# TARGETED SOCIAL ASSISTANCE FOR HEATING – HISTORICAL EXPERIENCE AND DEVELOPMENT PERSPECTIVES FOR LIMITING ENERGY POVERTY IN BULGARIA

The aim of the article is to provide guidance on how to optimize targeted social assistance mechanisms for heating in the broader context of the need to pursue a national policy for the reduction of energy poverty. The research tasks are: to summarize Bulgaria's historical experience in providing targeted social aid for heating after 1995; to evaluate its strengths and weaknesses; to outline possible solutions and guidelines for the development of social protection in this area in the context of reducing energy poverty.

Keywords: energy poverty; social assistance; heating aid

JEL: E61; H41; H55; I30; I38

#### A retrospective analytical review of the changes to the program for the provision of targeted heating aid during the winter period

At the end of February 1995, Decree No 43 of the Council of Ministers introduces for the first time a special scheme/program for targeted assistance to people with low incomes when using energy and fuels for domestic purposes. This happens at the end of a period of structural economic recovery. Its main objective is to redistribute the social burden of rising electricity and heat prices in order to provide additional social protection to the lowest income groups. This objective, albeit not explicitly defined, remains a constant for this specifically targeted social assistance.

The scope and mechanism of assistance in 1995-1996 are regulated by special regulations adopted by the Council of Ministers<sup>1</sup>. These have the following characteristics:

• The conditions for access to benefits include the level of income, the property ownership and other criteria applied to the recipients of monthly social benefits, as required by the then existing Social Assistance Regulations: lack of movable and immovable property, savings and other assets which could be a source of additional income; active job searching and readiness to enter the labor market. These criteria narrow the scope but also strengthen the targeted nature of the aid. At the same time, they predetermine the beneficiaries' profile, which includes mainly "chronically" poor populations: disabled and elderly people with low pensions, the families of unemployed persons or low-paid workers with children.

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<sup>&</sup>lt;sup>1</sup> Ordinance on Target Assistance to Low-Income Households in the Use of Energy and Fuels for Household Needs, adopted by Decree No. 43 of 1995. The following year, it was replaced by Ordinance on Target Assistance to Low-Income Households and Social Institutions financed by the State Budget for Electricity, Heat, Fuel and Water Utilities, adopted by Decree No.205 of the Council of Ministers of 1996

- Thus, aid under the Energy Assistance Program, similar to monthly social benefits, is targeted at individuals and *households* with a low income and wealth status. This shows that this program "builds upon" the basic scheme for ensuring minimum incomes for the poor through targeted monthly benefits. As a complementary program, it connects and regulates the relationship between social assistance and other components of the social protection network and the labor market.
- The level of the income threshold for access to energy aid is determined by two components the differentiated minimum income for social assistance (calculated under the program/scheme for insuring minimum incomethrough monthly social benefits) plus the value of the minimum monthly energy requirements, classified as two types "for heating" and "for other energy needs", at fixed prices, for the electricity consumed by the population for household purposes, acting for the respective month. Thus, the understanding of energy poverty is implicitly implicated in connection not only with the lack of heating energy but also with that of other household needs.
- At the introduction of the program in 1995, the magnitude of the second component the minimum monthly energy requirements, in both of its parts, is differentiated according to the size of the dwelling (Table 1).

Table 1
Standards for minimum monthly energy needs by season and house size

Season	Energy needs	House size	Standards for minimum monthly energy needs, 1995	Standards for minimum monthly energy needs, 1996	
Heating season from 1.XI until 30.IV.	Energy for heating regardless of the type used	Single-room dwelling	560 κWh, incl. 280 κWh day tariff 280 kWh night tariff	560 kWh, incl. 390 kWh day tariff 170 kWh night tariff	
		One-bedroom apartment	840 kWh, incl. 420 kWh day tariff 420 kWh night tariff	840 kWh, incl. 590 kWh day tariff 250 kWh night tariff	
	Other energy needs	Single-room dwelling	100 kWh, incl. 50 kWh day tariff 50 kWh night tariff	100 kWh, incl. 70 kWh day tariff 30 kWh night tariff	
		One-bedroom apartment	170 kWh, incl. 90 kWh day tariff 80 kWh night tariff	170 kWh, incl. 120 kWh day tariff 50 kWh night tariff	
Non-heating season	Other energy needs	Single-room dwelling	50 kWh da	100 kWh, incl. 50 kWh day tariff 50 kWh night tariff	
from 1.V. until 31.X.	One-bedroom apartment		170 kWh, incl. 90 kWh day tariff 80 kWh night tariff		

Source: Council of Ministers Decree No. 43 of 1995; Council of Ministers Decree No. 205 of 1996.

The introduction of a standard for minimum monthly *energy* needs regulations ensures the *automation* of the support mechanism (and that of the income threshold, respectively) at any change in energy prices. This is an important positive moment in the design of the program, which has been preserved over the years. In the

mass case, however, these standards do not take part in full in determining the income threshold, but instead with a 60% share (1995), which is then further raised to 90% one year later. An exception is made for "women over 55, men over 60 years old<sup>2</sup>, disabled people living as single households, and all households with children under the age of 18", for which the standard for minimum monthly energy needs is established for a one-room dwelling, regardless of the size of the dwelling actually occupied3.

