

# Can Ukraine secure enough gas for the winter 2015/16? A scenario analysis

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#### 1. Key Data

#### Gas situation 2015 less tense than 2014:

- Consumption dropped by 25% from 1Q2014 to 1Q2015
- Reverse flow capacity was increased from 16 mcm/d to 61 mcm/d
- Russia restarted gas deliveries

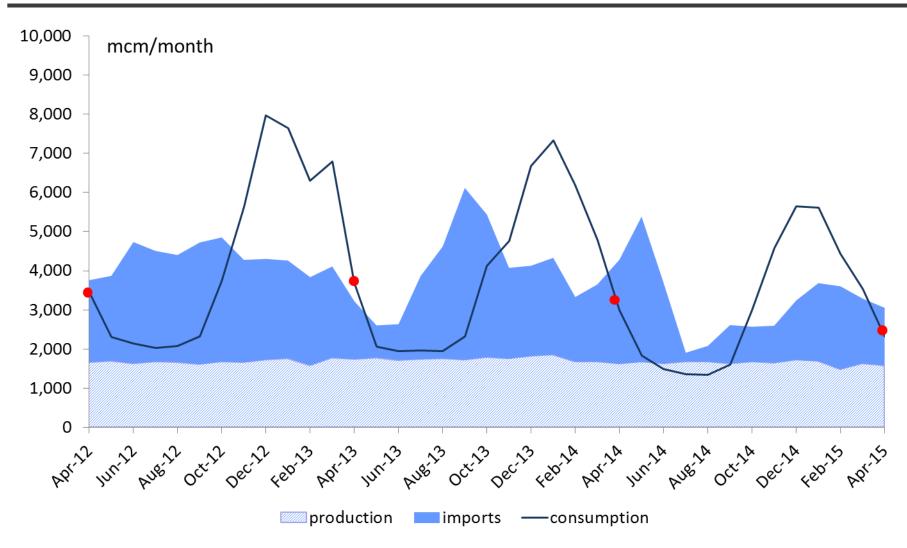
#### Planned annual balance 2015

Storage level 01.01.2015	11.4 bcm
Planed imports 2015	+ 26 bcm
Slovakia	~ 15 bcm
Hungary + Poland	~ 1.6 bcm
Russia	~ 9.4 bcm
Expected domestic production in 2015	+ 20 bcm
Planed consumption in 2015	- 40 bcm
Storage level by 31.12.2015	17.4 bcm

- ⇒ Without Russian imports storage in Jan16 would be 8 bcm
- ⇒ In 1Q2015 storage withdrawals were 3.5 bcm despite warm weather -> Russian imports can be pivotal (min. level ~5 bcm)

We are already in June 2015 and interested in 1Q2016-> require scenario analysis on daily/monthly basis.

### Monthly gas supply and consumption



Source: Own illustration based on Ministry of Energy and Coal

### How much gas can be imported from the West?

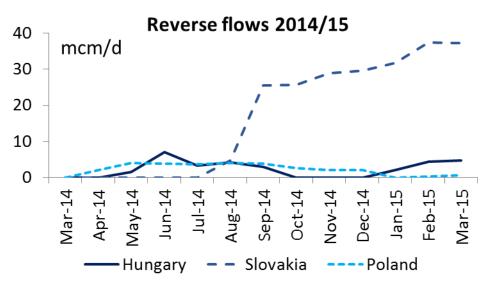
### Import capacity:

