



LOCAL ACTION PLAN ON FUEL POVERTY

PLOVDIV AREA BULGARIA

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1. Introduction

The initiative in Bulgaria will take place in the cities of Plovdiv and Rakovski both located in Plovdiv region. Plovdiv is the second largest city in Bulgaria and the largest city in the south central region of the country. The city has population around 340 000 inhabitants. It is the administrative centre of Plovdiv Province, which comprises 18 municipalities on a territory of 5,972.9 km², with population of 680 thousand inhabitants. The Municipality of Rakovski is one of the constituent municipalities of Plovdiv district and is also located in the central south region of the country. The municipality covers 7 places with total population of 26 381 residents.

1.1 Aim of the analysis

The aim of the following document is to collect regional 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 the area.

2. Data about the energy poverty in the Plovdiv region

a. Population in the region

	Total	City	Village
Total population	678 197	506 913	171 284

Table 1: Population in the region, Source: NSI

b. Energy supply and state of building fund

Heating structure by type of heating:

Based on the statistics from the National Statistics Institute (NSI) the most common type of heating in Plovdiv is the heating with electricity, from which biggest share has the heating with air conditioners, followed by central heating users. There are just few examples using pellets or geothermal energy.

	Central heating	Gas	Electricity	Oil	Coal	Wood	Pellets , Geothermal and other	Total
Plovdiv	21 987	1508	82 952	414	12 503	19 896	689	101 349

Table 2: Heating structure by type of heating for Plovdiv, Source: NSI

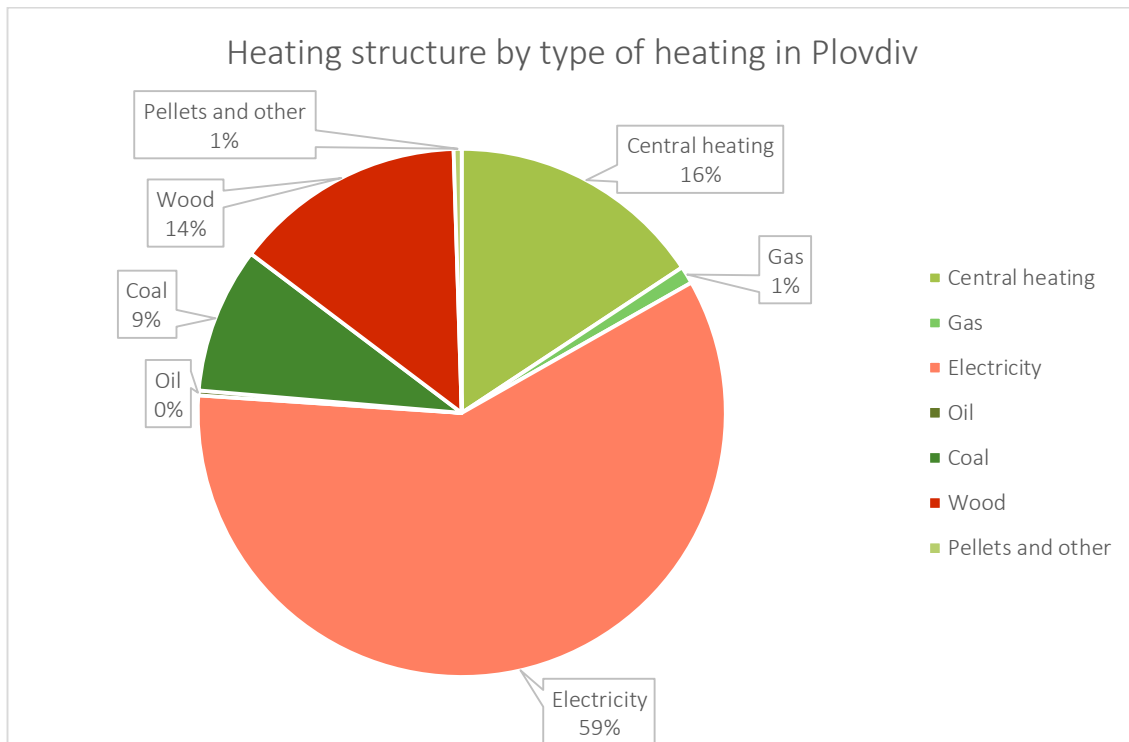


Fig. 1: Heating structure by type of heating in Plovdiv, Source: NSI

The statistics for the heating structure by type of heating in the region (Fig.2) is quite different compared to the one in Plovdiv. The type of heating with highest share is the wood type, followed by coal and electricity. All other types have less than 1 %. Analyzing the information we can conclude that existing heating model is inefficient - burning old fashioned fuels, like wood and coal into technically outdated equipment with low COP. The statistics serves to demonstrate the inability of household owners to make investments in new and efficient systems. The only affordable current measure is switching the type of heating to electricity by buying new air conditioner.