- The aid is provided in cash and is determined as the difference between this income threshold and the beneficiary's own earnings for the last 6 months preceding the date of filing the application <sup>4</sup>. Thus, a differentiated *income approach* is applied within the assisted population.
- The program operates throughout the year, with lower consumption (100 kWh) in the non-heating season. Its perennial character makes it more expensive and more difficult to administer.
- The way of identifying the beneficiaries is the same as for the monthly social benefits: filing an application/declaration with the supporting documents, conducting a social inquiry, taking a decision, and granting the aid.
- The funding of the program during this start-up period is done through funds from a specially-created "Targeted Social Protection" Fund as an extra-budgetary account at the Ministry of Labor and Social Welfare. Funds are funded mainly from subsidies from the state budget plus donations from local and foreign natural and legal persons, target proceeds from foreign natural and legal persons, income from interest on deposits of free funds from the Fund and from other proceeds.

The targeted financing of social assistance is a good practice that differs significantly from the decentralized approach to financing the monthly social benefits which is applied at the time, but is later replaced by program budgeting.

During the period of the financial and economic crisis, which started in 1996 and continued in 1997, the following major changes are made:

- In October 1997, this type of targeted support is included as a kind of monthly natural assistance in the Social Assistance Regulations<sup>5</sup>, which is a step towards consolidating the social assistance system.
- Beneficiaries of the assistance program are eligible persons and families, not households.
- The year-round nature of the program is removed, as aid is already granted only during the heating season (which is then 6 months – from 1 November to 30 April).

<sup>&</sup>lt;sup>2</sup> This is the retirement age for those working in the third category.

<sup>&</sup>lt;sup>3</sup> Later. the differentiation in the amount of heating aid is achieved not by the standard for minimum monthly energy needs, but through the introduction of a differentiated minimum heating income instead of the differentiated basic/guaranteed minimum income for monthly social assistance.

Beneficiaries who use coal or other fuels for heating may use the aid in the form of coal/fuel for the entire six-month period of the heating season.

Adopted with Decree of the Council of Ministers 398/1997.

- The "other energy needs" component used to determine the yield threshold is removed. This threshold remains the sum of the differentiated minimum income for social assistance plus the BGN equivalent of the minimum monthly energy requirement for that month (then 400 kWh of electricity, of which 280 kWh on the daily and 120 kWh on the nightly tariff).
- ullet The differentiation of the amount of heating aid in 1997 is based on specific limits according to the type of energy used, regardless of the size of the dwelling, as was the case up to that point<sup>6</sup>. The standards are, as follows: power 400 kWh (280 daily + 120 nightly); 0.7 Gcal central heating; solid fuel 2 tons of briquettes for the entire 6-month heating season.

Thus, the *income* differentiation (i.e. as a difference between the heating standard and the disposable income of the beneficiaries) *and* the differentiation according to *the size of the dwelling is replaced* by differentiation according to *the type of heating* used. In cases where the beneficiaries and families cohabit in one dwelling, the aid is doubled.

This, on the one hand, simplifies the administration process of determining entitlement to access to aid and, on the other hand, allows for differences in the prices of individual types of energy to be taken into account.

- A higher coefficient for calculating the differentiated minimum welfare benefit (the first component in determining the income threshold for access to heating aid) is introduced for children under 18 years of age. This can be seen as a first step towards the subsequent introduction of a system of specific differentiated coefficients for the different population groups for the purposes of this type of targeted social support in determining the yield threshold.
- Funding for social assistance is provided mainly through funds from the municipal budget. This removes the existing funding from the Targeted Social Protection Fund, which falls within the framework of the adopted general policy for radically reducing the extrabudgetary accounts of the ministries.
- The help is in-kind and is provided "by the suppliers free of charge for the approved amount of heating". The latter means that the beneficiaries do not receive the aid directly in cash, but instead through the energy suppliers as a free-of-charge amount in the energy bill.

Thus, the direction of the changes during this difficult economic period is towards consolidation, a more restrictive approach, naturalization and differentiation of the aid according to the type of heating used.

The main changes in *the subsequent stabilization period* (until around 2001) are limited to the following:

• In 1998, the Social Assistance Law (SAL) and its Implementation Regulations (SALIR) codify all social rights of the lowest income persons and families, Including assisting in the use of energy.

 $<sup>^{6}</sup>$  See Article 9, paragraph 4 of the Social Assistance Regulations.

- Families remain the object of the received support (as is the case with the monthly benefits with the regulation introduced by the Social Assistance Law).
- The program confirms the provision of heating aid only during the heating period, without recovering the "other energy needs" component, which existed until October 1997.
- However, the duration of this period is steadily decreasing: in 1998 it was from 1 November to 30 April; in 1999 the period was shortened to last until 15 April, and ever since 2000 it has remained permanently at five months from 1 November to 31March.
- The differentiation of the standards (and that of the aid by type of heating, respectively) is removed, which facilitates the administration process.
- Only the monthly minimum electricity consumption standard is maintained, increasing it from 400 kWh to 430 kWh of electricity, of which 280 kWh is daily consumption.
- The previous practice for determining the amount of heating aid is restored and is now defined as the difference between the own income and the sum of the differentiated minimum social assistance income and the defined monthly average price of electricity according to the stated standard.
- In calculating the differentiated minimum income for social assistance (which, as indicated, is the first component in determining the income threshold for access to heating aid), since 2001 a preferential rate is applied not only for children under the age of 18, but also for people over the age of 70 who live alone and for disabled persons with over 90% permanently reduced working capacity. These are additional steps toward the calculation and application of a differentiated minimum heating income as a viable criterion/threshold for access to heating aid.
- The economic form of these benefits changes: from natural ones, they become monetary and are made available to the beneficiaries and not to the energy suppliers. This makes it easier to manage, but it is a prerequisite for use of the aid for different purposes and not for heating. Since 2000, natural support has been applied only to families who use district heating, in order to ensure the payment of the heating service to the supply companies, which are suffering from chronic financial instability.
- Centralization of the method of financing since 1999 the funds for the targeted monthly heating allowances are provided by the state budget within the approved funds under the State Budget Act for the respective year and are provided through the budget account at the Ministry of Labor and Social Policy.

