



# The segmented natural gas market in Ukraine

## Analysis and Policy Recommendations

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## Motivation

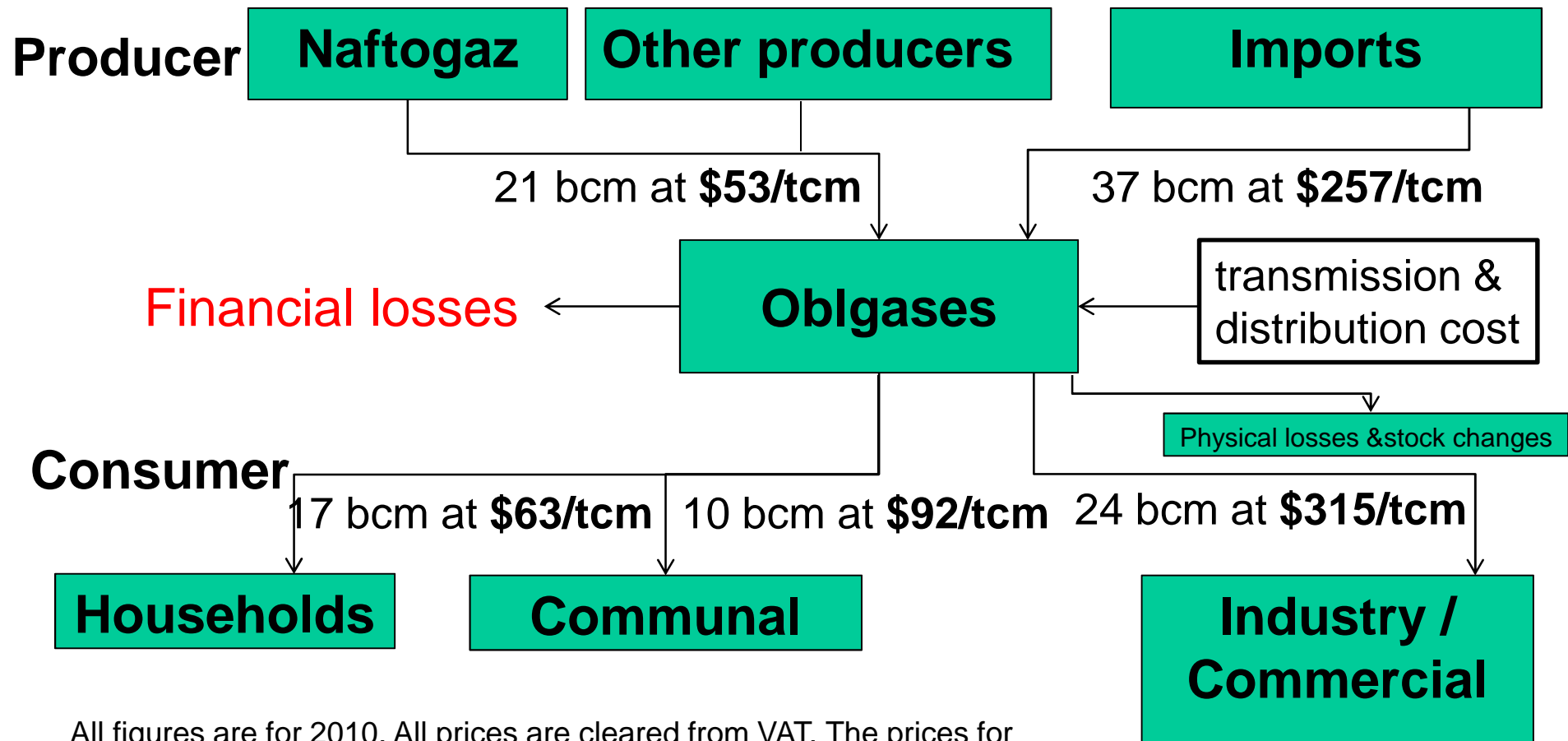
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The Ukrainian gas market is split into two segments:

- (i) One for domestic producer & final consumer
  - (ii) And one for imported gas & industrial consumer
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- Through this administrative segmentation, gas producer in Ukraine currently obtain an 80% lower price than gas importers.
  - This system has been criticized by economists for many years
  - It is now part of the discussion over the DCFTA energy section