	Central heating	Gas	Electricity	Oil	Coal	Wood	Pellets , Geothermal and other	Total
Plovdiv region	624	2 354	22 772	216	65 882	92 685	747	116 414

Table 3: Heating structure by type of heating for Plovdiv region, Source: NSI



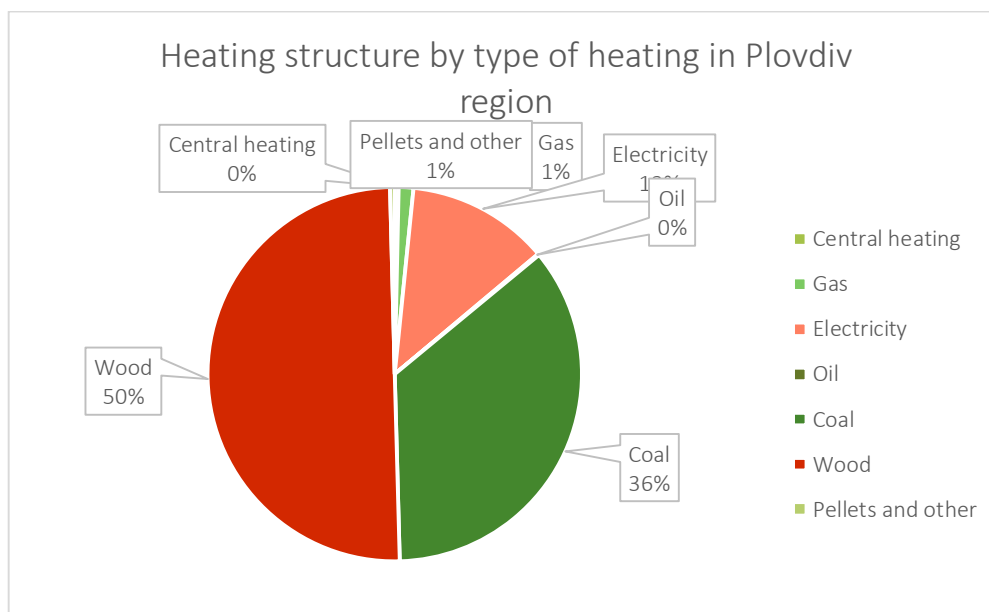


Fig. 2: Heating structure by type of heating in Plovdiv region, Source: NSI

Structure of the housing stock by year of construction:

According to data from the National Statistics Institute (NSI) based on undertaken national census in 2011 representing the structure of the housing stock by year of construction in Plovdiv region, about 53 % of the housing stock in the area is built by 1970 and 73 % is built by before 1990.

In the big residential areas in Plovdiv most buildings are constructed from prefabricated panels and are characterized as highly energy-inefficient and with old heating infrastructure. Households are mostly flat-based, where the ownership rate is 97 % vs 3 % rentals.

Plovdiv								
Year	by 1949	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000-2011	Total
Buildings	3606	2538	3702	2280	1875	2207	2618	18 828
Dwellings	6530	6506	23 440	38 445	38 578	15 997	19 811	149 408

Table 4: Structure of the housing stock by period of construction, Source: NSI

Plovdiv Region								
Year	by 1949	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000-2011	Total
Buildings	25 736	25 923	35 137	23 292	19 006	11 068	9880	150 042
Dwellings	29 932	32 241	63 202	71 990	65 187	28 033	28 733	319 318

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

Number of dwellings located in the region:

According to data from NSI the number of dwelling have increased with 5 % for the past six years, thus decreasing the average number of people in terms of people per dwelling.

	2007	2008	2009	2010	2011	2012
Buildings	148 857	149 104	149 319	149 430	150 042	150 199
Dwellings	304 794	306 301	307 662	308 399	319 318	320 030
Average people per dwelling	2,31	2,30	2,28	2,26	2,13	2,12

Table 6: Number of buildings and dwellings in the region, Source: NSI

c. Socio-economic parameters

Regional employment and unemployment rates:

The table below represent the unemployment rates in the period 2007 – 2012.