In this way, the changes during this period are mostly related to the synchronization of the targeted energy assistance program with the introduced legal framework (the Social Assistance Law); the regulation of aid according to size (minimal increase of the monthly norm, which now also determines the amount of the aid) and according to scope (preferential rates for individual vulnerable groups of beneficiaries); the simplification of the administration of the scheme (the introduction of a cash form of support directly to recipients; an equal amount of aid

for the entire heating season depending on the approved monthly norm); use of the program to reduce the indebtedness of district heating companies.

Subsequent changes to the design of the Targeted Energy Assistance Program in the period from 2001 up until mid 2008 are carried out in a favorable economic environment but with significant increases in electricity and heat prices and they coincide with the restructuring of the electricity sector (privatization, electricity distribution from the electricity distribution network), as well as with the deepening financial problems experienced by the district heating companies, due to the low collection of the receivables from the household subscribers. In connection with the significant increase in energy prices (by over 40% in the period 2002-2004), important changes are made in the period 2001-2003, not only for the optimization of social protection, but also for the easier acceptance by the population of these price shocks:

Firstly, in 2003 the Minister of Labor and Social Policy issues a special Ordinance No. 5 on the terms and procedures for the granting of targeted heating aid<sup>7</sup>, with which this matter is derived from the of the Social Assistance Law Implementation Regulations. With it, the aid differentiation is restored according to the type of heating used – the beneficiaries who are heated by electricity and central heating receive aid equal to the BGN equivalent of the electricity consumption standard; and for those using solid fuel, the aid is determined on the basis of the BGN equivalent of 1.2 tons of briquettes for the whole heating season. The reduction of this solid fuel norm is associated with the reduction of the duration of the heating season from 6 to 5 months.

Secondly, the standard for electricity consumption is increased from 430 kWh in 1998 to 450 kWh in 2001, with the aim of increasing the amount of aid. Thus, the scope of the system is adapting to the growing social burden of rising energy prices, which are becoming a problem not only for the poorest groups, but also for an increasing number of people with regular sources of income, pensioners, low-income employees, etc.

Against this background, and with the new electricity prices adopted by the State Regulator as of 2002 (see Table 2), the value of the electricity consumption standard, which (solely) determines the amount of targeted aid to the beneficiaries, which are heated by electricity and heating, increases by 21%. The actual amount of support for families that are heated by electricity increases by nearly 40% compared to the previous season, when it is differentiated according to the income of families and its average amount equals half of the standard amount. The relative increase is particularly beneficial for families who use central heating, as its price increases by 10% and the aid for them becomes twice as high. This change is justified, given that it is among these consumers that the debt to the companies producing heat is the greatest. Thus, two tasks are dealt with by targeted heating aid: (a) the social protection of low-income customers of district heating companies; (b) providing

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<sup>&</sup>lt;sup>7</sup> See SG No. 53 of 10 June 2003

some solvent demand for their services (volume-based revenue) in order to contribute to the financial stabilization of these companies.

Table 2

Prices of electricity used for household purposes by the population, adopted by the State Energy Regulatory Commission in 2002

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Measurement method	Zones in a 24-hour period	Monthly consumption	Price (BGN/kWh)	Targeted Consumers
	Doily	Up to 75 kWh	0.098	All targeted consumers
With two tariffs	Daily	Over 75 kWh	0.127	All targeted consumers
	Nightly	Entire consumption	0.068	connected to the heat transmission network;     not connected to the heat transmission network for the period 1 April – 31 October
		Up to 50 kWh	0.053	•not connected to the heat transmission network for the period 1 November – 31 March
		Over 50 kWh	0.068	not connected to the heat transmission network for the period 1 November – 31 March
		Up to 75 kWh	0.098	connected to the heat transmission network;     not connected to the heat transmission network for the period 1 April – 31 October
With one tariff		Over 75 kWh	0.127	connected to the heat transmission network;     not connected to the heat transmission network for the period 1 April – 31 October
		Up to 125 kWh	0.098	not connected to the heat transmission network for the period 1 November – 31 March
		Over 125 kWh	0.127	•not connected to the heat transmission network for the period 1 November – 31 March

Thirdly, it is particularly important to note the introduction of social tariffs at daily electricity prices through the so-called "two steps": consumption up to 75 kWh is paid by all users at the old prices ("first step"), and consumption above this limit is paid at the new prices ("second step"). In addition, users not connected to the heat transmission network for the heating period 1 November – 31 March enjoy the preference to pay part of their electricity consumption at the old prices (see table above). This measure can be seen as a form of reallocation of the social effect of the rising prices between high-income groups (which are supposed to consume more energy and pay more for the new prices) and low-income groups (which seek to limit the consumption of energy). On the other hand, however, "universal" access to the first step means unwarranted support/subsidies to wealthier electricity users.

