



REPORT ON NATIONAL SITUATION IN THE FIELD OF FUEL POVERTY

BULGARIA

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1. Introduction

The Republic of Bulgaria is a country in south-eastern Europe, located in the eastern Balkan Peninsula with population of 7.3 million people. It has a territory of 110,994 square kilometres, making it Europe's 14th-largest country. The population's distribution is predominantly urban and mainly concentrated in the administrative centres of the country's 28 provinces. The provinces subdivide into 264 municipalities that are run by mayors elected to four-year terms and by directly elected municipal councils. Bulgaria is a highly centralised state, where the national Council of Ministers directly appoints regional governors and all provinces and municipalities are heavily dependent on it for funding.

1.1 Aim of the analysis

The aim of the following document is to collect national data on energy poverty, unemployment, difficulties to pay bills, state of building fund and to analyse in order to provide insight into the scope and depth of the energy poverty problem in Bulgaria.

1.2 Overview of existing energy poverty definitions

A household is said to be in fuel poverty when its members cannot afford to keep adequately warm at reasonable cost, given their income. The term is mainly used in the UK, Ireland and New Zealand, although discussions on fuel poverty are increasing across Europe and the concept also applies everywhere in the world where poverty may be present.

In the UK fuel poverty is defined by the Warm Homes and Energy Conservation Act as: "a person is to be regarded as living "in fuel poverty" if he is a member of a household living on a lower income in a home which cannot be kept warm at reasonable cost. Statistically this used to be defined when a household would need to spend more than 10% of its income to maintain an adequate heating

The term energy poverty is not defined in Bulgarian legislation.

2. Methodology

For the development of the research the following materials and statistical information have been analysed:

- *Energy poverty policies in the EU: A critical perspective* - Stefan Bouzarovski, Saska

Petrova, Robert Sarlamanov;

- *Energy poverty in the European Union: landscapes of vulnerability – by Stefan Bouzarovski;*
- *Statistical information from Eurostat, National Statistics Institute, World bank, the Agency for Social Assistance, ODYSSEE-MURE project;*
- *Bulgarian energy strategy.*

3. Data and indicators of energy poverty in Bulgaria

3.1 Existing definition

The term energy poverty is not defined in Bulgarian legislation, as a result of which matters linked to the issue are part of broader social policies. Surveys taken in 2011 among key decision-makers from the Ministry for Labour and Social Policy in Bulgaria shows they were not even aware of the existence of direct EU-level policies to target energy poverty. Currently, there are only principles for providing social support for heating purposes, concentrated on assisting people whose average monthly income for the past six months is lower than the differentiated minimum income. The energy poverty policies in Bulgaria are fundamentally based on income support-orientated and fail to address the causal factors of the condition. They are only focusing on short term household budget support, which is highly inefficient.

3.2 Existing energy poverty programs

The Winter Supplement Program (WSP) administrated by the Ministry of Labour and Social Policy is the only existing program providing support for vulnerable households. The program provides direct financial support towards heating bills, electricity, coal briquettes or wood and natural gas for heating. According to the programme`s rules, all households earning less than the guaranteed minimum wage for a period of 6 months are eligible for heating assistance including some families above this line. In order to receive the social aid the applying households should also satisfy additional conditions including not having sold real estate in the last 5 years and not having travelled abroad on their own expenses for the last 12 months. The amount of the social aid is based on the equivalent of 450 kWh of electricity, of which 300 kWh day-time tariff electricity and 150 kWh night-time tariff electricity and is based on the electricity prices at the beginning of the heating season. The aid is granted for a period of 5 months and through a one-time payment in advance in cash for the entire heating season. The WSP currently falls under the jurisdiction of the Ministry of Labour and Social Policy, which has an extensive network of offices to

distribute the aid, while maintaining a database of vulnerable consumers. In 2013, 251 876 households received funding through the Winter Supplement Program.