HU: 16.8 mcm/d

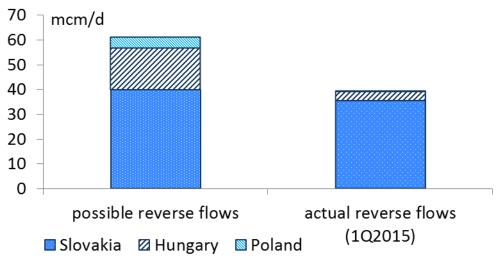
PL: 4.3 mcm/d

SK: 40 mcm/d

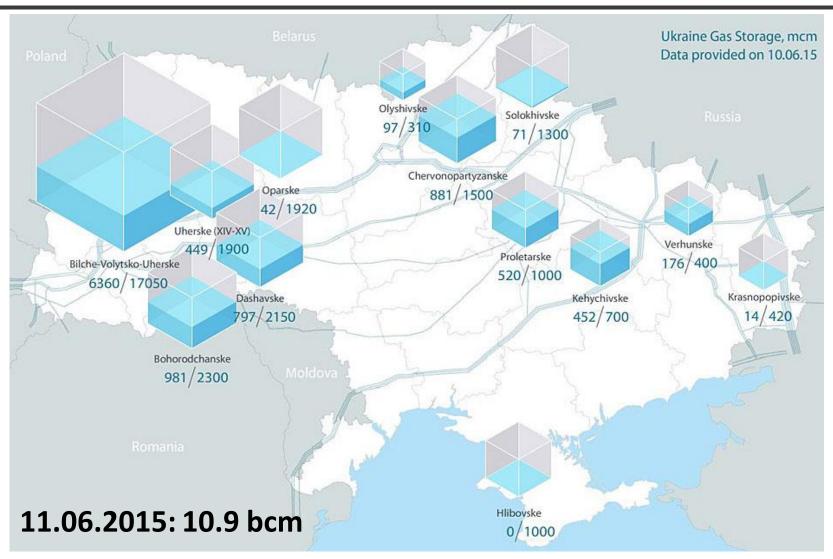
 $\Rightarrow$ 61 mcm/d [~22 bcm/y]