Fourthly, due to the fact that the electricity(and solid fuel, respectively) consumption standards become the sole determinant for the amount of aid, this leads to the elimination of its differentiation depending on the magnitude of the income of the assisted persons and families. As has already been pointed out, since the introduction of the program in 1995, the amount of aid has been calculated as the difference between the sum of the differentiated minimum wage for social assistance plus the value of the electricity consumption standard and the actual own income (with the exception of the heating season 1997-1998 and excluding the customers of district heating companies<sup>8</sup>). Under this method of determination, the allowance

<sup>&</sup>lt;sup>8</sup> Since 2000, they have been awarded the maximum amount allotted by the standard (if it does not exceed the costs actually incurred) and the aid is transferred directly to the district heating companies. The introduction at

is differentiated from BGN 0.01 to the maximum BGN amount allotted by the standard, depending on the income of the family. This avoids the sharp opposition between families with income just below the access threshold and those with income slightly above the threshold who are not entitled to support. If the aid was provided in full for all eligible persons, the unemployed (whose families make up a significant proportion of the assisted persons) would see fewer incentives to start work on the formal labor market. If they start low-paid work and their income exceeds the protected earnings line with a negligible amount, they will lose the right to receive an amount equal to the then half-monthly minimum wage, which is a significant disincentive factor (the effect of the so-called "trap of unemployment"). Thus, the mechanism for targeted energy support used up until the end of 2001<sup>9</sup> seeks to take into account the effects of some or other mechanisms for the social protection of the poor on their behavior on the labor market.

As is apparent from the above arguments, the introduction of an equal amount of aid to all beneficiaries who are heated by the same type of fuel is contradictory to the social justice and impact measure. Its contradiction is mitigated by the existence of the "first step" (which, however, is later abolished), the natural nature of the aid <sup>10</sup> (which in this period is once again transferred to the suppliers), and is to a certain extent justified by the lower administrative costs of implementing the program for targeted energy assistance during the heating season.

Fifthly, in 2003<sup>11</sup> the so-called "Differentiated minimum income for heating" (DMIH) is introduced for calculating the magnitude of the aid. The way it is calculated is as a differentiated minimum income for social assistance: based on the guaranteed minimum income (GMI) and a system of coefficients (or percent, since 2005) for the different social groups. The dimensions of the coefficients (percentages) are generally higher than those used for calculating the differentiated minimum wage for social assistance. Through this parametric change, the Target Heating Assistance Program is given the opportunity to differentiate and regulate access to the benefits provided by it in accordance with its objectives and resources.

Sixthly, the funding of the Targeted Social Assistance Program for heating remains centralized, but is already applied under the program budgeting framework

that time of this exclusion appears to be justified in view of the number of problems in the central supply chain caused firstly by the monopoly of the heating companies and their financial situation, and secondly, by the small number of beneficiaries (25-26 thousand families or about 4% of the total number of beneficiaries).

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9 See Article 15, paragraph 5 of the Social Assistance Law Implementation Regulations (SAAIR) Social Assistance Lawin force in that time.

In principle, cash benefits would have a stronger demotivating effect for low-wage workers, who will be slightly above the protected threshold. Given that benefits are granted in kind, individual motivation (or demotivation) sustained by the individual income at a certain level will be affected by many more factors, including the size of the family, the type of heating in the dwelling, etc. In this sense, the return of the monetary nature of the aid (with the exception of that for heating by heat) in 2010 has a disincentive effect.

<sup>&</sup>lt;sup>11</sup> See Article 2, paragraph 3 of Ordinance № 5 of 30.05.2003, on the conditions and procedures for the granting of targeted heating aid, issued by the Minister of Labor and Social Policy, State Gazette, No. 53 of June 10, 2003.

implemented in the Ministry of Labour and Social Protection (MLSP), and in particular as part of the "Provision of Social Assistance under a Differential Approach" program.

In May 2008, on the eve of the recession, a new Ordinance on the terms and procedures for the granting of targeted heating aid<sup>12</sup> is adopted, which (as amended) is still in force at the end of the period analyzed here. The main changes are related to:

- Extension of the period during which the own income of the assisted persons and families is reported (from one to six months prior to the filing of the application statement). In addition, as of 2009, it is specified that the income is declared for the month in which it was received, regardless of which period it refers to.
- Increase (in 2008 and 2013) of the percentages relative to the GMI on the basis of which the differentiated minimum heating income of the 17 assisted social groups is calculated<sup>13</sup>. This makes it possible for the energy support system to be opened to more beneficiaries.

The analysis of the changes in percentages during the period 2008-2018 shows that, in terms of categories of assisted persons and families, the structure of the percentage system was a constant. The only change is in 2014 with the addition of the category "child, placed in a family of relatives or close acquaintances, or in a foster family". The obvious objective is to specify the amount of assistance for such children by applying a relatively higher rate that further stimulates foster parenting as part of the national child policy.

In 2008, with the adoption of the new ordinance, the legislator applies an equal increase in the values of all percentages compared to those used up to that point in time. This, combined with equal other conditions, allows more people to benefit from heating aid as the value of the income threshold (DMIH) increases. With the next increase in percentages in 2013, "the scope of the targeted energy assistance program increases by about a quarter." A differentiated approach is used, with the increase being higher for the rates applied to co-habiting spouses (1.16 times) and learners (1.15 times), which stimulates school attendance. The least is the increase for the highest percentage of people, e.g. elderly people who live alone (1.08 times). This leads to a narrowing of the differentiation between the individual percentages – the coefficient of variation falls by more than two percentage points (from 20.5% to 18%). The higher rate for a "cohabiting person" than that for "each cohabiting spouse" is noticeable. This is discrimination of legitimate families compared to the competing form of cohabitation.

On this basis, on the issue of updating the percentages considered, *it can be summarized* that, on the one hand, the changes reflect the existence of some instability of this element of the targeted heating support system, but on the other hand, they are indicative of its adaptability to the external and internal factors and conditions in which it operates.

<sup>&</sup>lt;sup>12</sup> See State Gazette, No. 49 of 27.05.2008.

<sup>&</sup>lt;sup>13</sup> Their magnitudes are discussed in further detail in Shopov, 2016, p. 42.