At the moment there is a mechanism provided through Operational Programme “Regional Development” 2007-2013 under the program “Energy retrofitting of Bulgarian homes” providing 75 % funding for energy retrofitting of inefficient multifamily buildings up to at least energy class “C”. The scheme aims to provide better living conditions for all multi-family housing residents, thus to improve the urban environment and is worth 50 M BGN (25.6 M Euro). The program provides financial support not only for the energy efficiency measures but also for the construction works, preparation of technical project, copyright and construction supervision, costs associated with the unit's operation and the costs associated with obtaining the necessary authorizations documents. It also fully covers the costs of investigation to establish the technical characteristics of the building, including the preparation of technical passport and the energy audit. In order a building to be approved it should meet certain conditions. After being approved all owners of individual units receives individual budget based on the previously taken energy efficiency measures, those to be implemented and the size of the building. To proceed to the stage with the implementation of the energy efficiency measures absolutely all owners have to confirm they can finance their share of 25 % and to sign their individual budget. Since July 2012, 379 multifamily buildings have successfully filled up application and met the conditions, but just two are renewed so far!

One of the most successful credit line for energy efficiency in households and multifamily buildings being applied in the past years in Bulgaria is REECL. The credit line provides 20 % funding for different energy efficiency measures. In the period between September 2006 to September 2014, over 50 000 credits or 27,7 million Euro were provided. The most popular energy saving measure is the purchase of new windows, where 22 700 credits were provided, followed by the purchase of air conditioners and wall insulation. Although the grant could be provided very quickly, poor households cannot afford any additional costs and cannot invest in energy efficiency, thus the poverty itself becomes a barrier to energy efficiency.

In conclusion Bulgaria lacks targeted residential energy efficiency programmes for vulnerable households, as the government finds it difficult to determine which groups need energy poverty-related social support, and to what extent. State housing policy remains under-developed and poorly co-ordinated. At the same time, the state institutions that have traditionally had a strong institutional role in setting social policy yield a disproportionate amount of power in formulating and implementing energy poverty support. Their activities are characterised by a strong focus on ensuring

minimum subsistence though income support, accompanied by a lack of interest in the long-term energy efficiency dimensions of the problem.

3.3 Social services involvement in energy poverty at national level

The Winter Supplement Program (WSP) administrated by the Ministry of Labour and Social Policy is the only existing program providing support for vulnerable households. Even though Bulgaria currently has one of the lowest energy prices in the EU, a large number of household rely on social support. The share of households relying on social support between the period 2009 – 2013 varies between 7 % and 9 %. The total amount granted for the period of 5 months for the same period have increased with 19 %.

	2009	2010	2011	2012	2013
<i>Supported households</i>	259 395	206 452	219 760	210 711	251 876
<i>Household amount granted, euro</i>	141,20	145,36	148,07	168,00	168,00

Table 1: Number of households and total amount granted

3.4 Governmental and national programs for energy poor households

The 2003 Energy Act is the main pillar of Bulgaria's energy policy. In order to improve the country's energy efficiency policy framework and comply with EU accession requirements, this law was supplemented by an Energy Efficiency Act in 2004. The Bulgarian Ministry of Economy and Energy is responsible for setting national energy policies. Its main priority is to create a stable and fair energy market, while supporting energy efficiency and the use of renewable energy resources. The State Energy and Water Regulatory Commission (SEWRC) issues and monitors permits and licenses granted to companies in the energy sector. Moreover, SEWRC develops and implements the national tariff and price systems for electricity gas and heating. The relationship between energy and climate change is part of the responsibilities of the Ministry of Environment and Water, while the regulation of nuclear energy falls under the remit of the Agency for Nuclear Regulation.

Social welfare matters are regulated by the Ministry of Labour and Social Policy, which operates under the framework of the Act on Social Assistance - itself the result of a range of formal policies and strategies. The Ministry of Regional Development is responsible for the housing sector, according to the 2005 National Housing Strategy.

The aim of this document is to support and encourage the refurbishment of the housing stock by creating the necessary legislative framework, providing housing subsidies, offering methodological and technical support and developing information campaigns. Therefore, multiple institutions are responsible for various parts of the overall energy poverty issue in Bulgaria.

