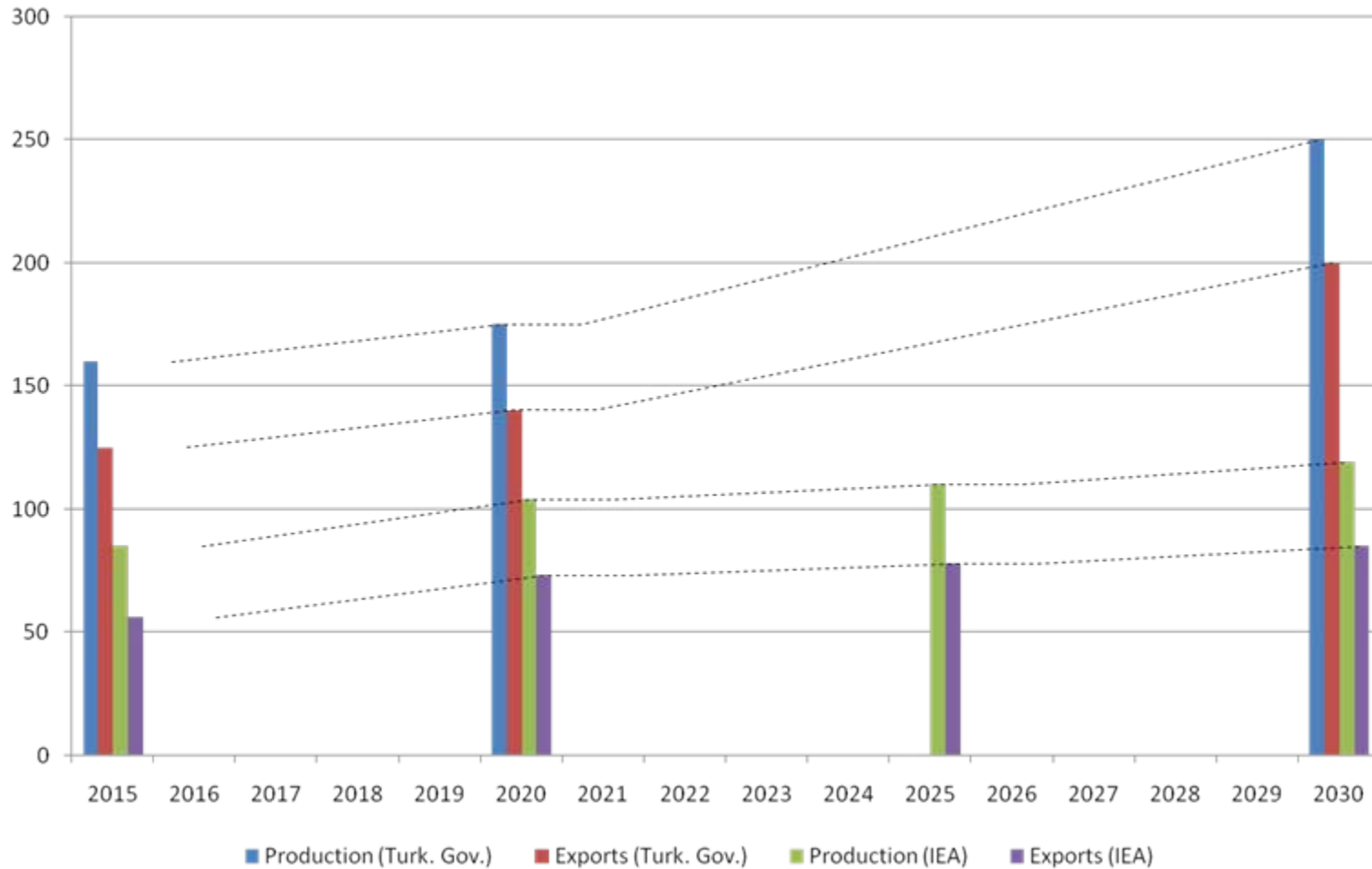
- China: At least 30 bcm/year from 2013/2014
- Iran: up to 20 bcm/year
- Russia: up to 30 bcm/year (at present roughly 10 bcm)
- Consumption: circa 20 bcm/year, increasing
- Supplying the European Union with 10 bcm/year?
- Implementation of the Turkmenistan-Afghanistan-Pakistan-India-Pipeline?



**To fulfill all commitments, Turkmenistan has to increase its export capacity to at least 70 bcm/year in the near future**



# Projections of Turkmen gas production/exports



Source: Own preparation from IEA-data and various sources

# Export Routes



1

## Transkaspische Pipeline

> 300 km lange Offshore-Pipeline verbindet Turkmenistan und Aserbaidtschan

2

## Offshore technische Pipeline

> Verbindung der Offshore-Plattformen zwischen Turkmenistan und Aserbaidtschan

3

## CNG/LNG Schiffstransporte

> Transport von Compressed Natural Gas (CNG) oder LNG

4

## Transitroute durch den Iran

> Ausbau der bestehenden Pipeline durch den Iran bis zur türkischen Grenze

Source: RWE

# Findings

At present it is very unlikely, that Turkmenistan will supply gas to the Nabucco-Pipeline, because it seems, that it not has the production/export capacity. There is also no infrastructure to pipe Turkmen gas to the planned Nabucco-Pipeline.

Although there are some negotiations concerning the implementation of the TAPI-Pipeline, in my opinion the present security situation in Afghanistan and Pakistan does not allow the construction.





Thank you for your attention!

Questions?