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RIA -New Energy Law Effect on Vulnerable Consumers

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Objectives of the RIA

Initial objectives of RIA - Assess the effect of NEL on vulnerable customers and suggest the mitigation actions for:

1. Potential price increases affect negatively the welfare and ability of socially vulnerable customers to satisfy their basic needs

2. Open market can put customers with disabilities to competitive disadvantage (realistic after 3-4 years).

Effect of NEL is positive compared to the BAU (*USAID RIA on electricity and gas price effects of NEL)*. Objectives reformulated to:

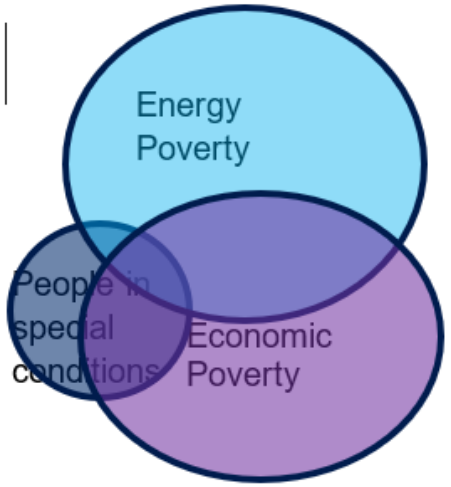
1. Examine the effects of tariff change on vulnerable consumers as per BAU and NEL scenario and **suggest the corrective actions to maintain the same level of welfare**

2. Suggest the policy actions **to protect the customers with special needs and disabilities** in competitive retail energy markets

Energy poverty and vulnerable consumers

- WEG study on Energy Poverty (1998)
- EnC secretariat recommendations (2013)
- Practice of many countries

suggest:



Vulnerable customer is a **socially vulnerable** customer of electricity or gas network using the energy for household needs.

Definition of Vulnerable customers:

1. Socially vulnerable customers on the SSA database with the score below 100000 – meaning below the subsistence level (option above 100000 – rejected)

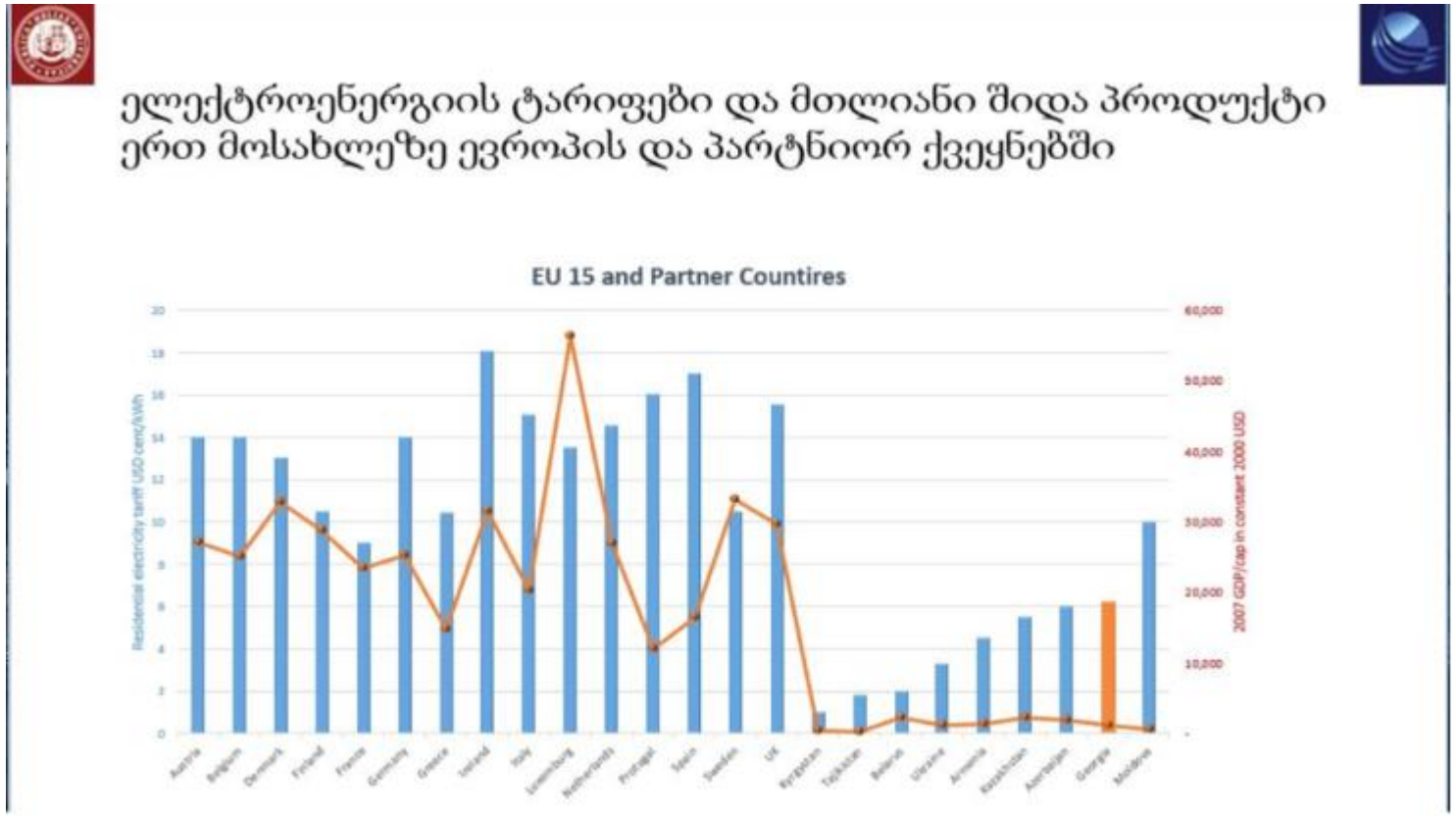
2. Customers in any form of disability or special condition putting them at disadvantage in a competitive retail energy market

Exceptions: *1. Customers under special government programs including mountainous areas, vicinity of conflict zones, refugees etc. - sphere of* ***state policies other than energy policy.***

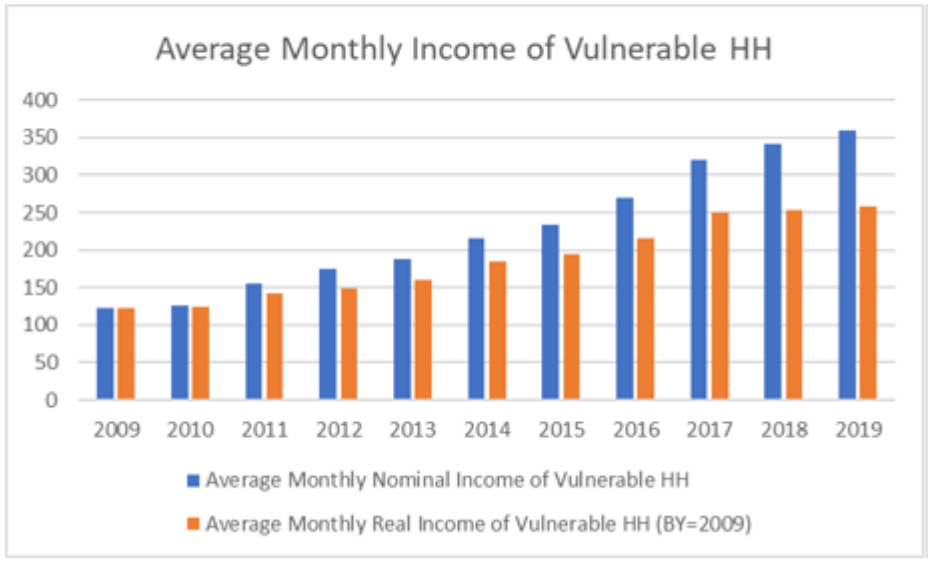
2. *General customer rights regulated by GNERC*

Rationale for Energy Assistance – Energy Affordability

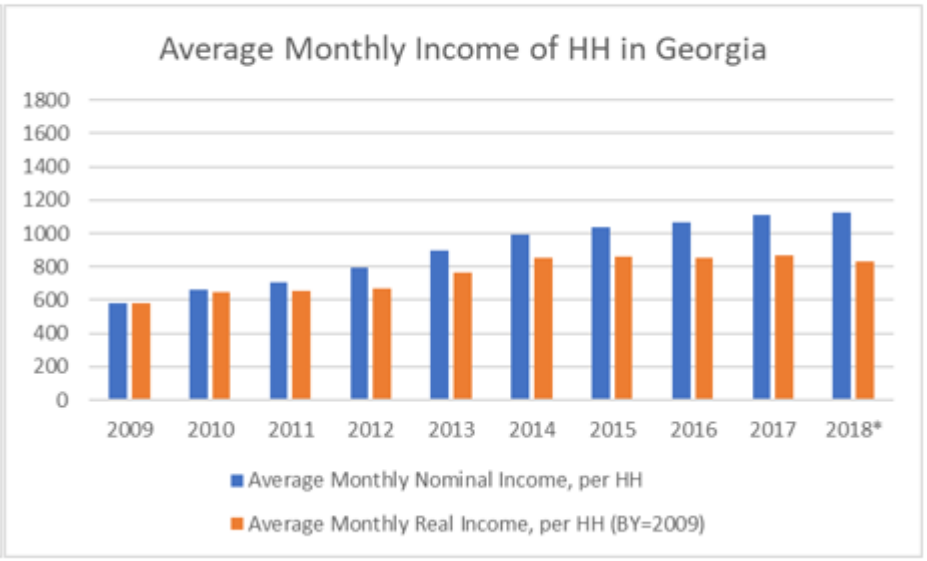
1. Tariff levels compared to income
2. Nominal versus real terms
3. Long term versus short term
4. Support in competitive market to disabled