Institution in charge	Ministry of Economy	Ministry of Labour and Social Affairs	Ministry of Regional Development
Policy documents	National Energy Strategy 2020	National Social Protection Policy	National Housing Strategy
		Joint Inclusion Memorandum between Bulgaria and EU	
Regulation and operational documents	First and second national action plans for energy efficiency 2008–2010	National Demographic Strategy 2006 - 2020	Act on Condominium Management
	Energy Act	National programme for the improvement of living conditions among Roma 2005–2015	
		Act on social assistance	
By-laws	Act on energy efficiency	Ordinance for the terms and conditions for granting for heating to the population with low income	National Program for Renovation of Residential Buildings
	Bylaw on energy characteristics of buildings		
	Bylaw on issuing of energy certificates for buildings		

Table 2: Institutional and regulatory framework for addressing energy poverty in Bulgaria.

Energy poverty policies in Bulgaria are entirely based on income and are orientated on short term household budget support, thus failing to address the causal factors of the condition.

3.5 National Statistical information

Average consumptions per dwelling:

The analysis of the dwellings' consumptions shows that they consume an average of 8770 kWh/y during the period 2007-2011 and the average share of the energy for heating to the total energy consumption is 66 %. Despite rising energy prices and slowing growth in household income Bulgarian households fail to reduce significantly

their energy consumption. Actually their consumption remains constant in the analysed period. Here it should be mentioned that the energy consumption of Bulgarian households is about two times twice less than the average for EU 27.

	2007	2008	2009	2010	2011
Average consumption per dwelling kWh/dwelling	8606	8490	8606	9188	8955
Consumption per dwelling for lighting and electrical appliances (kWh/dwelling)	1601	1679	1691	1704	1676
Average heating consumption per dwelling for space heating (kWh/dwelling)	5699	5699	5815	6048	5815
Share of the heating consumption from the total consumption, %	66,2%	67,1%	67,6%	65,8%	64,9%

Table 3: Average consumptions per dwelling in Bulgaria, Source: ODYSSEE-MURE

Annual household expenditure for electricity, heating and water:

The table below displays statistics presented by the National Statistics Institute for the annual household expenditures in Euro for electricity, heating and water and the share of the expenditures to the annual income. It is necessary to clarify that it identifies the share of income that a household spends, but it is possible that the household is still unable to maintain the temperature up to a socially and materially adequate level and is living in heat deprivation.

On average Bulgarian households currently spend approximately 14 % of their income for water and energy bills – up from approximately 11 % in 2002. The average annual household expenditures for electricity, heating and water have increased by 36 % between 2008 and 2013.

Year		2008	2009	2010	2011	2012	2013
Expenditure	Euro	562	610	595	617	752	767
Share from the income	%	13,6	14,5	14,3	14,1	15,3	14,2

Table 4: Annual household expenditure for electricity, heating and water in Euro - 2008÷2013, Source: National Statistics Institute

Average number of persons per dwelling and number of dwellings located in the country:

According to data from the National Statistical Institute based on undertaken national census in 2011 the population of Bulgaria is 7,369,431 and is living in 3,006,376 dwellings, or an average of 2.4 persons per dwelling. Nearly three-quarters - 73.3 % or 2,203,007 of all dwellings are located in cities. In rural areas the number of dwellings is 803 369 and the average number of person of the dwelling is 2.5. The largest number of dwellings are located in Sofia - 15.6 %, followed by the city of Plovdiv.

- 84 % of the building stock are over 90 m²
- 96,6 % of the building stock is private and just 3,4 % state-owned

Structure of the housing stock by year of construction:

According to data from the National Statistical Institute based on undertaken national census in 2011 representing the structure of the housing stock by year of construction about 50 % of the housing stock in Bulgaria is built by 1970 and 83,6 % is built by before 1990. All those buildings are characterized as highly energy inefficient and are deeper emphasising the energy poverty problem.