In this regard, particular attention must be paid to the following important circumstance. From 2009 until the end of 2017, the amount of GMI is (once again) frozen at BGN 65, due to the fact that since its introduction the question of the way of its updating (e.g. periodicity, factors, formula, etc.) has not yet been resolved. Such prolonged freezing of the amount of the GMI (determined by the necessary financial stability prioritized over the years, achieved with a restrictive budgetary policy) does not allow for the provision of adequate social protection for the lowest income and risk groups of the population who rely on state support<sup>14</sup>. Therefore, the introduction of specific, higher percentages for the calculation of the DMIH is an approach that allows for a more flexible operation of the targeted heating assistance program for "self" regulation of the income threshold for access to them.

• Reduction of the monthly consumption norm on the basis of which the aid threshold is set – from 450 kWh (2007) to 350 kWh (2008), and 385 kWh of electricity, of which 280 kWh per day and 105 kWh per night (2014) and "at the average end-selling price of household electricity as of 31 October of the current calendar year". It is also possible (with an amendment from 2013) that "in the event of a change in the price of the electricity which leads to a change of up to 10% in the monthly amount of the target heating aid under para. 1 for the respective heating season, the target aid can be determined according to its amount from the previous heating season." This gives new dimensions to the automatic regulator of the energy assistance mechanism and allows for a reduction in aid and/or an incomplete compensation for the growth of the electricity prices. However, it should be noted that this option has not been used so far.

In their entirety, these are restrictive changes (except for the latter), which after 2009-2010 are not adapted to the new socio-economic realities and lead to a decrease in the level of social protection provided by this program. Taking into account the recommendations made to Bulgaria by the EC for improving the scope and adequacy of social assistance in the context of energy poverty, it is increasingly necessary to prioritize the social assistance policy with adequate resources.

Based on the presented retrospective analytical overview of the major changes since 1995 in the design of the program for the provision of targeted social aid for heating in the winter period, the following summaries and conclusions could be made that would be useful in its further optimization in view of ensuring adequate social protection for the poor:

Initially, the program was introduced as a year-round energy support scheme aimed at covering the legally defined minimum "energy" needs of low income individuals and families who cannot provide for their "heating needs" and "other energy needs". Thus, from the outset, the concept of energy poverty, which is associated not only with the lack of heating energy but also with that of other household needs, is set in it.

<sup>&</sup>lt;sup>14</sup>On the other hand, this helps to better target aid.

Art. 3, paragraph 6 of the cited Ordinance (introduced as paragraph 3 with amendment to State Gazette, No. 94 of 2013, amended SG No. 56 of 2018).

The introduction of minimum monthly energy requirements is an important positive point in the design of the program, which has been preserved over the years because it provides automation of the support mechanism (or the income threshold) at any change in energy prices. This, of course, is valid when the standard remains at a constant rate.

Subsequently, the program shifts its focus towards granting heating aid only (1997) and only during the heating period (6 months from 1997 to 1999, and 5 months since 2000).

The conditions for access to benefits from the outset are based on the earnings, wealth and labor status requirements of the basic program for providing monthly welfare benefits to the poor.

Initially, the amount of aid is differentiated in several respects:

- According to income, as the assistance complements the income of the beneficiaries up to a certain threshold (similar to the targeted monthly social assistance scheme), which in turn is defined as the sum of: (a) the differentiated minimum income for social assistance plus the value the minimum monthly energy requirements that are further differentiated as "for heating" and "for other energy needs", and (b) the applicants' own disposable income. In other words, the amount of aid is defined as the difference between this income threshold and the beneficiaries' own income from a previous period. This is a socially fairer way of calculating aid, but it requires greater administrative effort and expenditure.
- According to the type of dwelling, as the monthly energy requirements used are different for one-room and one-bedroom dwellings.
- According to the season, as the norm is considerably reduced outside the heating season.

Since 1997, important changes have been made to the initial design of the program:

- Since 1997, the differentiation according to the size of the dwelling is abolished and by the end of the 90s a differentiation according to the type of energy used is applied. Assistance during the non-heating season as well as the "other energy needs" component are removed as well.
- Since 2003, the minimum electricity and solid fuel consumption *standards* have remained *the only determinant of the amount of aid* for heating and electricity, and heating using solid fuels, respectively. Thus, they start to be supplied in the same amount to all beneficiaries who share the same type of fuel. This, *in terms of social justice and solidarity, puts recipients with relatively higher incomes in a more advantageous position.*
- The norms themselves are distinguished by: (a) *instability* of the dimensions/ parameters used, the overall tendency being towards a decrease; (b) *public uncertainty* about the methodology for their determination.
- As regards the *income criteria*, differentiated coefficients for certain groups of candidate beneficiaries are gradually introduced (1997 and 1998) into those used in the monthly social welfare scheme, as well as the so-called "Differentiated

minimum income for heating" (DMIH), which is introduced in 2003. Since then, the Targeted Heating Assistance Program has applied its own coefficients (percentages – from 2005 onwards), as well as higher ones, to calculate the GMI of the income threshold for access to heating allowances. Changes in percentages provide more autonomous flexibility to the program (especially when there is a continued stagnation in the guaranteed minimum income – GMI), as well as a specific differentiated approach to the 17 different groups of beneficiaries.

All this reflects its gradual *parametric "emancipation"* from the monthly social assistance scheme as well as the experience of optimal adaptation to the pursued budget policy in the interest of the people who need state assistance.

As with the minimum electricity consumption standard, there is uncertainty about the methodology for determining the percentages used to calculate the differentiated minimum heating income. Thus, the changes from this 5-6 year period (1997-2003) largely shape the features of the current up-to-date program for targeted heating aid in the winter season.