Graph 5a-Average Monthly Income of Vulnerable HH

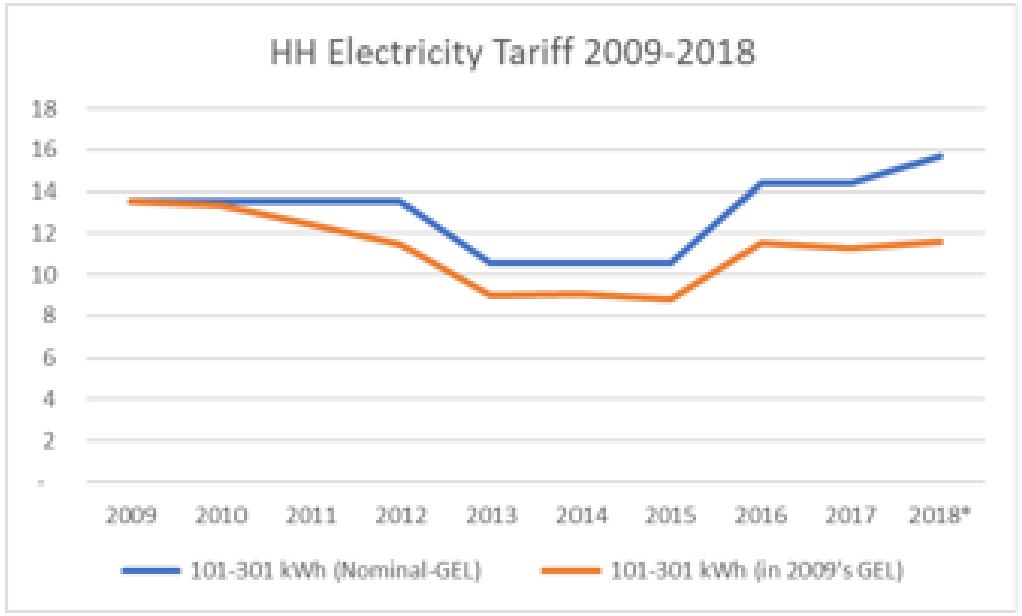


Graph 5b-Average Monthly Income of HH

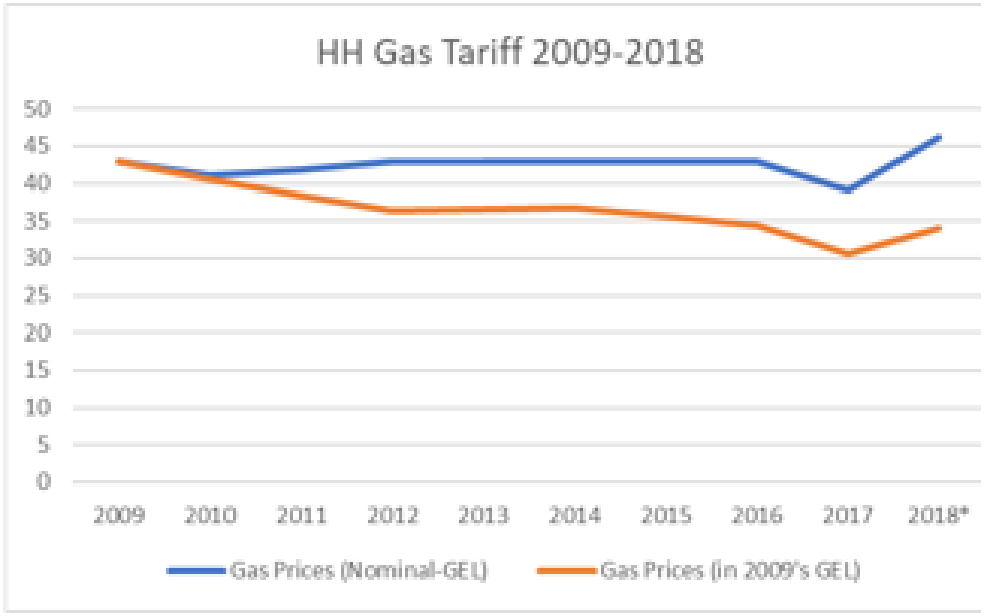


Evolution of Energy Tariffs

Graph 6 Evolution of energy prices over 2009-2019

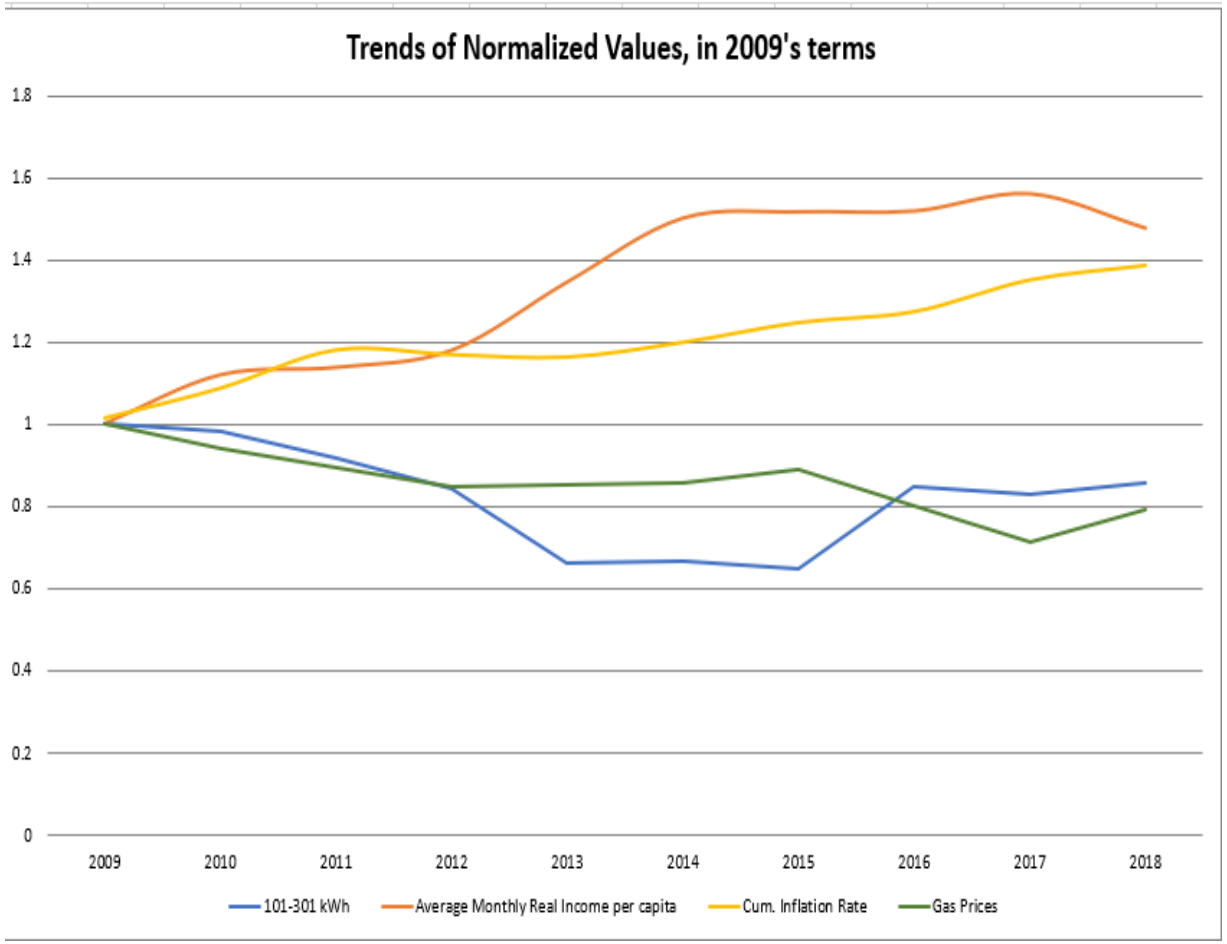