Year	by 1959	1960-1969	1970-1979	1980-1989	1990-1999	2000-2011
Cities	28,4	22,2	17,9	15,1	8,5	7,9
Villages	46,6	19,4	12,9	12,3	5,2	3,6

Table 5: Structure of the housing stock by year of construction, Source: National Statistical Institute

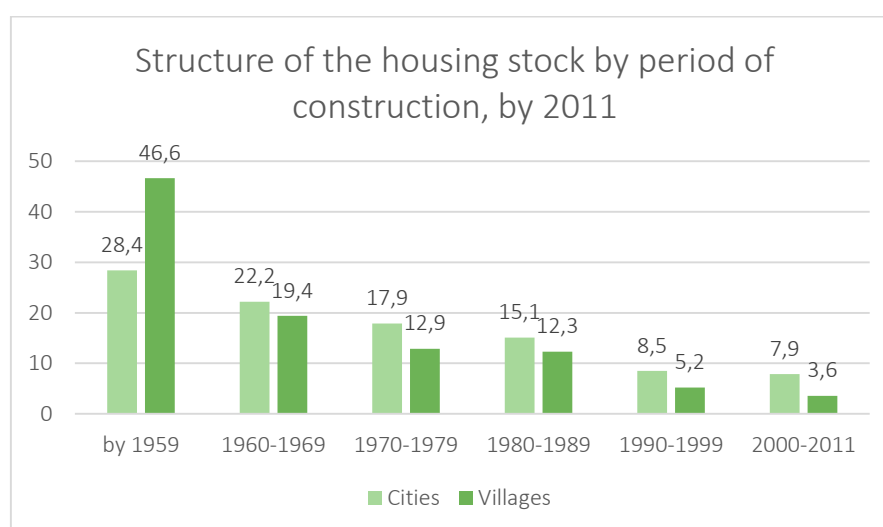


Figure 1: Structure of the housing stock by year of construction

Employment and unemployment rates:

Tables 6 and 7 shows that in the period 2008-2013 the unemployment rate have increased more than 2 times. As shown on table 15 (see below) the unemployed people are the most vulnerable group, as around 50 % of them are living with incomes lower than the required annual minimum, as a result of which they cannot afford to adequately heat their dwellings.

	2008	2009	2010	2011	2012	2013
Total population	7 518 002	7 467 119	7 421 766	7 369 431	7 327 224	7 296 459
Employment rate, %	70,7	68,8	65,4	62,9	63,0	63,5
Unemployment rate, %	5,6	6,8	10,3	11,3	12,3	12,9

Table 6: Employment and unemployment rates, Source: National Statistics Institute

Unemployment rates										
	2009		2010		2011		2012		2013	
Total	238 000		348 000		376 200		410 300		436 300	
Share	6,8		10,2		11,3		12,3		12,9	
By group	thousands	%	Thousands	%	Thousands	%	Thousands	%	thousands	%
Sex										
Male	130,1	7,0	196,3	10,9	219,0	12,3	241,1	13,5	248,3	14,1
Female	107,9	6,6	151,7	9,5	157,2	10,1	169,3	10,8	185,00	11,9
Residence										
City	155,6	5,8	233,4	8,9	260,2	10	285,3	11	298,0	11,5
Country	82,4	10,2	114,6	14,8	116	15,6	125	16,9	135,2	18,6
Education										
University	25,7	2,9	38,7	4,4	44,7	5,1	51,8	5,8	59,9	6,4
High school	126,3	6,2	196,7	9,7	209,8	10,5	234,6	11,7	243,8	12,4
Primary school	65,2	13,6	84,5	19,6	90,4	22,8	91,6	24	97,7	27,0
No education	20,8	27,8	28,1	43,1	31,3	48,4	32,3	51,7	31,8	47,9

Table 7: Unemployment rates by sex, residence and education, Source: National Statistics Institute

Economic and energy indicators of Bulgaria

Thanks to its highly developed energy power sector, Bulgaria is currently a net exporter of electricity, occupying the fourth place in Eastern and Central Europe in

terms of per capita production of this resource. Coal is responsible for 43 per cent of thermal electricity generation, with nuclear energy contributing a similar share. Bulgaria imports most of its oil and gas from Russia, while serving as a corridor for the transit of the latter towards neighbouring states. Households and industry are the largest energy consumers.

