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**ENERGY SUBSIDY REFORM IN THE REPUBLIC OF  
MOLDOVA: ENERGY AFFORDABILITY, FISCAL  
AND ENVIRONMENTAL IMPACTS**

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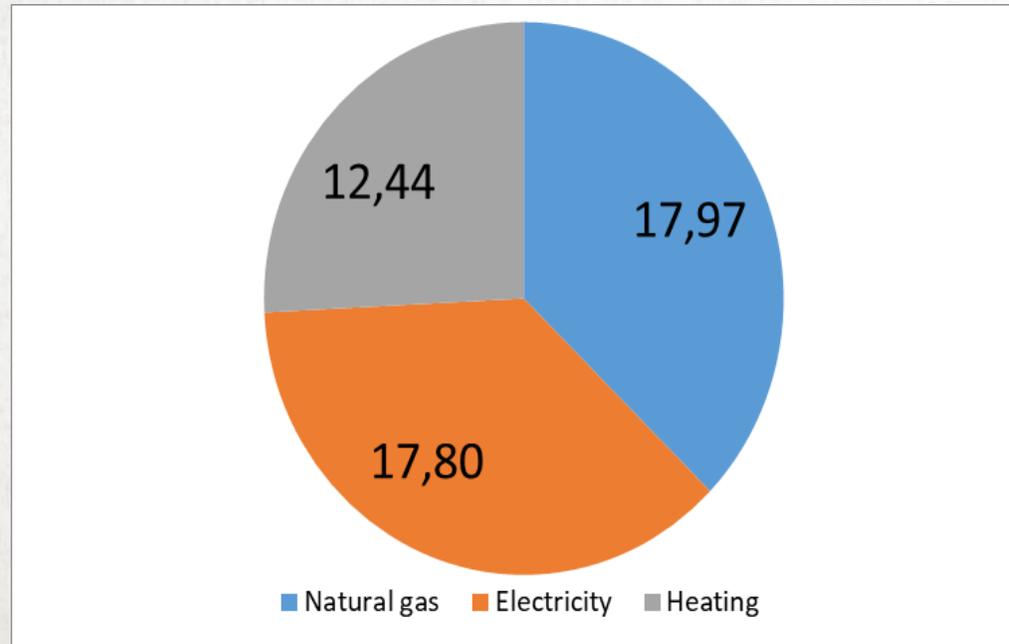


## BACKGROUND

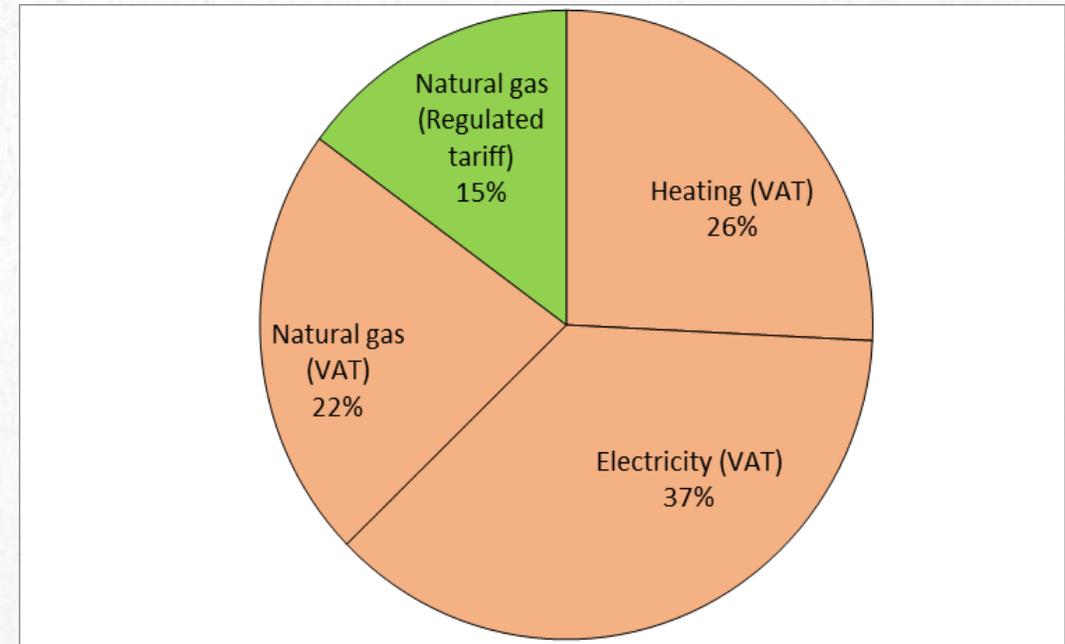
- OECD Study on *Inventory of energy subsidies in the Eastern Partnership Countries*, including the Republic of Moldova (2016)
- OECD Study on *Energy subsidy reform in the Republic of Moldova: energy affordability, fiscal and environmental impacts* (2017-2018)

# STUDY ON INVENTORY OF ENERGY SUBSIDIES IN MOLDOVA

The total amount of estimated consumer energy subsidies in 2015 was of **USD 48.21 million**



**85%** of consumer energy subsidies were related to the reduced VAT rates



# SCOPE AND NEED OF THE STUDY ON ENERGY SUBSIDY REFORM IN MOLDOVA

- *Energy affordability* - a key policy concern for Moldovan decision-makers
  - *Scope*: To inform the Government of the Republic of Moldova of the fiscal, environmental and especially social impacts of reforming major energy subsidy schemes and to help the Government make realistic and well-justified decisions
  - *Need* for a detailed and evidence-based analysis which can support the decision-making process
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# OBJECTIVES OF THE STUDY