6a. Electricity tariffs

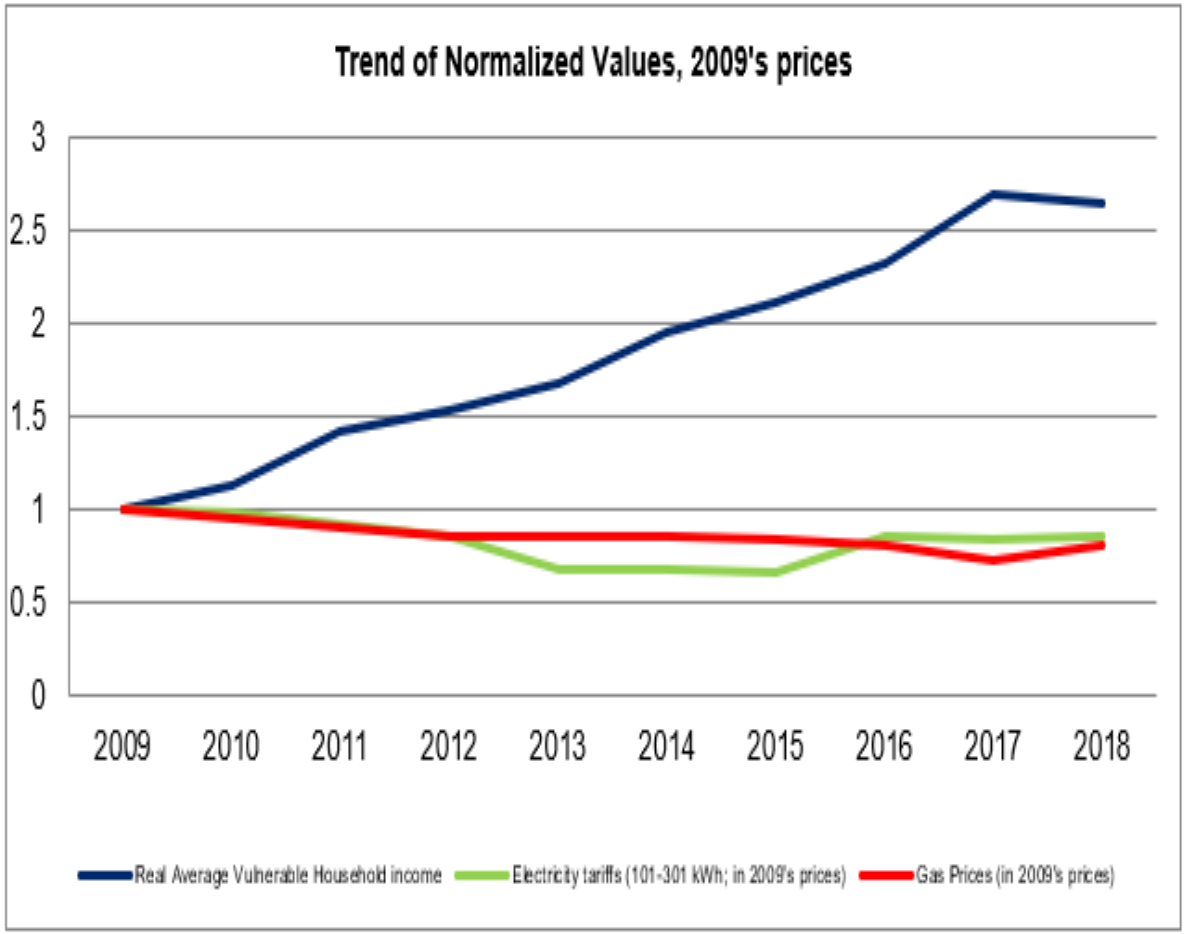


6b. Gas tariffs

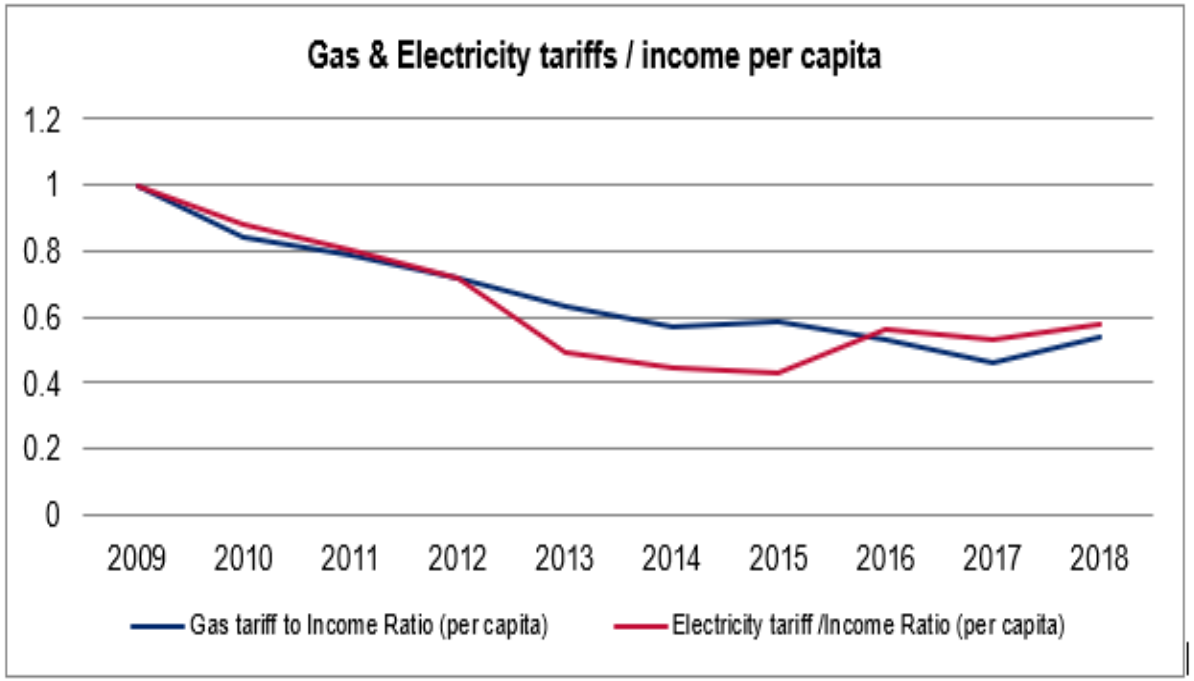
Income per capita vs tariff changes in real terms

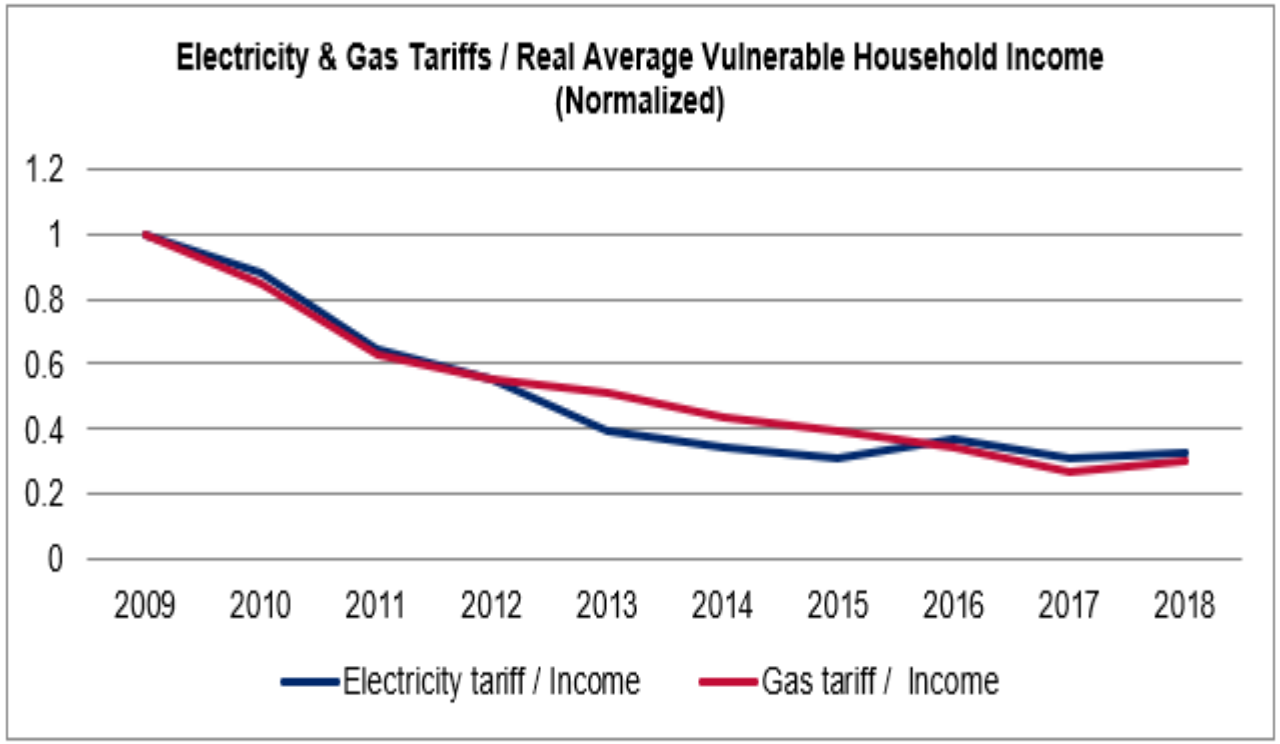


Graph 7 **Ratio of energy tariffs to average vulnerable person income over last decade (TBA)**