The energy intensity ratio of the economy in Bulgaria is 669.9 while the average ratio in EU-28 is 143.2. The energy intensiveness of the national GDP is 89% higher than the EU average. There is high dependency on energy resource imports: Bulgaria meets 70% of its gross demand through import.

	Unit	2008	2009	2010	2011	2012
Annual GDP Growth	%	6,2	-5,5	0,4	1,8	0,8
GDP	Billion US\$	51,82	48,56	47,72	53,54	50,97
GDP per capita	US\$	6917	6524	6453	7287	6977
Exports of goods and services	% of GDP	58,0	48,0	57,0	66,0	67,0
Central government debt	% of GDP	-	13,8	14,9	15,4	18,0
Electricity prices	euro/kWh	0,0823	0,0818	0,0830	0,0874	0,0955
Gas prices	euro/kWh	0,0391	0,0348	0,0431	0,0472	0,0556
Energy Dependence	index	51,7	45,1	39,6	36,0	36,1

Table 8: Economic indicators of Bulgaria, Source: World Bank

	Unit	2008	2009	2010	2011	2012
Gross inland consumption	1000 toe	19926,5	17504,1	17769,8	19089,9	18233,3
Energy intensity of the economy	kg oil per 1000 EUR	711,7	661,4	668,8	705,5	669,9
GHG emissions	units of CO ₂	61.43	52.97	55.33	60.54	56.02
Energy use	kg oil per \$1,000 GDP	-	167,80	156,92	159,74	168,47
Energy use	kg oil per capita	-	2644,65	2352,33	2419,99	2615,04
Electricity consumption	billion kWh	30,5	28,8	29,9	28,3	28,3
Electricity - imports	million kWh	3054	3243	3097	2660	5073
Electricity – exports	million kWh	7534	7992	5407	7073	7735

Table 9: Energy indicators of Bulgaria, Source: World Bank

Few conclusions based on the displayed information in Tables 8 and 9 could be made:

- After a sharp decline in GDP of Bulgaria in 2009, consequently in 2010 and in 2011 a gradual recovery is observed, but in 2012 country couldn't maintain the growth;
- The central governmental debt continue to increase over the period of 2008-2012;
- Over the period 2008-2012 the energy efficiency in the country continue its improving run, mainly due to the improvement in the industrial sector and of the low initial level of efficiency in it;
- Electricity and gas prices are on a trend of price growing every year, which seriously affects vulnerable households

Demographic indicators:

Table 10 displays the negative demographic indicators in the period 2008-2012.

	Unit	2008	2009	2010	2011	2012
Population growth rate	%	- 0,81	- 0,79	- 0,77	- 0,78	- 0,80
Net migration rate	<i>Migrants/1000 population</i>	- 3,41	- 3,11	- 2,8	- 2,82	- 2,84

Table 10: Demographic indicators of Bulgaria

4. The extent of the energy poverty in Bulgaria

4.1 Why are the existing definitions and principles for targeting energy poverty not applicable?

The term energy poverty is not defined in Bulgarian legislation. For instance, governmental energy bill assistance through the Winter Supplement Programme (WSP) is one of the ways that target people who cannot afford adequate thermal comfort, but this is not directly referred to energy poverty. The last major changes in the principles of providing social support through the WSP were undertaken in 2003 and concentrated on assisting people who cannot cover their basic expenses in society with their current incomes. Energy poverty policies in Bulgaria, therefore, are fundamentally based on income support-orientated, end-of-pipe programmes that fail to address the causal factors of the condition, focusing on short term household

budget support instead. Despite the co-operation between social and energy policy-making state institutions, household's energy needs and housing stocks condition remain outside the scope of the programme, and an absolute, rather than relative energy consumption standard is utilized to inform funding decisions in the WSP. The standard is based on an expert judgement about the amount of funds an average household needs, in order to heat an average room during the winter. It is established how much energy would be needed to ensure a normal thermal comfort, while emphasising that 'social support does not help improve living standards, rather it helps people to survive the winter, in one room only!