	2007	2008	2009	2010	2011	2012
Regional population	705 121	704 057	701 864	696 300	680 884	678 860
Unemployment rate, %	3,1	3,9	5,1	8,5	8,8	11,2
Unemployed people	19 230	16 931	27 114	26 397	27 334	30 352

Table 7: Regional unemployment rates, Source: National Statistics Institute

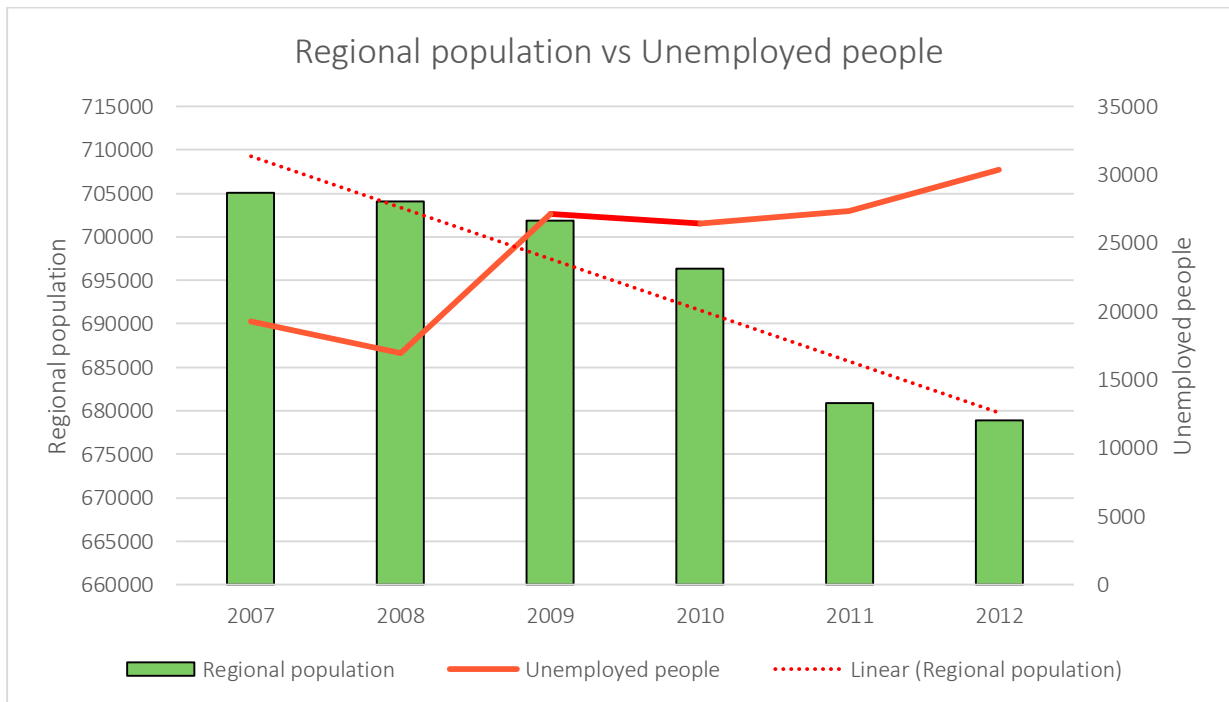


Fig. 3: Regional population trend vs Unemployed people trend, Source: NSI

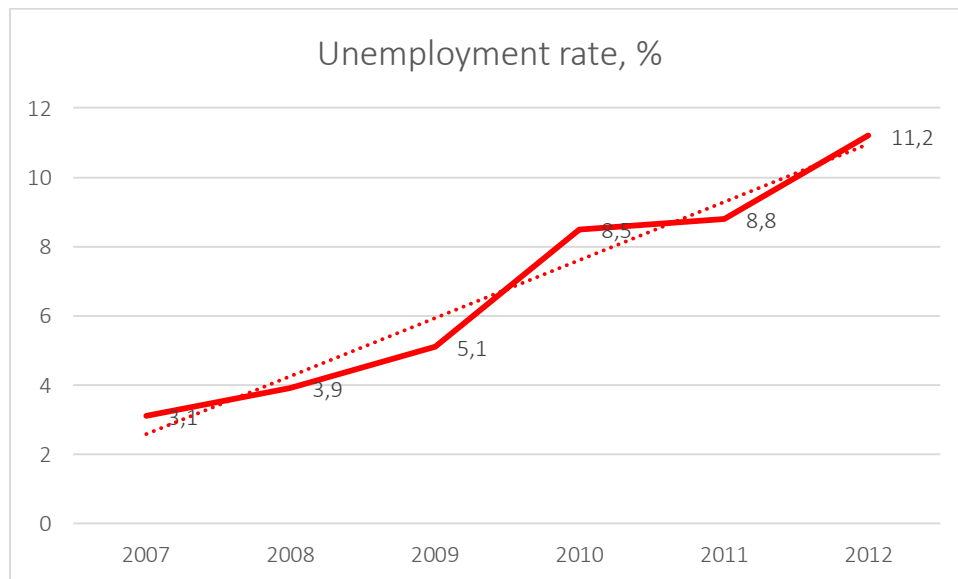


Fig. 4: Unemployment rate trend, Source: NSI

The table below represent the number of employed people and the share of the total population in the period 2007 – 2012.

	2010	2011	2012
Regional population	696 300	680 884	678 860



Employed people	282 800	273 900	277 400
Share of total population, %	40,6	40,2	40,8

Table 8: Regional employment rates, Source: National Statistics Institute

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

Statistics about the minimum annual income for every household in order to achieve an acceptable living standard is published by the NSI every year. The table below shows that for a 5 year period the size of the spending needed to reach an acceptable living standard in the region has risen by 31 %, while earnings have hardly risen at all.

Year	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
DiStatistical area	One person					Two adults and two children under 14 years				
Plovdiv region	1357	1668	1872	1742	1734	2851	3504	3933	3658	3643

Table 9: Poverty line in the region – calculated minimum annual household income in Euro - 2007÷2011, Source: NSI

d. Estimated number of energy poor households in Plovdiv region

The Winter Supplement Program (WSP) administered by the Ministry of Labour and Social Policy as the only existing program at national level and regional level. At local level the program is supervised by the local Agency for Social Aid. The number of the granted households in the Plovdiv region varied between 19 500 and 24 200 for the period between 2009 and 2013. The share of households in the region who received funding through the WSP is more than 9 % from all granted households. In 2013, 23 860 households or approximately 50 000 people from the region were receiving funding for heating purposes.

	2009	2010	2011	2012	2013
Supported households	24 134	19 525	20 225	19 836	23 860
Share of grants provided to household from the region	9,30	9,46	9,20	9,41	9,47

<i>from all grants,, %</i>					
<i>Total household amount granted, million euro</i>	3,34	2,78	2,93	3,26	3,93