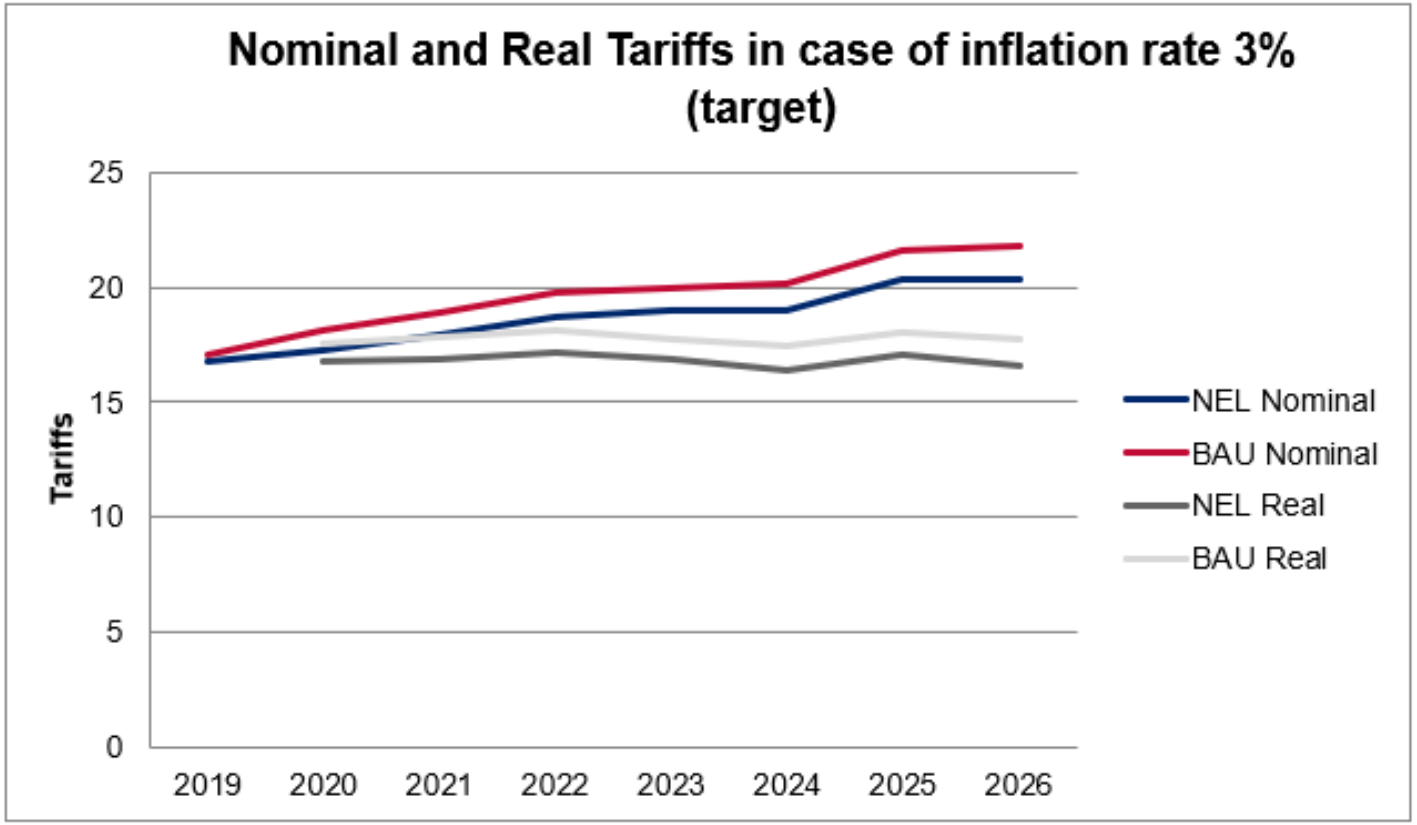


Affordability of energy growing





Graph 8.RIA EI projections of BAI and NEL electricity tariffs vs official projection of GEL inflation



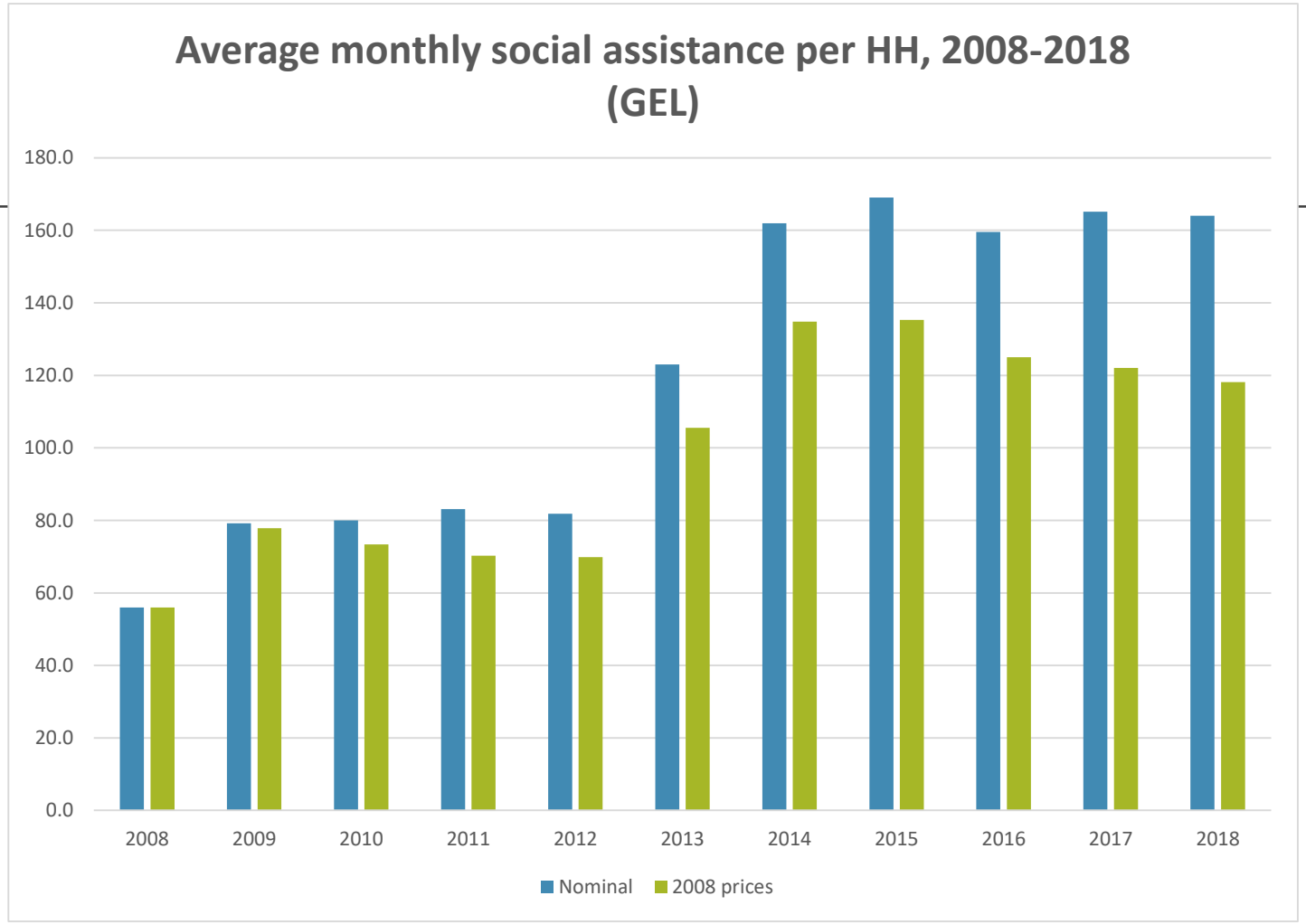
Social Subsistence System

Household welfare index is calculated based on the following formula:

$$I = \frac{C}{N}$$

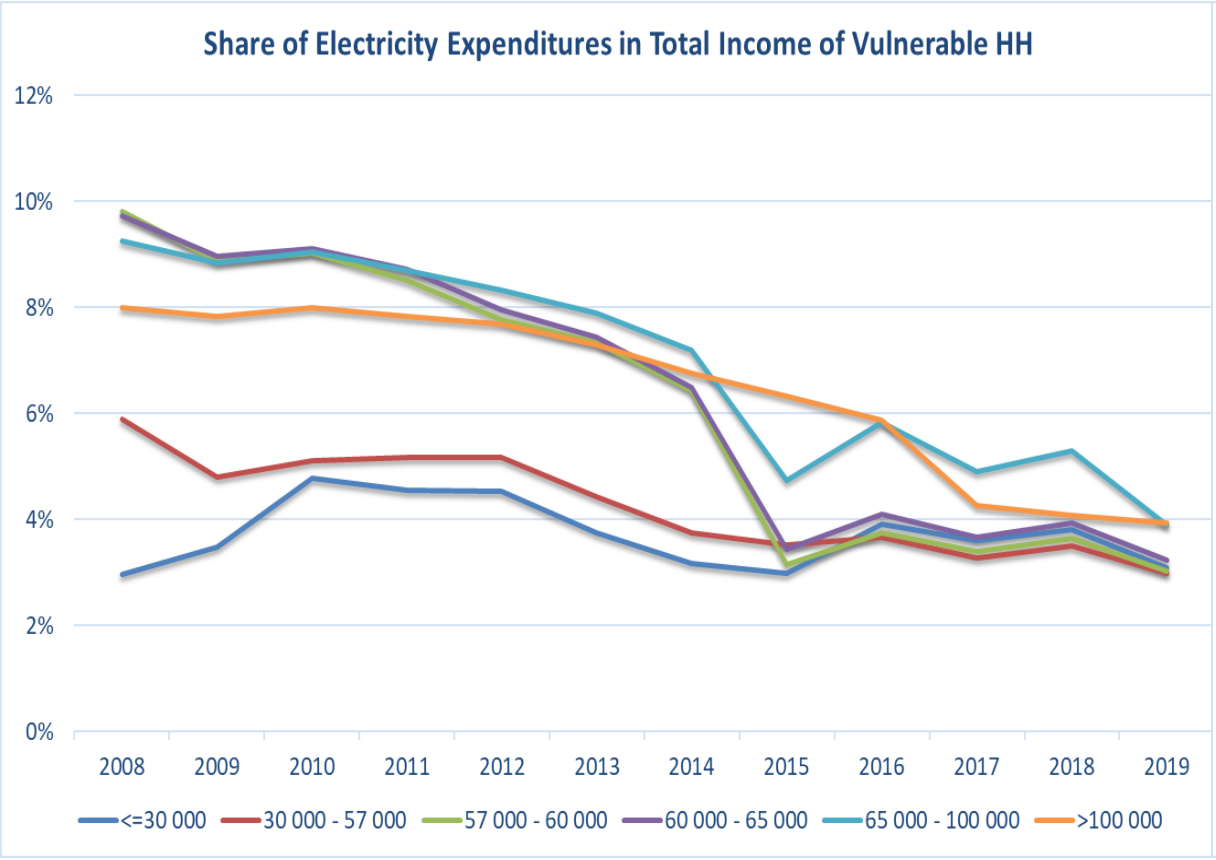
Where:C - Is a HouseholdConsumer Index of (family expenditures), N - Index of household needs. The resulting number is multiplied by thousand to arrive at the score in SSA DB. Therefore –**customers with the score below 100000 are unable to satisfy their basic needs. These customers are suggested as prime candidates for compensation in case of tariff increase**

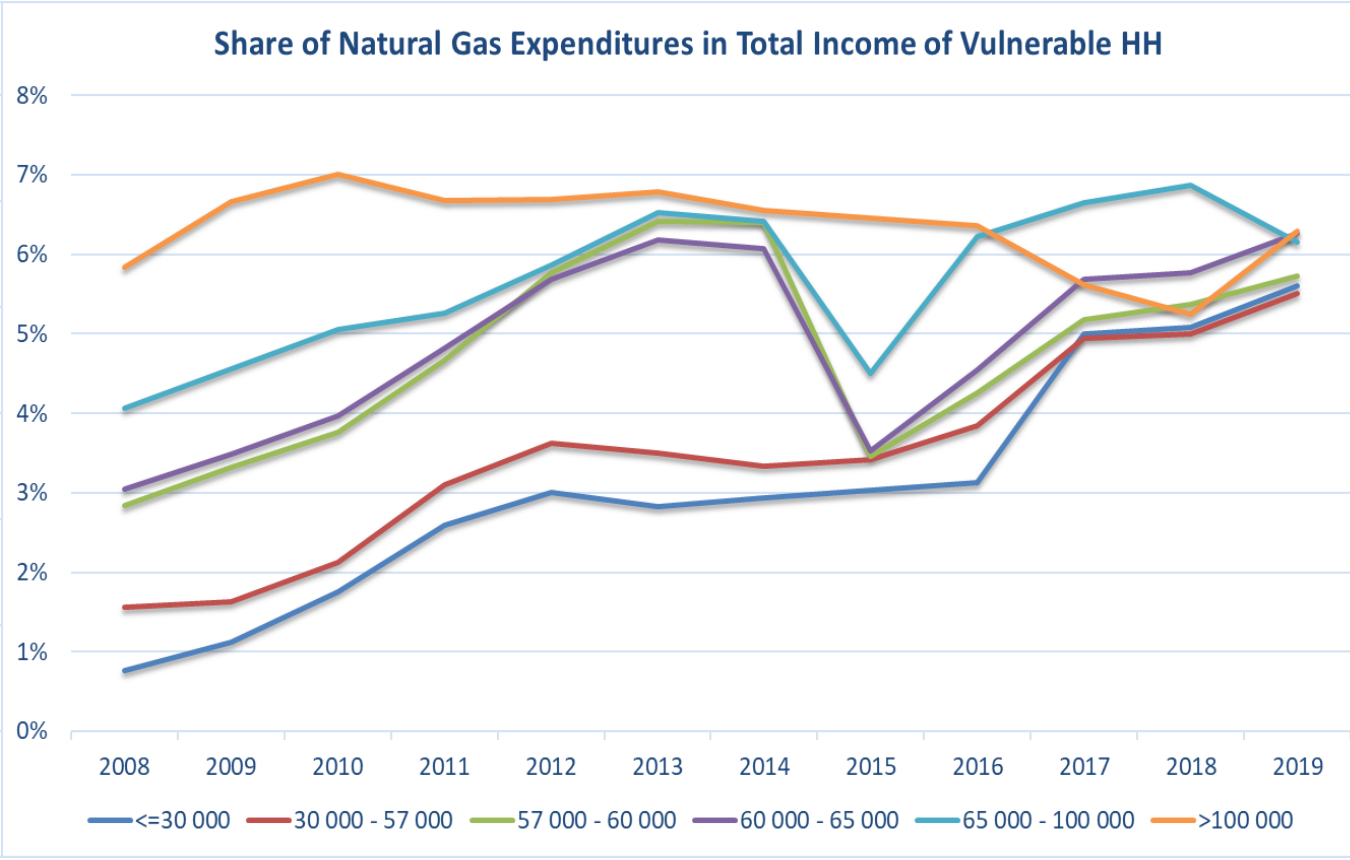
As of July 2019, 315,970 families (949,263 persons) are registered in The SSA Database. 196,728 families (602,977 persons) are under the rating score 100,001. 45000 families with scores up to 2000000 live in Tbilisi



Assistance for VC has increased 50% since 2009 and doubled since 2008 in real terms (Source SSA)

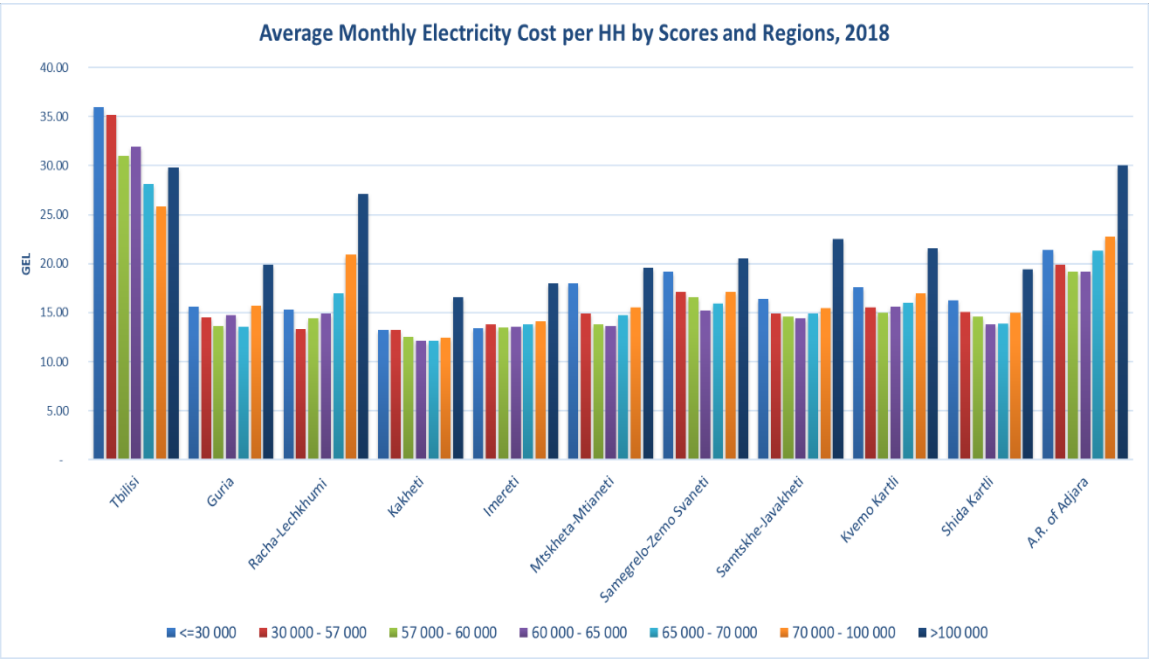
Total of Electricity and Gas Bills of VC - 10% of their budget[1]

