Social aspects of tariff setting and energy sector reforms

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Factors affecting energy prices

- Growing consumption of final energy, especially in large developing countries
- Climate changes and related policy actions
- More expensive production of primary energy
- Tension due to inadequacy of primary energy resources and final energy consumption
- Others
Average electricity prices for residential consumers

<table>
<thead>
<tr>
<th>Country</th>
<th>€c/kWh</th>
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<tbody>
<tr>
<td>Hungary</td>
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<tr>
<td>Poland</td>
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<td>Romania</td>
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<td>Lithuania</td>
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<td>Kyrgyz</td>
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</table>
Social aspects in electricity sector of transition countries

- Average electricity prices growing faster than economical power of population
- Development of electricity networks increases accessibility but final electricity price grows as well
- Electricity price for domestic users in some countries (artificially) low – to be increased in the future

ELECTRICITY CONSUMPTION COULD BE ADJUSTED TO ECONOMICAL POWER OF CONSUMER
Social actions in the electricity sector

- Mandatory or discounted connection to the electricity network of domestic users
- Cross subsidies between industrial and domestic consumers
- “Social” tariff for minimal monthly amount of electricity for each domestic consumer
- Formation of electricity market with aim to reduce electricity production prices
- Offer of varies tariff systems and payment plans in order to increase accessibility to electricity
Natural gas prices to the residential consumers

$/GJ

-3


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ENERGY COOPERATION BETWEEN THE EU, THE LITTOREAL STATES OF THE BLACK & CASPIAN SEAS AND THEIR NEIGHBOURING COUNTRIES
Residential and non-residential gas prices

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$/GJ

Azerbaijan  Russia  Ukraine  Armenia  Georgia  Moldova

residential  non-residential
Social aspects in the natural gas sector

- Natural gas prices growing rapidly in Europe during the last few years
- Gas prices in the internal market of some countries are still lower – to be increased (Russia...)
- Regulation of gas consumption or conversion to cheaper fuels is possible when individual house is heated

**VERY LIMITED POSSIBILITY TO REGULATE GAS CONSUMPTION WHEN MULTI-STORY BUILDING IS HEATED**
Social actions in natural gas sector

- Subsidized gas prices for domestic users
- Tax discounts (VAT...) is applied
- Discounted connection fee to gas network for domestic users
- Cross subsidized transmission fee for domestic users
- Individual social assistance schemes for vulnerable users

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Social aspects in the district heating sector of transition countries

- Large part of population (often more than 50%) is heated using district heating schemes
- Cost of thermal energy production have been increased dramatically during the last few years
- Thermal energy consumption is very high in old buildings but renovation process is going very slowly
- A lot of speculations and misunderstanding about district heating – some consumers are disappointed with this method of heating
Average district heat price in Lithuania

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ENERGY COOPERATION BETWEEN THE EU, THE LITTORAL STATES OF THE BLACK & CASPIAN SEAS AND THEIR NEIGHBOURING COUNTRIES
Monthly heating cost of 60 m² apartment in Lithuania

![Graph showing monthly heating costs for different types of buildings in Lithuania.]

- I. New high quality buildings
- II. New regular buildings
- III. Typical old buildings
- IV. Poor quality old buildings

Heating costs, £

- January
- February
- March
- April
- October
- November
- December

Energy Cooperation between the EU, the littoral states of the Black & Caspian seas and their neighbouring countries
Social aspects in the district heating sector of transition countries

- Decisions related to collective heating of multi-story buildings are very problematic
- Administration of multi-story buildings is poor in many countries
- It is very painful to move to smaller apartment due to the economical reasons
- **CONSUMERS HAVE NO POSSIBILITY TO REGULATE USAGE OF HEAT IN MOST CASES SO PAYMENTS FOR HEATING DO NOT CORRESPOND THEIR LIVING STANDARD OFTEN - SOCIAL TENSION**
Situation of the district heating sector in the “cold” transition countries

- District heating sector is important and perspective part of energy system
- Interests related to district heating sector
  - Federal (energy strategy)
  - Municipal (local energy infrastructure, buildings)
  - Consumers (accessibility to heating)