#### Possible vs. actual reverse flows



# How much gas is accumulated in the storages?

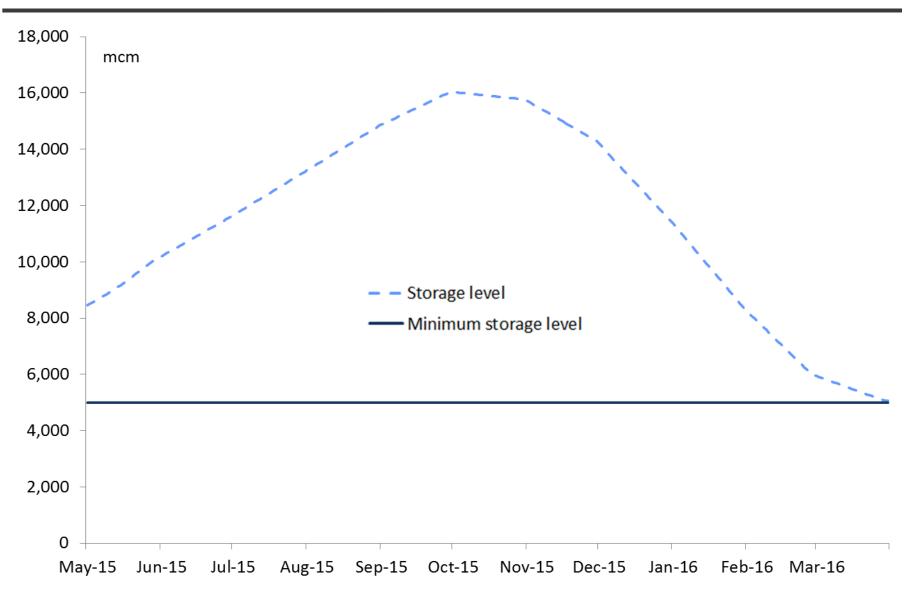


Source: http://naftogaz-europe.com/article/en/englstorage

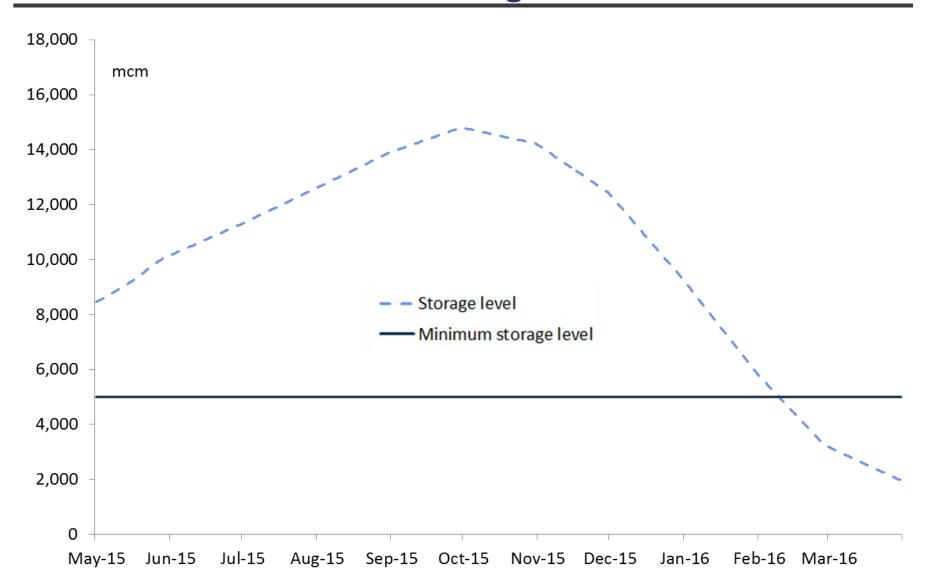
### 2. Scenario Analysis

- Construct five scenarios
- Under which assumptions will there be enough gas for the winter 2015/16?
- Three factors:
  - Consumption
  - Production
  - Imports
    - Russia
    - Reverse flows

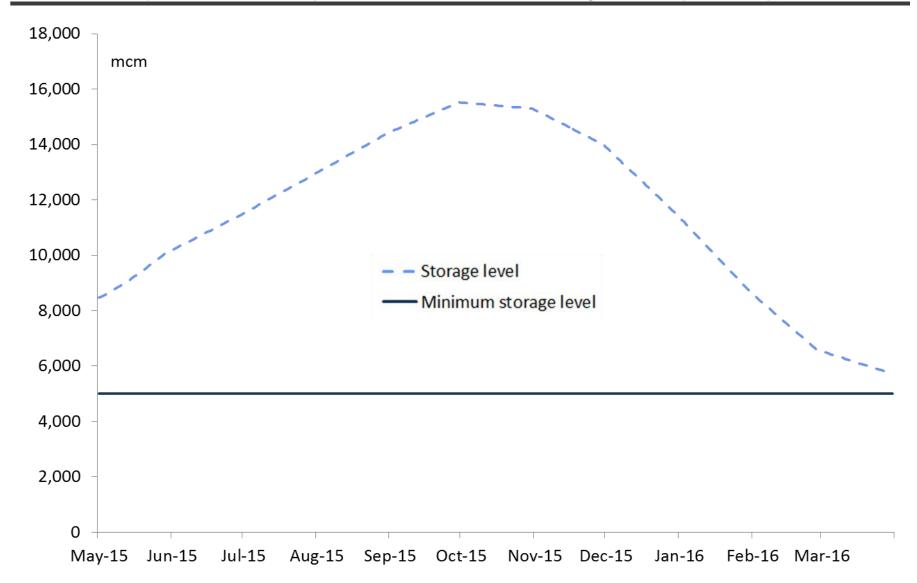
# Scenario 1: High imports (50 mcm/d)