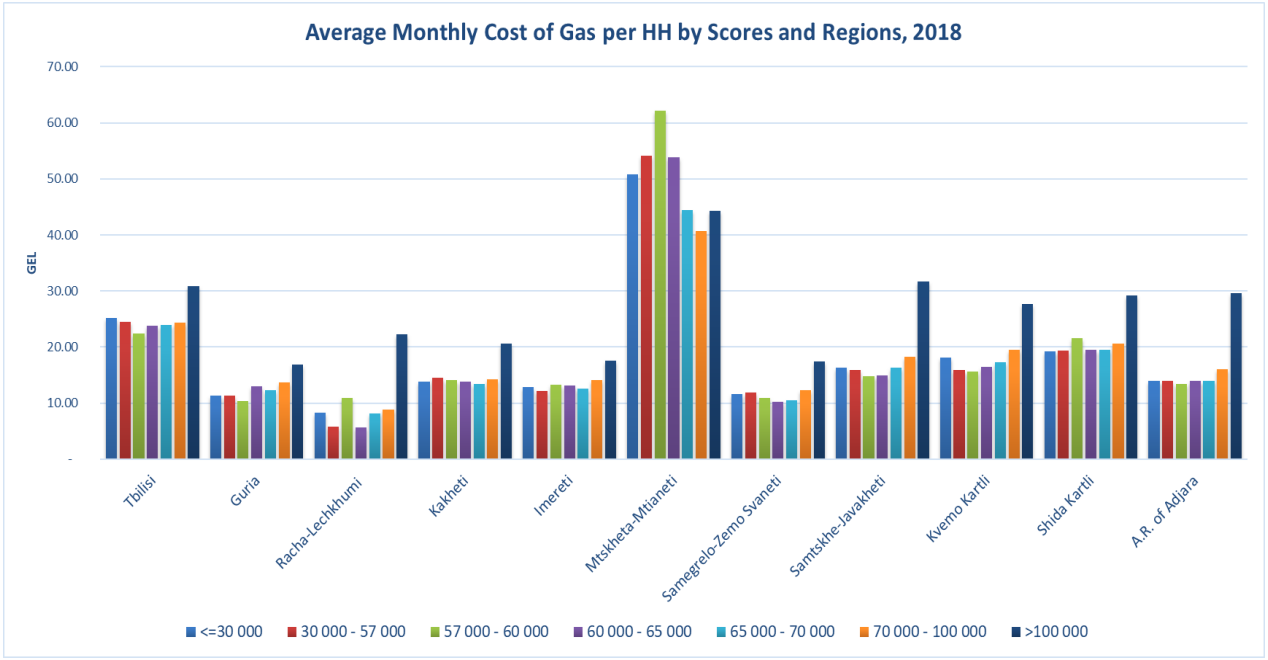




Comment: *Does not include electricity subsidy*

Effects of subsidies





Assistance design needs some improvement

Findings of Data Analysis

Average electricity bill for vulnerable customers on SSA DB is about 4% of declared income+ state live assistance ex. Electricity subsidy

Average electricity bill for vulnerable customers on SSA DB is about 6% of declared income+ state live assistance

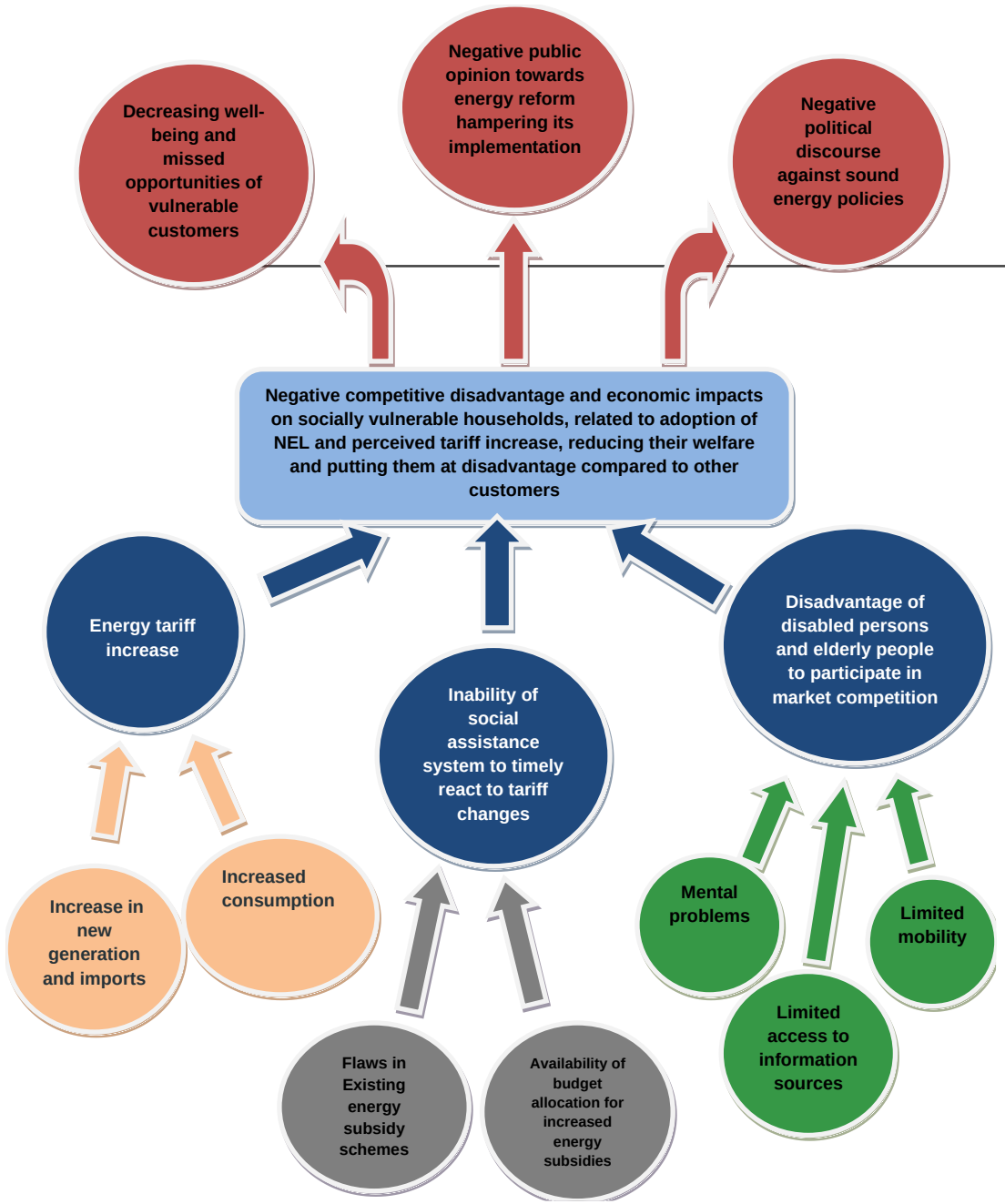
Combined electricity and gas bill is about 10% of budget before electricity/communal assistance

Approach to subsidy

Individual history vs average household consumption

Electricity and gas norms not adequate measure for assistance

The generic problem tree uniting the ~~problems of vulnerable~~ customers



Alternatives of financial assistance

Objective – allow consumption at least of the same amount of electricity or gas as before the tariff change

1. Tariff – as in case of socially vulnerable customers in regions being compensated per kWh of electricity used

2. Electricity or gas vouchers – providing for free the amount of energy proportional to increase in energy cost for average household consumption – voucher applicable only for energy cost