Every year between 30 and 42 Million euro are granted to poor households without improving their living conditions or creating sustainability.

	2009	2010	2011	2012	2013
<i>Total amount granted, Million euro</i>	36,66	30,00	32,54	35,40	42,32

Table 11: Total amount granted through the WSP in Million euro

4.2 Energy poverty data in Bulgaria and key parameters defining it

Percentage of households in inability to keep home adequately warm

A recent survey on Statistics on Income and Living Conditions in households reports that 64.5 per cent of Bulgarian households could not keep the home 'adequately warm', while 32.1 % said that they were facing arrears on utility bills. These were by far the highest figures within the EU-27, where the respective averages were 8.9 and 10.

As there is no definition of energy poverty in Bulgarian legislation, in order to define the extent of the problem we use available statistics from Eurostat, presenting the percentage of people below and above 60 % median equivalised income in Bulgaria, who answered that they were unable to maintain an adequately warm home.

Inability to keep home adequately warm					
Below 60 % median equivalised					
	2009	2010	2011	2012	2013
% of population					
Single person	80,6	81,8	70,7	72,0	-
One adult 65 years or over	79,0	80,2	69,8	74,9	-

Two adults	76.6	80.3	66.2	64.0	-
Total	80,2	83,3	68,9	70,0	
Above 60 % median equivalised					
	2009	2010	2011	2012	2013
% of population					
Single person	68,3	72,0	50,1	51,6	-
One adult 65 years or over	72,6	77,1	56,6	54,9	-
Two adults	63.1	65.9	47.8	47.2	-
Total	59,7	62,1	39,8	40,2	
Total					
	2009	2010	2011	2012	2013
% of population					
Single person	75,5	77,0	60,6	61,2	56,0
One adult 65 years or over	77,2	79,0	64,7	65,9	60,1
Two adults	66,5	68,8	51,3	50,1	49,1
Total	64,2	66,5	46,3	46,5	46,6

Table 12: Percentage of population in inability to keep home adequately warm, Source: Eurostat

In 2013, 46.6% of the total population answered that they could not keep the home 'adequately warm', thus giving the country the 1st place among EU-27, while the average EU numbers are 10,8 %.

By 2013 the total population in Bulgaria is 7,296,459 or approximately 3,400,150 people are experiencing difficulties in adequately heating their homes and are affected by energy poverty.

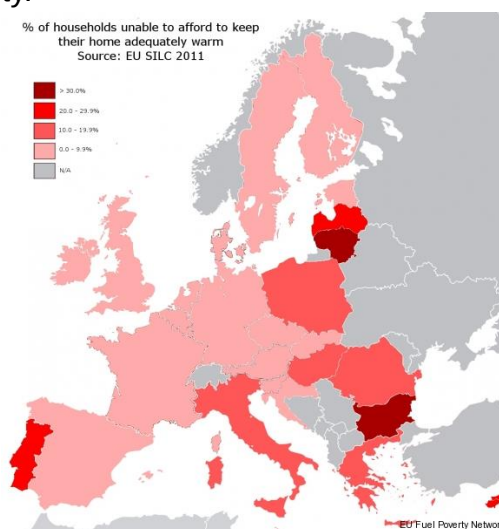


Figure 2: Inability to keep home adequately warm in 2011, Source: EU Fuel Poverty Network

Nearly two thirds of Bulgarians are left to cope for themselves, while research in the area is rather new. Yet, energy poverty is quite severe in Bulgaria. All major factors that could exacerbate energy poverty are present in Bulgaria - low incomes, the upward rebalancing of energy prices, the poor energy efficiency standards of the dwellings and the faster rising energy costs compared household income. The specific measures and the social policies for each factor are ineffective, targeting a very limited part of the population and providing very low heat allowances, for the poorest groups, in particular. Therefore, energy subsidies and direct financial support to households for heating cannot provide a sustainable long-term solution to the energy poverty problem