- Impact assessment of the VAT rate increase on electricity, natural gas and heating on:
    - Energy consumption, costs and energy affordability for households
    - Public budget
    - Greenhouse gas (GHG) emission levels
  - Analysis of possible social measures to protect vulnerable households that could be affected by the reforms
  - Discussion of international practices to measure energy affordability and energy poverty and measures to protect poor households
  - Identification of the best reform scenarios
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# DATA COLLECTION FOR THE STUDY

The following type and sources of data were used:

- The tariff calculation methodologies and tariffs approved by the National Energy Regulator (ANRE)
- Tax code (Chapter on VAT)
- Tax base for non-collected VAT from ANRE reports and JSC Moldovagaz (gas distributor), namely:
  - *number of households consuming energy*
  - *amount of energy consumed for natural gas, electricity and heat energy*
- Information from the National Bureau of Statistics on disposable household income and household survey

# FOCUS OF THE STUDY

The 3 largest Government support schemes were identified and estimated as a part of the Study:

- reduced VAT rate on natural gas consumption by households – **8%**
- VAT exemption on electricity consumption by households – **0%**
- VAT exemption on heat consumption by households - **0%**

**Standard VAT rate in Moldova – 20%**



# METHODOLOGY OF THE STUDY

- VAT-related subsidies were estimated using the IEA/OECD price-gap approach. The SEEA framework was not used as the project team was not sure if it was appropriate and how exactly to apply it.
  - The affordability study is based on a methodology specifically designed for the analysis of energy affordability and a related computation model
  - The VAT increase is modelled for 3 different VAT rates: **5%, 8% and 20%**, but most of the analysis is focused on the impact of the VAT rate increase up to 20%
  - The report analyses the VAT rate increase in terms of three main impacts:
    - (i) change in the revenue stream to the public budget
    - (ii) costs that will need to be shouldered by the public budget to protect poor households affected by the VAT increase
    - (iii) impact on household spending on energy
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# MODELLING OF POLICY MEASURES TO PROTECT VULNERABLE HOUSEHOLDS (HHS)

- **Scenario 0.** No transfer to vulnerable households
  - **Scenario 1.** Income-tested (X% poverty definition) cash VAT compensation to vulnerable HHs
  - **Scenario 2.** Income-tested (X% poverty definition) VAT voucher to vulnerable HHs
  - **Scenario 3.** Income-tested (X% poverty definition) cash transfer to vulnerable HHs  
*Transfer rule: A family shall be compensated for overspending on energy (relative to disposable HH income):*
    - 6% for electricity
    - 3% for natural gas used for cooking
    - 10% for natural gas used for cooking and for heating
    - 15% for heating
  - **Scenario 4.** Income-tested (MDL 4 000 poverty definition) cash lump-sum transfer to vulnerable HHs
  - **Scenario 5.** Income-tested (MDL 4 000 poverty definition) cash VAT voucher to vulnerable HHs
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# SCENARIO ANALYSIS

Scenario	No compensation	Income-tested, VAT compensation with cash	Income-tested, VAT compensation with voucher	Income-tested, compensation over 10%	MDL 4 000 poverty definition , lump-sum compensation	MDL 4 000, poverty definition, VAT compensation with voucher
Impact on public budget (MDL)	222 107 322	63 363 051	121 347 067	-104 120 512	90 007 495	131 054 185
Impact on public budget (qualitative)	+++	+	++	-	+	++
Ease of administering the measure	+++	-	++	-	+	++
Level of protection provided by the measure to poor families	---	++	++	+++	++	++
Link of social protection measure to energy consumption	---	+	+	++	-	-
Overall assessment	-/+	+++	+++++	+++	+++	+++++

# MAJOR CONCLUSIONS AND RECOMMENDATIONS (I)

- Due to the high level of energy poverty in the Republic of Moldova, **the system that protects vulnerable households will need to cover a significant part of the population** (*60% of HHs for electricity and natural gas; 70% of HHs for heating*)
  - The easiest social protection measure to implement is a **Voucher system** that will compensate poor households for the increase in the VAT rate
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# MAJOR CONCLUSIONS AND RECOMMENDATIONS (II)

- Under the scenario of a 20% VAT increase, if a voucher system is introduced for gas, electricity and heat, the **following estimates are presented in the Study:**
  - **The additional revenue that can be collected by the public budget - about USD 77 million**
  - **The total cost for the public budget if a voucher system is introduced – about USD 47 million**
  - **The net budget surplus - about USD 30 million**
- The VAT increase on heat energy will bring little revenue to the public budget. Thus, **reforming heating energy subsidies at this stage is not recommended!**

# NEXT STEPS

- **Formulation of legislative proposals for the draft 2020 Fiscal policy, based on study recommendations**
  - **Preparation of a policy package on energy affordability and energy poverty, including:**
    - clear definition of low-income households that will be targeted and that can get support as part of the reform
    - development of amendments to the legal framework on Energy, Energy efficiency, 3<sup>rd</sup> Energy package
    - methodologies on energy tariffs
  - **Conducting regular/annual review of major energy subsidy schemes to support policy analysis**
  - **Raising the status of energy-related taxes and subsidies by including them in the official national statistics (national accounts) using the SEEA framework.**
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**THANK YOU FOR YOUR ATTENTION!**