3. Monetary assistance equal to additional cost of energy due to tariff increase

4. Tariff subsidy to all households is considered as an additional option

Alternatives for Pecuniary Assistance

Figure 3: Re-optimization Outcome

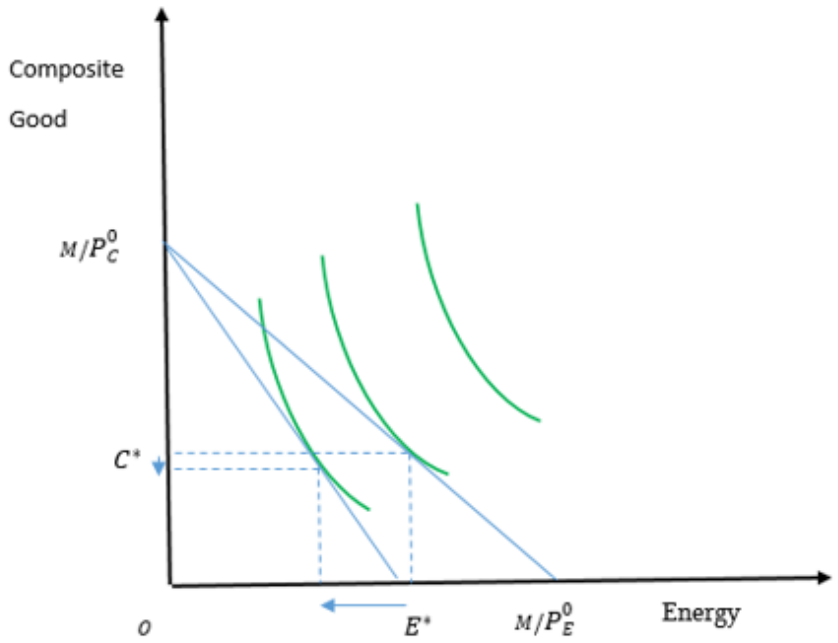


Figure 4: Optimal Choice with Vouchers

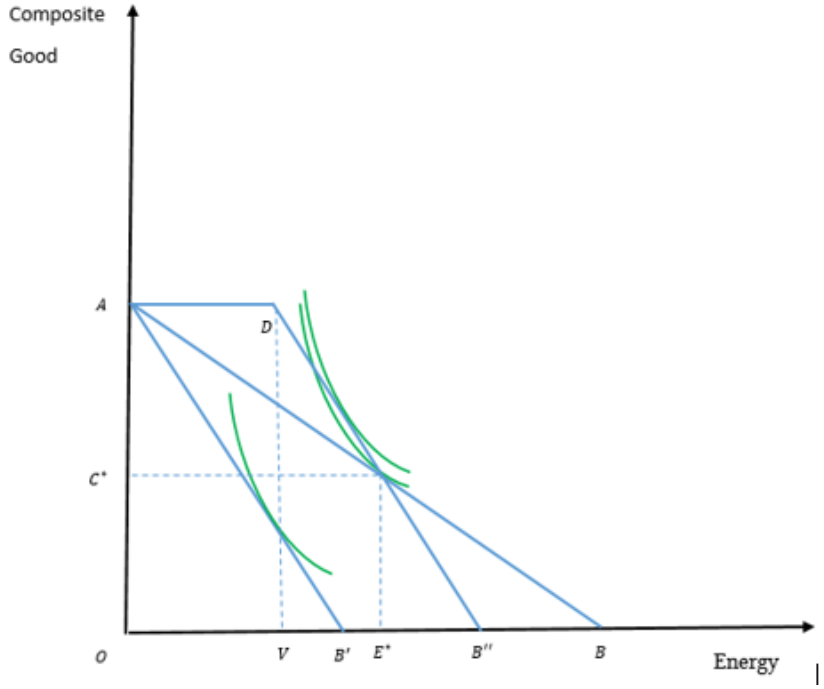
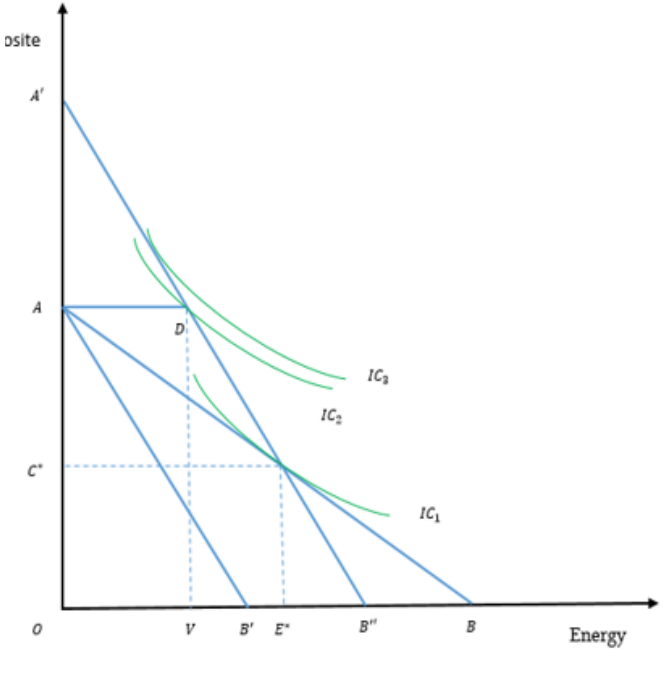


Figure 6: Optimal Choice under Money Transfer – Case 2

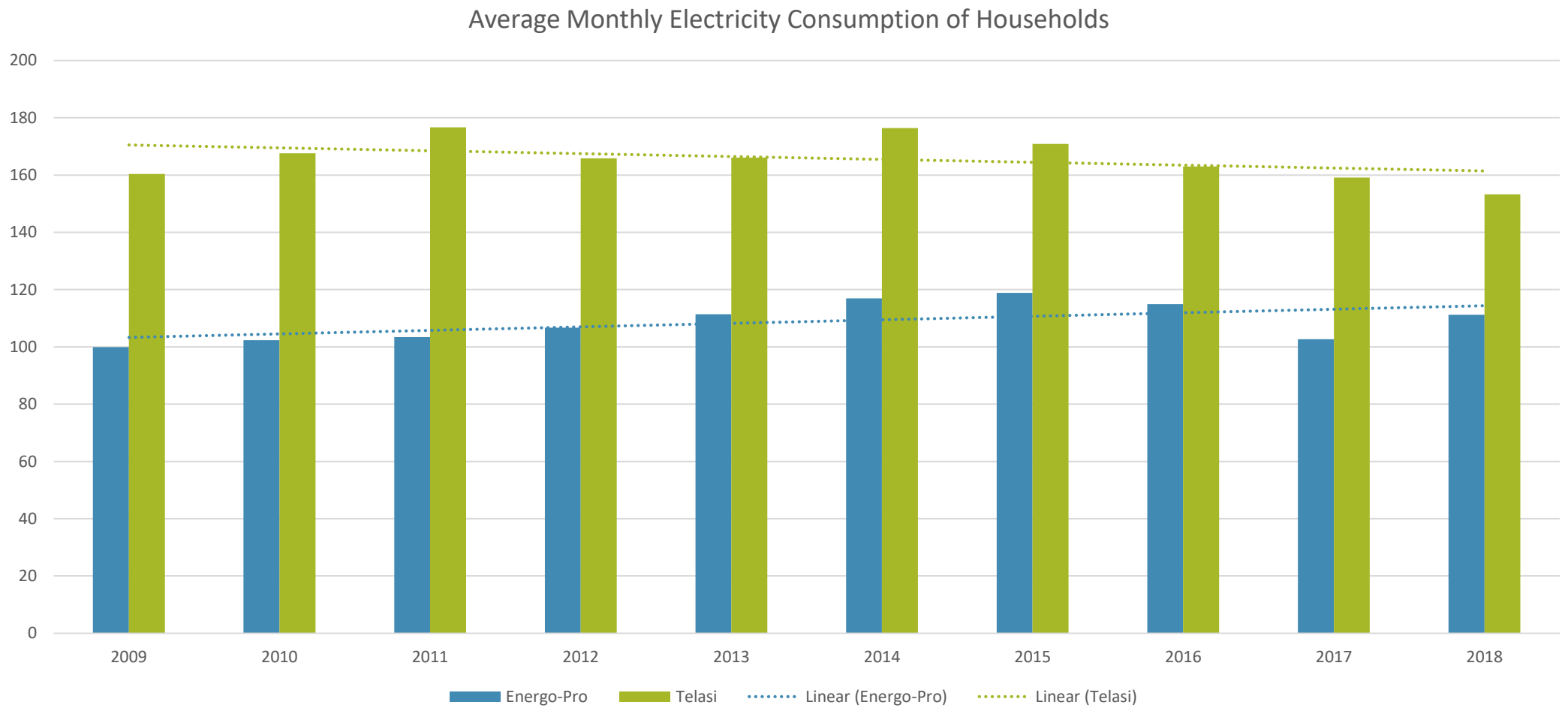


Conclusions on financial assistance schemes

- Tariff subsidy is the most inefficient scheme causing market distortion, excessive use of energy, causing social inequivalency – contradicts with SDGs.