Table 10: Number of households and total amount granted

Persons being at risk of poverty or social exclusion in the region:

Bulgaria tends to have the highest percentage of people in poverty in EU-28, According to the statistics from NSI nearly 47 % of the population in Plovdiv region is living at risk of poverty or social exclusion. For the period between 2008 and 2011 the share of people being at risk of poverty has increased with 53 %.

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
Plovdiv region	213,7	30,9	346,5	48,2	345,5	49,2	327,1	46,9

Table 11: Persons being at risk of poverty or social exclusion and the share of the total population in the region - 2008÷2011

3. Stakeholders related to energy poverty

Stakeholder participants are all organizations that can support the campaign for recruitment and involvement of energy-poor households, providing effective solutions for energy and water savings or any other kind of support for the implementation of REACH project. Stakeholders could also be comprised of social centres and organizations who support activities for disadvantaged people.

Potential stakeholders are:

- Local Agency for Social Aid
- Social Care Centres;
- Unions and associations of people with impaired mobility;
- Churches;
- Home Care Centres;
- Caritas;
- Red cross
- Organizations of unemployed people;

- NGOs;
- Other stakeholders – local authorities, energy providers, energy agencies.

3.1 Stakeholders already identified

Local Agency for Social Aid

Based on successfully established partnership between the Local Agency for Social Aid and Energy Agency of Plovdiv during ACHIEVE project, a database with households applying for funds from the Winter Supplement Program will be obtained. The Agency for Social Aid is an important stakeholder since REACH's target group represent beneficiaries of the Winter Supplement Program. The Agency could help in further promoting the project as well as reaching identified households through their established channels.

Municipality of Rakovski

Project materials, as well as voucher cards for signing up for REACH will be handed out to municipality representatives, who would put them in public places. The materials themselves would contain a summary of the project objectives and the opportunities it would provide, as well as Energy Agency - Plovdiv contacts, so that interested parties can sign up and to obtain additional clarification for the campaign.