The economic form of granting the aid has changed several times from a monetary one (provided directly to the beneficiaries) to a natural one (through the receipt of "free" limit-regulated services and/or solid fuel from fuel suppliers). The natural form, in principle, better guarantees the targeted nature of this kind of aid, but requires greater administrative effort and expenditure. Therefore, the monetary form is preferable, as program administrators apply methods for controlling its use (e.g., the Social Assistance Directorates require and receive from the electricity companies information on whether the recipients of the aid have unpaid bills).

For many years, aid for district heating subscribers has been transferred directly to the companies concerned, helping to reduce deficits in their budgets. For the heating season 2017/2018, it was also decided that this aid should be paid directly in cash. The motive was "to allow for greater flexibility in emergency situations and to guarantee their heating in the winter" resulting from the major accidents in Sofia and other cities, which left many citizens without heating for several days during the frosty January 2017.

The short-term specific support mechanism for heating is the introduction and use in 2002-2003 of the daily electricity prices of the *social tariff* through the so-called "*two steps*". A downside to this approach is the fact that the "first step" also provides support to high-income population groups.

The initial *funding* from the special "Targeted Social Protection" Fund as an extra-budgetary account at the MLSP is replaced by financing at the expense of the republican budget (from 1997 to 2001 – through the municipal budgets, and since 2002 – through the MLSP budget as part of the program budgeting under the targeted aid program).

# Current design of the targeted social protection program for the heating season of the low income population – a summarized description

The immediate aim of this program, according to the Ministry of Labor and Social Policy's report, is "to provide financial means for people with low incomes so

that they are able to provide their heating during the winter period <sup>16</sup>". This corresponds to some of the objectives set out in Article 1 of the Social Assistance Act – "Assisting citizens who, without the help of others, cannot satisfy their basic life needs" and "Support for the social inclusion of those who receive social benefits". Against this background, as a more general objective, the alleviation of heating poverty in accordance with the socio-economic development and capabilities of the country can be considered in a broader sense.

Within these general frameworks, *the parameters of the current program* for the provision of targeted heating aid during the winter season are defined in Ordinance No. RD-07-5 of 16.05.2008 on the terms and procedures for the granting of targeted heating aid<sup>17</sup>. The key ones are, as follows:

Firstly, the right to targeted heating assistance is granted to persons and families whose average monthly income for the preceding 6 months prior to the month of submission of the application is lower than or equal to the differentiated minimum income for heating (DMIH) and who are eligible for receiving the monthly social benefits under the Social Assistance Act Implementation Regulations.

Secondly, the main access criteria are related to the determination of the earning, property, employment, health and age status of the applicants for assistance. These are detailed in Article 10 and Article 11 of the Social Assistance Act Implementation Regulations, the main ones being systemized in Matrix 1.

Matrix 1

Criteria	Description		
Profit threshold – differentiated minimum income for heating (DMIH)	The monthly income declared by the applicant should be below the norm for the different risk groups (DMIH).  The threshold is determined on the basis of the size of the Guaranteed Minimum Income and the percentage system. The applicant must declare his income from all economic activities; from the sale or exchange of immovable or movable property; of rents; pensions; scholarships; monthly supplements for children, etc.		
Ownership	Beneficiaries cannot: have a home with a size larger than the normative definition according to the composition of the family; possess property that can be a source of income; have sold or donated a dwelling, villa, or farmland over the previous 5 years if the transaction exceeds 60 times the amount of GMI; refuse to process land provided to them by a state or municipal land fund (this requirement does not apply to people with reduced working capacity).		
Conditions and requirements for the unemployed	They have to:  •be registered with a labor office;  •have waited 6 months before applying and receiving assistance (this requirement does not apply to people with reduced working capacity);  •not refuse a job or a course of professional qualification offered by the Labor Office;  •not refuse to work for up to 14 days a month for 4 hours a day in municipal employment programs.		

<sup>&</sup>lt;sup>16</sup> See Report on the degree of implementation of the program budgets of the MLSP for 2015, p. 52. The "Activity Report of the Agency for Social Assistance, 2008" states that the objective is "to provide funds for heating for people in severe social situation" (p.4).

With latest amendments in SG No. 56/ 6 July 2018.

Thirdly, the amount of the heating aid is the same for all applicants whose applications for aid declarations are approved. The monthly amount of the aid is determined on the basis of the BGN equivalent of 385 KWh of electricity, of which 280 kWh per day and 105 KWh per night, at the average end-selling price of electricity per household user as of 31 October of the current calendar year. For the heating season 2016/2017 the targeted aid amount was BGN 362,30 for the entire heating season, for 2017/2018 it was BGN 365 and for 2018/2019 it is BGN 374,15.

*Fourthly*, the duration of the heating season is 5 months – from 1 November to 31 March.

Fifthly, the identification of the beneficiaries is based on the application/ declaration submitted to the local Social Assistance Directorate. It provides complete information about the applicant or family that is required in order for social workers to conduct a social inquiry to verify the accuracy of the information submitted. In the application/declaration the applicant shall explicitly indicate the type of heating used – heat, electricity, solid fuel <sup>18</sup> or natural gas. On the basis of the report drawn up as a result of the social survey, the Director of the Directorate issues an order for the granting or refusal of social assistance. It should be noted that for beneficiaries receiving monthly social benefits, in principle, the results of the social survey drawn up in connection with the granting of these monthly benefits are used. This is an important factor in reducing the administrative costs of implementing the targeted heating aid program<sup>19</sup>.

Sixthly, grants are mainly provided in cash and to final beneficiaries. An exception is made in the case of solid fuel heating when the corresponding amount is paid by the Social Assistance Directorate to the solid fuel trader who made the delivery – upon a request expressed explicitly in the application form by the applicant or family.