- Monetary compensation is the best way of assistance allowing the customer to consume the same amount of energy, but also to redistribute the costs to achieve higher level of utility. This however should be applied with caution to customers having difficulty in controlling their budget.

Average household consumption pattern



Observations from Data Analysis

The topic of vulnerable customers has two aspects - long term and short term:
- In long term the **assistance should be considered with the account of inflation, dynamics of income and level of social assistance to socially vulnerable consumer**
- In short term the problem is caused by the loss of welfare compared to the period immediately preceding the tariff change

Increase in levels of income and in compensation levels is more gradual and goes independent to tariff changes. The main problem with tariff changes is that they happen at once and have immediate negative impact on customers, irrespective to the fact that this abrupt change may be happening on the background of graduall increase in welfare or social assistance

Financial assistance packages are not always proportionate and may cause excessive spending of energy as well as inequality across the class of VCs

The real value of energy tariffs has decreased in Georgia over the last decade by 20-25%. We cannot name the objective economic rationale for such reduction. Energy sector seems to be used for implicitly subsidizing the population.

Alternatives of Financial Assistance

Financial Subsidy Form	Tariff Subsidization all consumers	VC Tariff Subsidization	Energy Vouchers	Monetary transfer
Description	Keeping the tariff level for all households	Keeping the tariff level for VCs	Providing the equivalent of increase in average household	Adding to the social assistance equivalent amount of money
Effectiveness	Compensates for price increase All households. Does not allow alternative use and maximization of benefit	Compensates for price increase VCs. Does not allow alternative use and maximization of benefit	Provides the equivalent value within the capped amount	Covers the previous consumption and allows the flexibility in spending to maximize the welfare
Efficiency	Inefficient - Requires high spending of public resource	Less efficient prevents energy saving	Limited spending of public resource	Maximizes social welfare for the given cost. Encourages energy saving
Practicality and ease of implementation	Requires intra-government coordination and budget redistribution. High budget	Existing scheme	Can be conducted easily through Discos as before	Limited to SSA. Additional amount to be added to regular assistance
Compliance with EU Market principles	Removes the market price signal causes market distortion	Distorts the market price signal for VCs	Keeps the price signal, minimal market distortion	Keeps the market signal, no market distortion
Political and Social Acceptability	High due to high level of populism in policy discourse	Less acceptable due to high level of populism in policy discourse and tariff increase for general HHs	High acceptability	Should be welcomed by VCs more than other forms of compensation. Adequate explanation needed
Other advantages	Established practice	Established practice, Clear attribution to energy	More disposable income to VCs Existing practice in Tbilisi Clear attribution to energy	More disposable income to VCs
Other disadvantages	complicates the DSO control of consumer on large scale	complicates the DSO control of consumer	TBD	Complicated for consumers having difficulty of managing own budget,

Main findings

- Enegy subsidies are being used by government and municipal programs as the means of financial support of special groups of customers as part of policies other than energy policy. Energy subsidies are used as easy and convenient way of administering the assistance
- Using energy as the form of assistance is causes some excessive use of energy and public money, causes inequality and sometimes is not fare (e.g. by number of dwellers)

Alternatives of non-financial assistance

	Measure		Main features/comments
	Protection from disconnection		
1	Prohibit disconnection in winter periods		those who are disconnected due to lack of payment must be reconnected
2	warn the vulnerable customers prior to disconnection		Applies to all consumers but can be iterated or made more targeted to vulnerable people
3	Consumers on health safety equipment (or related health conditions) cannot be disconnected		
4	Elderly people living alone are protected from disconnection		May be still disconnected in the next rading cycle
5	Offering Different Payment Options		for example, payment by regular instalments, settlement of the bill in cash in the service location etc.
6	Proactively engage with the customers to find the best way to repay the debt.		A failed direct debit or an unpaid energy bill could be a sign that a customer is struggling financially. Supplier should monitor these signs and proactively engage
	Energy Efficiency Measures		
1	Provision of energy efficiency equipment (bulbs, appliances, etc.)		Can be conducted on a wide scale
2	Energy Efficiency of Buildings		Low penetration- does not cover significant number of customers – more relevant to energy poverty
3	Energy efficiency information (Information about consumption and etc).		suppliers must keep and maintain information about energy efficiency and be able to direct customers to sources where they may obtain further information or practical guidance
1	Information Campaigns		
2	Raise awareness by different means (information campaigns)		Information in the press/media; flyers; websites; contact with communities and trade groups; targeted events. Leaflets; factsheets; guidebooks; case-specific guidance. This requires some interaction with the client via telephone; interview; visit; advice stand; written reports with specific recommendation
3	Offer Information on price comparison and tariff switching		more simplified bills with information on cheaper tariffs for vulnerable consumers, energy advice centers and etc.
4	provide energy advice to vulnerable consumers		For example voluntary groups and NGOs who are able to provide energy advice to vulnerable consumers.
5	Special service for blind persons with telephone information on bills and a possibility of a personal visit		

	Non-Financial Support Measures
	Protection from disconnection
1	Prohibit disconnection in winter periods
2	Warn the vulnerable customers prior to disconnection
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Comparing Alternatives

Financial Subsidy Form	Household Tariff Subsidization	VC Tariff Subsidization	Energy Vouchers	Monetary transfer
Description	Keeping the tariff level for all households	Keeping the tariff level for VCs	Providing the equivalent of increase in average household	Adding to the social Assistance equivalent amount of money
Effectiveness	+	+	++	+++
Efficiency	---	+	++	+++
Ease of administration	+++	+	+	+
Compliance with Market principles	---	--	++	+++
SDG goal-7 Affordable and Clean Energy	+	++	+++	++
SDG goal-1 No Poverty	---	+	++	++
Total scores	-4	+4	+12	+14

Recommendations

1. Define vulnerable customer as socially vulnerable customer registered in the SSA data base and with the score below 100000 and as household customer in a need of care or some form of disability putting him/her at disadvantage in competitive market

2. Country-wide universal support scheme for Vulnerable Customers within the SSA system. Municipal programs could override or supplement the country-wide assistance – transparent mechanism of budget allocation and coordination needs to be established.

3. Monetary compensation of tariff changes provided with the existing SSA mechanism is the most efficient option. Second best option is the voucher scheme. Customers who cannot control their budget might be switched to voucher scheme.

4. Assistance to vulnerable customers with special needs shall be conducted in line with best international practices energy efficiency measures should be applied in line with policy on energy poverty where vulnerable customers may be chosen as primary

RECOMMENDATIONS

Coordinate the tariff raise with increase in assistance amounts and accompany with effective communication campaign

Communication campaign on energy spendings, tariffs and energy efficiency options – highly important – lack of awareness and communication causes damage and overspending.

Conduct an in-depth objective **survey** of energy consumption of Vulnerable Customers verify the findings of/ CRRC study

Introduce **Energy Affordability as a tool for discussing the energy policies**

Recommendations

- Develop the detailed mechanisms for prohibition of disconnection of people in critical conditions include responsibilities for informing the customers of their rights, and mechanisms of payment and cost recovery after critical condition is over.
- SSA and MoESD -after adoption of the EE law consider creation of a mechanism for simple energy audit, energy advice and dwelling weatherization for vulnerable customers
- Consider the issue of gradual approach to tariff adjustments with inflation
- Start discussion with distribution companies on allowing partial payments for vulnerable customers in winter months so that the full cost gets redistributed over the year as an alternative to seasonal vouchers.

Thank You!

Energy Poverty VS Vulnerable Customer

	Vulnerable Customer	Energy Poverty
Individual vs class or group	Individual Customer of electricity and/or gas network or a person in specific individual conditions	A group of customers (consumers) or a specific case considered as a representation of consumer class
Electricity and gas customers (network energy) vs general energy conditions	An electricity and/or natural gas customer in relation to Electricity and Gas Directives	Refers to energy conditions in a more general sense in relation to general energy policy, including regional etc.
Economic vs. technical	Financial/Economic affordability	technical availability of clean energy or excessive expense due to technical conditions (e.g. poor dwelling)
Examples	Poor families at social welfare support list Handicapped people unable to e.g. switch the suppliers Temporary health conditions requiring special care	Households in non-electrified areas Households in non-gasified areas using non-clean fuel in health-damaging conditions Households with excessive energy expenses in typical inadequate dwellings,
Types of policies and measures	Social support schemes targeted to individuals - Financial support - Nonfinancial support	State energy policies and programs targeted to elimination of conditions leading to energy poverty (in an area or a group of population). EE policies, RE alternatives, network extension and improvement, etc.
Examples of measures	Electricity or gas vouchers Special tariffs (poor example) Targeted information measures Individual EE measure	Programs for gasification and electrification Cheap loans for building insulation and other EE programs Oversight of network operations -improvement of supply quality and service conditions.