Church "Holy Heart of Jesus"

The local church "Holy Heart of Jesus" is one of the largest Catholic churches in the Balkan Peninsula and the largest in the Municipality of Rakovski. A large number of volunteers are taking part in the Church's activities and can help with structuring and implementing the campaign and identifying households in need in the city of Rakovski, one of the two pilot cities within REACH project.

Caritas

Meetings with key representatives from Caritas Bulgaria are planned to be conducted. The organization would be able to help with identifying energy poor households due its vast network. Caritas is an organization that also works with volunteers, who would be trained to become energy advisors and take part during the implementation of the active campaign for energy advising of energy poor households.

Hope for decent life

The main objective of the association is the integration of people with disabilities in society by overcoming different barriers. The organization would be able to provide help in structuring and implementing the promotion campaign, but also through promoting the REACH projects` goals among its members, thus identifying households in need.

Union of Handicapped people

Meetings with the Union of Handicapped people are planned to be conducted. Many handicapped people are often living in energy poverty and due to their condition, they might be an especially hard group to identify and connect to. Through the meetings, channels for future cooperation would be established and also support from the Union of Handicapped People would be obtained with the aim of overcoming the barriers.

ABEA – ASSOCIATION OF BULGARIAN ENERGY AGENCIES

The Association of Bulgarian Energy Agencies is a non-government organization. The mission of ABEA is to coordinate and to join the potential and the experience of its members and to present them and their positions to the Bulgarian government. Different common activities and conferences with members of ABEA are planned to happen within the duration of the project. ABEA would be a key stakeholder for the process of establishing energy poverty as a policy issue that demands tailor-made policies and measures at national level. The organization would be able to provide expertise and help in order to engage decision-makers in tackling energy poverty in Bulgaria.

No.	Organisation	Contact Person
1	Municipality of Rakovski	Bozhidar Strehin
2	Local Agency for Social Aid	Tanya Taneva
3	Church "Holy Heart of Jesus"	Father Dimitar
4	Caritas	Tanya Savova
5	Hope for decent life	Veska Mladenova
6	Union of Handicapped People	Didi Deneva

7	ABEA	Zdravko Georgiev
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Table 12: Identified social actors

4. Target groups

Given the objectives of REACH project, there are three target groups. Each target group would go through a phase of "training of trainers", where participants will learn about the ideas and the methodology of this project. The target groups are comprised of:

- Households at risk of energy poverty;
- Schools;
- Teachers and students.

Households at risk of energy poverty:

Households at risk of energy poverty are the main target group of this project, as within its duration 400 visits are going to be implemented. The specific aim of the visits is to analyse the energy and water consumptions, to give advice in order to achieve savings, and to provide a set of saving devices, with the aim of reducing annual costs.

Schools, teachers and students:

Schools, teachers, and students are the next group to be targeted and communicated with. The purpose of the communication with them is to build trust. Energy Agency of Plovdiv should approach them strategically, in order to build their belief of the positive role of their contribution and to indicate the benefits of their participation – improving the image of the school, creating new skills and opportunities for young students, etc. Before the start of the active campaign, number of meetings with key school authorities would be conducted, where the concept of the project would be presented and discussions for creating partnerships are going to be held.

Target schools:

No.	SCHOOL	TYPE	CONTACT PERSON
1	Vocational School of Electrical Engineering and	Technical profile	Elena Dinchiyska



	Electronics		
2	Vocational School „Petar Parchevich”, Rakovski	Information technologies	Petar Karparov

Table 13: Potential schools identified

5. Timetable for the actions

2014				
	September	October	November	December
Vocational School of Electrical Engineering and Electronics				
Vocational School „Petar Parchevich”, Rakovski				

Table 14: Planned schedule or targeting schools

Action	2014	2015	2016
Planned schedule for work with social actors			
Municipality of Rakovski			
Local Agency for Social Aid			
Church "Holy Heart of Jesus"			
Caritas			
Hope for decent life			
Union of Handicapped People			
ABEA			

Table 15: Indicative planned schedule for targeting social actors



Partners



Focus - Association for Sustainable Development, Slovenia

www.focus.si



Society for sustainable energy development, Croatia

www.door.hr



Energy agency of Plovdiv, Bulgaria

www.eap-save.eu



Macedonian Centre for Energy Efficiency, Macedonia

www.macef.org.mk

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