# Status Quo 1



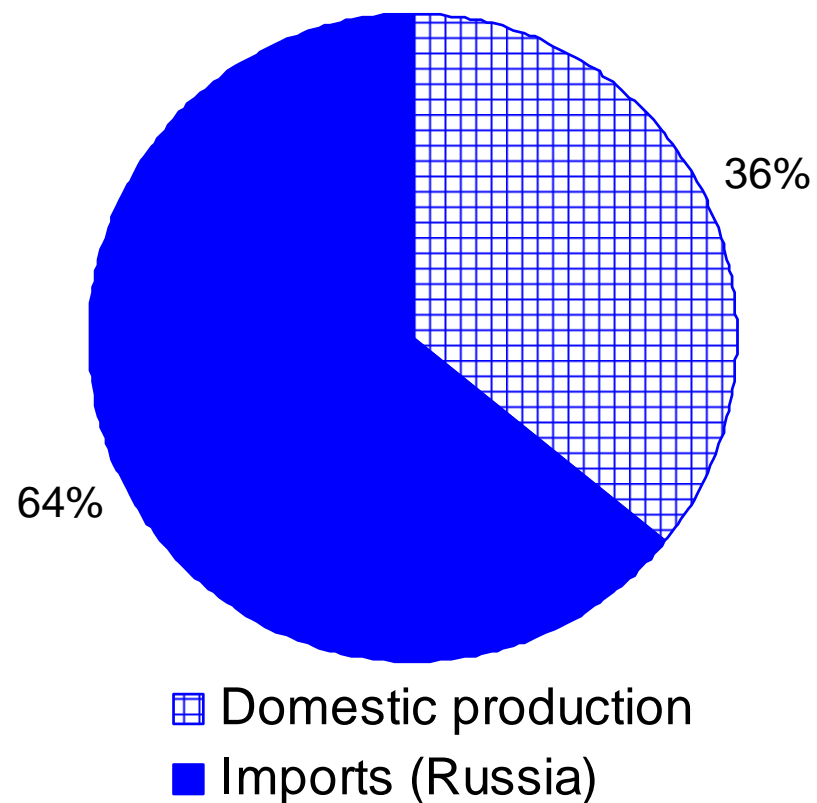
All figures are for 2010. All prices are cleared from VAT. The prices for consumers include the transmission and transportation costs.



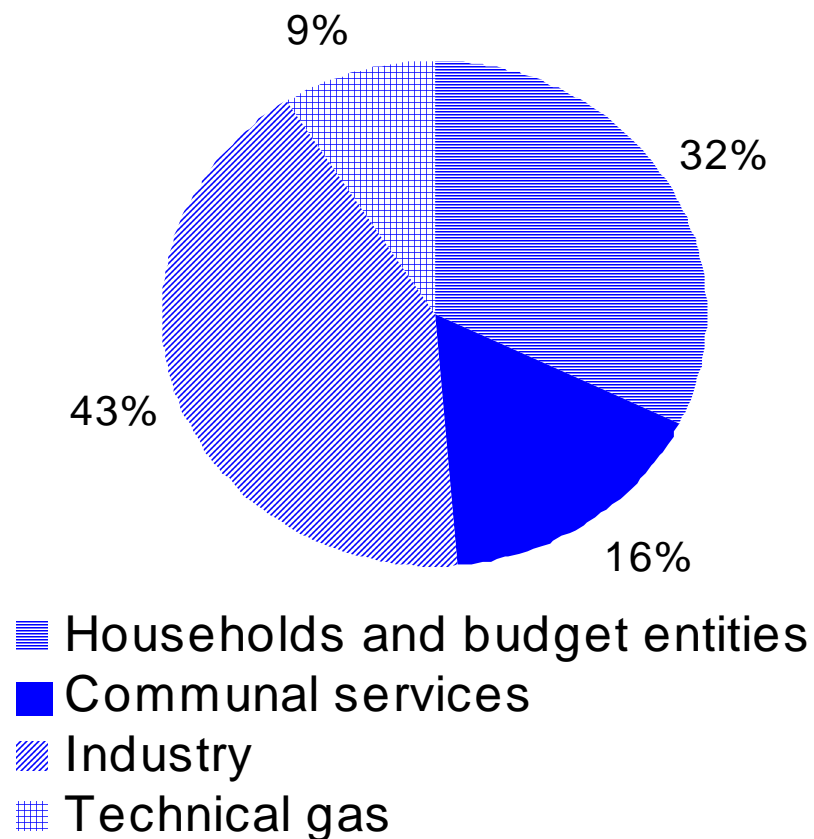
## Status Quo 2

In bn cm

### Sources of natural gas



### Natural gas distribution



All figures are for 2010



# Structure

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1. Rationale for the status quo
  - a. Avoids fuel poverty
  - b. Rents go to all consumers not some firms
2. Advantages of a uniform pricing mechanism
  - a. Impact on investment
  - b. Impact on consumption
  - c. Impact on import prices
  - d. Good governance
  - e. Development of gas market and gas transit
  - f. Ecological effect
3. Final remarks