Seventhly, control over the beneficiaries' use of their cash amounts is made by the Social Assistance Directorates, which provide the respective service providers with lists, containing the full name of the beneficiary, the client number and account holder for which an order is issued for the granting of targeted heating aid, by 30 November. In turn, the utility companies return information to the Social Assistance Directorates on the submitted lists for the presence of unpaid bills and the actions taken during the interruption of the power supply for each of the months during the heating season. In cases where the aid granted has not been used as intended, sanctions shall be imposed. The control relations with the district heating companies are similar.

About 80% of the applications are for solid fuel, which raises *problems* with: (a) the efficiency of using this heating source, which is about 40%; (b) air pollution, which brings forth the issue of policy change in this regard.

The approximate share of administrative costs for the provision of monthly social benefits is around

The approximate share of administrative costs for the provision of monthly social benefits is around 14% of the total expenditure of the program and about 8.5% of that of the target for heating aid (indicative estimates based on the "Report on the execution of the program budgets of the MLSP for 2015", p.52 and 54).

On this basis, the following assessments can be made of the strengths and weaknesses of the current program for the provision of targeted heating aid for the low-income population during the winter season.

Its strengths are related to the following:

- It is an important element of the system for the social protection of the population and, in particular, of social assistance as a second social protection network, including that of the group of targeted social assistance programs, which also includes the provision of monthly social benefits, family allowances to children under the Family Assistance for Children Act and Social Assistance for the Integration of People with Disabilities under the Law on the Integration of People with Disabilities
- In the last decade, the design of the targeted heating aid program has been relatively stabile/sustainable in terms of the mechanism of its operation e.g. terms of access, method of determining the amount of aid, administration and financing, etc.
- The program, by using the same basic principles and approaches, builds upon the scheme for providing monthly social benefits.
- A differentiated approach is applied to the different population groups in order to determine their access to heating aid (through a system of percentages added to the GMI on the basis of which the DMIH is calculated).
- DMIH rates are different and are higher than those used to determine the DMI, which is a lucrative criterion for access to monthly social benefits. This allows for (a) wider access to heating aid and for (b) greater flexibility through self-regulation of the scope of the heating aid program in the case of a prolonged freezing of the amount of GMI.
- The use of minimum monthly heating requirements (in the beginning for energy needs) ensures the automation of the support mechanism at any change in energy prices. This is an important positive moment in the design of the program, which has been preserved over the years.
- Automation has been occasionally (mainly over recent years) combined with ad hoc measures such as (a) the provision of additional budget funds for the provision of one-time heating allowances, or (b) a reduction in the relevant pension coefficient when determining the right to targeted heating allowances for third-age beneficiaries in order to prevent retirees from dropping out of the targeting procedure during the respective upcoming heating season due to the mid-year amount of their pension.
- Beneficiaries are entitled to choose the type of heating they use according to their needs and preferences.
  - Heating aid is relatively well targeted and reaches mostly poor consumers.

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<sup>&</sup>lt;sup>20</sup> On this occasion, it should be noted that Article 12 of the Social Assistance Law stipulates that "social benefits are monthly and targeted". This is not quite accurate since the targeted nature of the aid is determined by their targeting according to predefined access criteria. By virtue of this, the monthly allowances granted on the basis of the GMI also have a target character, which is determined by the conditions listed in Art. 10 and 11 of the Social Assistance Law Implementation Regulations. There are therefore grounds for refining the legal text in Article 12.

- A solid administrative capacity for the practical implementation of the program has been built. There is good interaction between the different stakeholders (e.g. between the SAA and its territorial structures and the National Agency of Incomes, energy suppliers, etc.).
- There is accumulated national experience (a specific "administrative memory") in the use of the social tariff as an additional temporary measure for the social protection of consumers in the case of a significant rise in electricity prices.

The weaknesses of the program are related to the following:

- It focuses on alleviating heat-related poverty and provides benefits only during the winter season. Greater problems related to the alleviation of energy poverty have been excluded from the scope of the program in the second half of the 1990s.
- Unclear/publicly unpublished methodology for defining key elements of the program, such as (a) the minimum monthly electricity consumption standard which determines the amount of aid; and (b) the percentages used to determine the DMIH of the 17 population groups.
- The unclear methodology for setting a minimum monthly power requirement standard allows frequent "manual" changes to its size most likely due to budget considerations. This is a sign of a certain conceptual but also operational fragility of the program.
- The same amount of aid for all recipients, which is determined solely on the basis of minimum monthly electricity consumption. From the point of view of social justice and solidarity, this places the beneficiaries with relatively higher incomes in a more advantageous position.
- The small coverage of heating aid which is why a large proportion of the low-income population is not protected against rising energy costs.
- Dependence of the access to the program on the amount of the GMI, which is usually frozen for prolonged periods of time (e.g. BGN 55 from 2005 to 2009 and BGN 65 from 2009 to 2017<sup>21</sup>). This is a prerequisite for the small scope of heating aid.
- The insufficient size of the benefits, as they make up a very small share of the income of the poor who receive them.

# Possible directions for the development of social protection in the context of combating energy poverty

However, the key structural problems – not just those of the targeted heating social assistance program itself, but the social assistance and social policy system as a whole – are related to the need for clear and explicit face-to-face approach to *energy poverty*, which includes the heating-related poverty, which the program for

At the end of 2017, the Council of Ministers adopted a Decree raising the amount of the GMI to BGN 75 from 2018 onward, with the same BGN 10 step as in the previous increase, but this one was done after a four-year period.