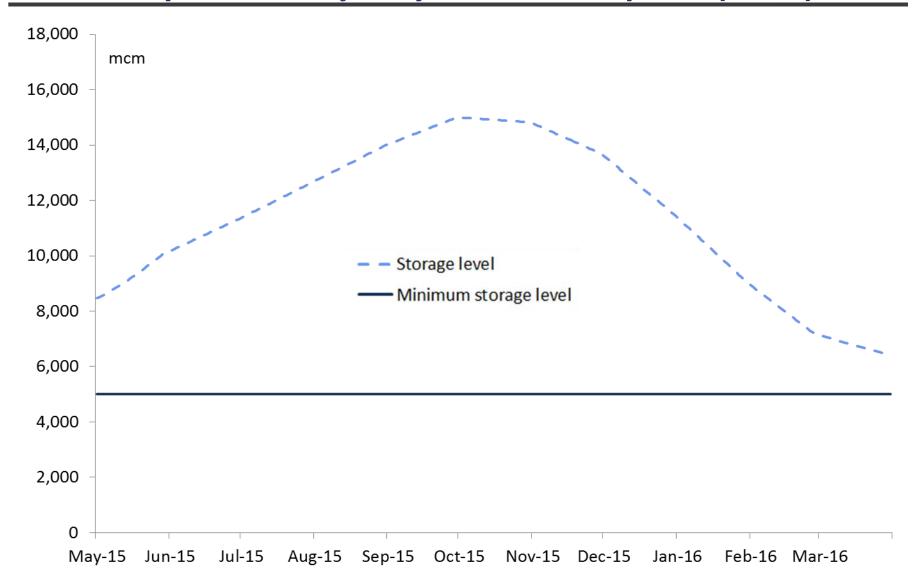
# Scenario 2: Medium imports (40 mcm/d) alone will not be enough



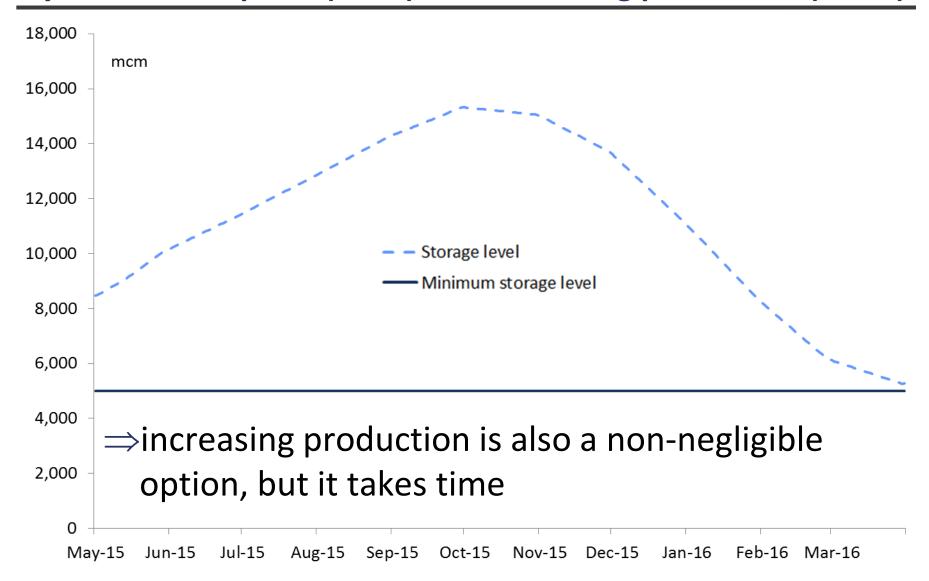
# What other options work? Scenario 3: Medium imports (40 mcm/d) and less consumption (-10%)



# Scenario 4: Low imports (30 mcm/d) can be compensated by very low consumption (-20%)



# Scenario 5: Low imports (30 mcm/d) can also be compensated by less consumption (-10%) and increasing production (+15%)



#### **Conclusion**

- Situation more comfortable than last year
  - Consumption dropped (-25%; 1Q15 vs. 1Q14)
  - Russia delivers some gas
  - Reverse flow deliveries (40 mcm/d) & capacity (61 mcm/d) increased significantly
- No room for complacency
- Imports, consumption & production not fully foreseeable
- So steady imports of >50 mcm/d
  - can be from Russia as long as it works
  - is a question of security, not price



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