Features of the energy consumption of households:

Despite having the lowest energy prices in the EU, the low-income groups are facing serious problems with regard to the affordability, due to the low income level, the inefficient dwellings and the upward rebalancing of energy prices as a result of the liberalisation of energy sector activities, but also due to the energy consumption structure in Bulgaria. According to estimates electricity accounts for 40 % of the final heating energy consumption of Bulgarian households in 2011, around 32 % comes from primitive biomass consumption, 9 % from coal, 16 % from district heating and 1-2% from gas. This is highly inefficient and results in high costs for primary energy. The share of electricity consumption has even increased in the past years due to the many district heating users switching to electricity in order to be able to keep their energy costs low. One of the reasons for the many users who stop using district heating is the abolished governmental subsidies for district heating. This followed to a rapid decrease in district heating users, which made the distribution costs for those remaining on district heating higher and bills unpredictable, thus the district heating became not a solution, but a cause for poverty. A huge barrier is the underdeveloped gas supply network for households, leaving a large number of household with no access to gas. Unlike the electricity prices the gas prices in Bulgaria are among the highest in EU, thus became too high for the average households. Due to this fact many users who switched to gas for heating, stopped using it.

Another existing trend can be seen among low-income households, who cannot afford to heat their dwellings with electricity, which prices are growing up every year, as a results Bulgaria has seen a shift towards fuel wood and coal among low-income households. The trend can be seen even in the central areas of all major Bulgarian cities.

If the trend of faster growth in energy prices compared to the income of households remains the same and if households do not receive any external support to improve the characteristics of their dwellings and appliances, the energy comfort of Bulgarian household could be expected to decline, in order to meet other expenses.

➤ Conclusions:

- Large share of electricity (40%), as result of its low cost and low level of household gasification;
- Large and increasing share of primitive biomass (32%), because the wide availability and low price of firewood;
- Low share of natural gas (2%), although in the period 2001-2010 the consumption of natural gas has increased 49 times;
- Relatively low and declining share of district heating (16%).

Persons being at risk of poverty or social exclusion:

There is a strong correlation between the percentage of people living at risk of poverty and the percentage of people falling into arrears, which means that countries with the highest percentage of people in poverty like Bulgaria tend to have the highest percentage of people falling into arrears. Bulgaria is one of the countries with the highest share of persons being at risk of poverty or social exclusion. According to the statistics of the National Statistics Institute, shown on the table below, nearly 49 % of the population is living in such conditions.

Year	2008		2009		2010		2011	
Statistical area	Thousands of people	% of population	Thousands of people	% of population	Thousands of people	% of population	Thousands of people	% of population
North west	452,7	49,4	462,7	51,3	454,8	51,2	417,3	49,7
North central	506,1	54,8	527,0	57,6	516,9	57,3	456,7	53,4
North east	440,7	44,4	510,6	51,6	496,7	50,8	491,1	50,9
South east	536,4	47,8	569,9	51,0	590,8	53,0	606,9	56,3
South west	757,5	35,9	838,5	39,7	876,8	41,4	881,8	41,3
South central	792,4	51,4	820,2	53,7	757,1	49,9	762,8	51,7

Table 13: Persons being at risk of poverty or social exclusion and the share of the total population - 2008÷2011

Minimum annual household income in order to achieve an acceptable living:

Statistics about the minimum annual income for every household in order to achieve an acceptable living standard is published by the National Statistics Institute every year.

Year	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Statistical area	One person					Two adults and two children under 14 years				
North west	1 070	1 415	1 514	1 396	1 403	2 246	2 971	3 179	2 932	2 946
North central	1 223	1 549	1 594	1 559	1 568	2 567	3 253	3 348	3 275	3 292
North east	1 089	1 620	1 664	1 625	1 677	2 286	3 403	3 494	3 413	3 520
South east	1 308	1 692	1 749	1 719	1 625	2 747	3 554	3 674	3 610	3 413
South west	1 613	2 010	2 263	2 234	2 072	3 388	4 221	4 752	4 692	4 351
South central	1 231	1 607	1 681	1 568	1 610	2 586	3 375	3 531	3 293	3 380

Table 14: Poverty line by regions – calculated minimum annual household income in Euro - 2007÷2011, Source: National Statistics Institute

The table above shows that for a 5 year period the size of the spending needed to reach an acceptable living standard has risen by 27 % for one person household and respectively by 31 % for the bigger households, while earnings have hardly risen at all.