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# 1. Rationale for the status quo



## a. Avoids fuel poverty

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- Fuel cost are an important component of household consumption basket
  - Cold housing has externalities (e.g., public health implications)
- ⇒ Lowering household prices has a social target

But: household prices are not linked to gas sourcing prices => Targeted subsidies could avoid fuel poverty much cheaper

**Conclusion 1:** Social targets could be reached without distorting the market



## b. Rents go to all consumers not some firms

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Currently, population benefits of Ukrainian resource wealth

- There is a risk that due to the monopolistic nature of the sector a price increase will go into the wrong pockets
- But: appropriate taxation could prevent that legacy rents are transferred from consumers to producers

**Conclusion 2:** Rent transfer to gas producers can be prevented by taxation





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## **2. Advantages of a uniform pricing mechanism**



## An alternative to segmented pricing

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- A **uniform pricing mechanism** in Ukraine would imply a single wholesale price for a cubic meter of gas
- If market-based, the wholesale price would reflect the cost of acquiring the last unit of natural gas (i.e., probably the import price)
- But, different consumer groups may face differentiated gas retail prices due to differentiated tariffs for gas transmission, distribution and supply (e.g., consumer directly connected to high pressure pipelines pay less)  
**=> In this briefing we focus on wholesale prices**



## a. Impact on investment

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Lower gas prices for domestic producer:

- Negative effect on investment in domestic gas production
  - Conventional gas
  - But also non-conventional gas
- Negative impact on investments to increase energy efficiency in buildings

**Conclusion 3:** The impact of segmented pricing on investment is clearly negative

**Conclusion 4:** Negative effect on domestic gas production



## b. Impact on consumption

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Lower gas prices for households:

- Less savings (open window to regulate temperature)
- Substitute gas for other fuels (e.g., use gas heating instead of district heating)
- Illegal arbitrage: Use cheap gas for inefficient home-manufacturing

**Conclusion 5:** Inefficient and excessive gas demand



## c. Impact on import prices

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Segmented pricing => High domestic demand and low domestic production

⇒ Ukraine needs more gas imports

⇒ Market power of Russian suppliers rises

⇒ Import prices rise

**Conclusion 6:** Segmented pricing leads to a higher gas import bill



## d. Good governance

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- Segmented pricing invites illegal activities (e.g., illegal arbitrage and corruption)
- Segmented pricing incentivizes consumers, traders and producers to focus their attention on acquiring/maintaining preferential treatment and thus distracts the attention (staff time) from productive measures.

**Conclusion 7:** Uniform pricing will improve governance



## e. Development of gas market and gas transit

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- Administrative segmentation implies a dominant role of state monopolies in the gas sector
  - Under-engagement of private investors in gas production
  - No interest of private investors in loss-making gas supplies
- Gas transit revenues used to compensate internal losses and not to modernise transit pipelines

**Conclusion 8:** Negative impact of price segmentation on gas market and gas transit



## f. Ecological effect

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- Causal chain: Cheap gas => High demand for gas  
=> High consumption, waste of energy resources
- Implications:
  - High energy consumption (relative to GDP)
  - High CO2 emissions
  - Bad for environment and climate change
  - Less room for international cooperation and for participation in the international carbon market, including possibility of revenues from this market
- **Conclusion 9:** Negative ecological impact of artificially low prices





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## 3. Final remarks



## Final remarks

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- There are good reasons to abolish the gas market segmentation
- Social policy motives are legitimate, but current policy is not well targeted on those in need
  - Those households with high share of energy cost in their budget already get compensated
  - Those who could afford most, benefit most of the segmentation (higher income=>more living space=>more heating need=> more implicit subsidy)
- Gas market segmentation should be replaced by a proper taxation of gas producers and a targeted social policy



# Contact

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