**STATE HAS TO FORM POLICY SECURING ECONOMICAL VIABILITY AND ACCESSIBILITY OF DISTRICT HEATING**
Role of district heating in the national energy policy

- Expansion of cogeneration for primary energy savings (state policy)
- Wider usage of local and renewable fuels, waste heat etc.
- Environmental issues (carbon emissions, new EU Directive)
- Introduction of new heating and cooling technologies
- Energy efficiency targets
- Fuel type diversification - energy independence
- Utilization of city waste, etc.
Social actions in the district heating sector of transition countries

- Setting of heat prices and tariffs based on real but effective cost (confident to consumers)
- Separation of collective and individual heating cost
- Ensuring district heat price level competitive with alternative heating methods
- Payments for heating must ensure collection of money
- Individual social support scheme for vulnerable consumers
Setting of heat prices and tariffs

- Real and effective cost of heat supply must be considered in any case.
- If state or municipal subsidies are applied it is important to increase efficiency of heat supply and to remove gradually general subsidies.
- Final task - heat prices covering cost and pricing system stimulating technical and economical progress.
Separation of collective and individual heating cost

- General heating prices and tariffs should cover cost related to all district heating system (outside buildings)
- Individual components of heat prices or tariffs should be related only with heated building
- This is key factor for increase of energy efficiency and to implement individual social support scheme
District heat price level competitive with alternative heating methods

- District heating prices have to be competitive with other regulated energy sources (mainly gas and electricity) in order to avoid significant disconnections and destroy of DH systems.

- Competitiveness is ensured by regulation means (introduction of individual regulation, planning, “zoning of territories”, pricing policy, etc.).

- General subsidies and donations which make lower price level of district heating.
Payments for district heating and collection of money in transition countries

- Single part heat tariff applied usually (promote savings?)
- Two part tariff is not popular but would improve financial flows
- Fixed monthly fee for heating and correction of paid sum after the heating season (China)
- Varies promotions to improve payments
- Stop of hot water supply or apartment sold due to unpaid debts

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Energy cooperation between the EU, the littoral states of the Black & Caspian seas and their neighbouring countries
Payments for district heating of typical pensioner in Lithuania (60 m²)

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Energy cooperation between the EU, the littoral states of the Black & Caspian Seas and their neighbouring countries
Individual social support scheme for vulnerable consumers

- Determination of “vulnerable consumer” by national legislation
- Individual social support mechanism preferable against general subsidies, tax compensation or similar means
- Administrative system for controlling of real personal income (register of property, declarations of income and similar)
Who is vulnerable customer?

The Definition used by ERGEG to describe a vulnerable customer relies on national provisions, stating that a “Vulnerable customer”[is] a customer defined by national laws as a person to be protected in his relations with energy suppliers.” (It provides the following non exhaustive list of examples: “disabled, chronically sick, pensioners, living on low incomes and living in remote areas”).

(ERGEG: European Regulators’ Group for Electricity and Gas)ERGEG
Example of social support scheme (Lithuania)

- Compensation of expenses for heating (*district or local*) exceeding 20% of total family monthly income
- Compensation of expenses for hot water exceeding 5% of total family monthly income
- Compensation is applied to limited area of heated space and to normative volume of hot water
- Supported consumers must pay their part of the heat bill in time
Example of social support scheme (Lithuania)

- Required amount of compensation for low income consumers are calculated every 3 months
- Corresponding sum is allocated from the state budget to municipal budgets as a specific donation
- All compensated sums are transferred to communal utilities
Procedure of social assistance in Lithuania

- An application for financial assistance with proving documents are submitted to municipality
- Estimation of poverty level (property and total income)
- Calculation of compensatory expenses for communal services
- Decision and allocation of money
Conclusions

- District heating is most sensible energy sector from social point of view in “cold” transition countries
- General federal or municipal support mechanisms should be applied as much as it makes district heating competitive
- Individual effective social support schemes are most reasonable in accessibility to energy systems
Thank you for attention

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