Share of people living below the calculated minimum annual income by economic activity:

Table 15 presents statistics for the share of people below the calculated minimum annual income by economic activity – employed, unemployed, pensioners and other inactive. It is possible to conclude that the unemployed people are the most vulnerable households, as around 50 % of them are living with incomes lower than the required annual minimum. The next most affected group is the group of the pensioners, of which every 4th of them is living below the minimum annual income.

Year	2007	2008	2009	2010	2011
Statistical area	Employed				
North west	7,5	6,1	9,1	6,5	5,1
North central	9,5	7,7	8,7	8,6	7,2
North east	4,4	6,9	7,8	7,4	9,7
South east	7,8	8,1	8,0	8,7	5,6
South west	7,4	5,5	6,9	8,0	6,7

South central	7,2	8,7	6,7	7,3	8,8
	Unemployed				
North west	57,5	62,8	52,6	48,1	44,8
North central	55,3	50,9	46,9	51,7	50,6
North east	39,6	48,9	49,9	52,8	47,1
South east	57,1	53,6	54,4	57,8	56,2
South west	46,2	35,2	36,5	44,2	39,7
South central	58,1	53,8	40,2	47,1	48,6
	Pensioners				
North west	18,6	32,9	29,7	27,2	19,1
North central	29,1	37,1	23,3	23,6	23,1
North east	21,7	37,1	31,1	25,6	22,5
South east	29,8	32,2	29,0	25,3	22,0
South west	39,8	37,2	31,1	31,2	29,9
South central	27,2	32,9	27,2	24,7	27,0
	Other inactive				
North west	27,2	29,2	27,3	39,0	34,3
North central	22,3	23,2	33,1	27,9	19,2
North east	18,6	20,4	23,4	24,1	30,3
South east	27,0	26,6	29,7	17,5	27,1
South west	24,7	15,9	18,0	21,1	22,5
South central	21,0	26,9	19,2	19,9	30,8

Table 15: Share of poor people based on economic activity in % - 2007÷2011, Source: National Statistics Institute

5. Summary of the analysis

There is no doubt energy poverty is becoming a major problem across the EU and is likely to expand in coming years as a result of anticipated energy price increases. Currently there is no systematic research or rigorous scientific basis on this issue in Bulgaria, one of the most affected countries in EU-28.

The reviewed evidence also indicates that the driving forces of energy poverty in Bulgaria are themselves embedded in locally specific social, political, and environmental circumstances. For instance despite possessing some of the highest energy prices in Europe, the incidence of energy poverty in Germany is judged to be significantly lower than in Bulgaria, where energy prices are one of lowest. The causes of the problem reside in the poor affordability of gas, electricity, and heat services, the inadequate energy efficiency of the residential sector and of course the

lack of systematic governmental approach to the problem. On the practical side, there are significant opportunities to address the issue via demand-side energy efficiency policies—mainly in the form of deep building retrofits and appliance market transformations. Such measures are clear win-win solutions in the case of energy poverty, as they can also assist the broader process of poverty alleviation.

The state institutions and the government stands at a serious problem – the energy poverty issue. The seriousness and the difficulty of the decision stems from the fact that in order to achieve sufficient thermal comfort in a household it is required to ensure an adequate match between housing types, heating systems, and household needs, as it is about incomes and energy efficiency. The temporary measure – granting social heating aid in order large number of households just to survive the winter months in only room is necessary to be replaced with a comprehensive and well-coordinated long-term institutional program. It is all clear that solving the problem requires time, but setting new priorities in solving them is a big step further.

Partners



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