Targeted social assistance for heating - historical experience and development perspectives...

the provision of targeted heating aid is presently aimed towards<sup>22</sup>. In other words, *a transition is needed* from the narrower approach to poverty related to heating in the winter season to a wider approach towards providing social assistance aimed at alleviating energy poverty and, more generally, *towards a state policy, (including an energy policy) aimed at limiting it.* 

This necessity is determined by the complexity of energy poverty, by external factors (e.g. the outstanding commitments of our country in this area, which are derived from the Third Energy Package or the Directive 2009/72/EC on common rules for the internal market of electricity and Directive 2009/73 on common rules for the internal market for natural gas<sup>23</sup>), but also by the expected development of internal factors such as:

- the relatively larger extent of energy poverty in Bulgaria compared to the average European level and the expectations for changes in the national dimensions of this poverty:
  - changes in household electricity consumption, incomes and electricity prices.

### Structuring policies on energy poverty

#### Matrix 2

	Social Problem		Policies	Orientation	Instruments/type	Field of intervention
vul cus an	tection	Poverty related to heating	Social protection through targeted social assistance	Softening the energy poverty of poor persons and families	Targeted social benefits for heating in the winter season according to the consumption of electric energy for heating (financial instrument)	Energy Market; affordability of services for poor consumers
	sumers' Pro		Social protection through social tariffs	Softening the energy poverty of vulnerable customers	Target social tariffs for paying electricity by standards for household usage in addition to heating (financial instrument)	Energy Market; affordability of services for vulnerable customers
	Vulnerable Consumers' Protection		Policies beyond ener	Limiting and preventing the energy poverty of vulnerable customers	Non-financial and long-term measures for: (a) consumer protection, such as: a register of vulnerable customers; improving their awareness; protection of their rights to accessibility and continuity of services, etc.	Outside the energy market; other factors of energy poverty
	Protection of vulnerable customers and other users				(b) enhancing the <i>energy</i> efficiency of housing, optimizing household energy consumption, etc.	

The author's opinion on the issue of the scope of energy poverty is presented in more detail in Tsanov, Shovov, Beleva, Hristoskov, 2017, p. 226-238; Shopov, 2016.

These documents are binding on Member States and require that they: (a) Take measures to protect

These documents are binding on Member States and require that they: (a) Take measures to protect end-users and, in particular, provide adequate safeguards for the protection of vulnerable customers. In this regard, each country defines the concept of "vulnerable customers", which may refer to *energy poverty* and, inter alia, the ban on stopping the electricity of such consumers at critical times. (b) Take appropriate measures, such as drawing up national energy action plans and providing social security assistance to ensure the necessary electricity supply to vulnerable customers or providing energy efficiency aid in order

to address the energy poverty as soon as it arises, including in the wider context of poverty.

In this context, there are open questions to be addressed, such as, for example, the adoption of a method for determining the energy poverty threshold and the definitions of "energy poverty", "heating poverty" and "vulnerable customers" (in response to the requirements contained in the Directives). On this basis, it is necessary to develop conceptual frameworks of the state program for social assistance for the energy poor persons and families; and, *more broadly, to establish a national strategic framework for combating energy poverty, including relevant action plans.* 

Matrix 2 illustrates the structuring of policies against social issues related to energy poverty.

On the basis of the retrospective analytical review of the National Program for Targeted Social Assistance for Heating, proposals can be made to optimize social protection in the area under consideration in the following two main directions:

- •with regard to the current program for targeted heating aid in the winter season;
- •with regard to the publicly announced intentions of competent state institutions for policies on energy poverty in particular the introduction of social tariffs<sup>24</sup>.

Opportunities for improving the program for targeted heating aid during the winter season

These options are related to the *parametric changes* needed in order to overcome some of the key weaknesses of the program, which have been summarized above.

Weakness 1: The profitable access criteria that apply to applicants for heating aid through the so-called "DMIHs" are based on the Social Assistance Grant, which has not changed since 2009. One reason for such a long freeze period is that there is no clear and transparent mechanism in place for updating the nominal size of the GMIs within the tripartite social dialogue.

<u>Proposal 1</u>: Update the GMIs with a clearly defined periodicity (e.g. annually or once every two years).

It may be based on the average rate of increase of the poverty line and other minimal incomes such as the minimum wage, the social old-age pension (another option is the minimum retirement pension and the minimum age of retirement) or the average unemployment benefit. The choice of these variables is conditioned by their relationship to monthly social benefits, such as "last resort" minimal incomes for the poor persons and families, and their socio-economic profile, which is defined mainly by their income (below the poverty line), employment (working for minimum wages; unemployed) and age (pensioners with a minimum pension) status.

In this case, "based on the average rate" does not mean its direct application, but its use as a basis for national contracting between the social partners and within a predetermined "corridor" – for example, plus or minus 5% of the average. The aim is for the GMI to follow the development of other sources of minimal income and

<sup>&</sup>lt;sup>24</sup> In addition, the final section of the study summarizes some areas of long-term intervention for combating energy poverty.

with that – to provide more opportunities for poor people and families to meet their living needs, which is also a leading goal of social assistance.

At the first update of the GMI, it would be logical to make a one-off increase to restore its ratio (for example) to that of the official government-defined poverty line, at the level of around 40% of the one achieved during the last update in 2009. The proposed mechanism for upgrading the GMI can then be applied.

Weakness 2: The unclear and not public methodology for defining key elements of the program, such as: (a) the minimum monthly electricity consumption standard which determines the amount of aid; (b) the rates of the percentages used to determine the DMIH of the 17 socio-economic groups of the population, which rates can be considered as a specific equivalent scale, reminiscent of the OECD equivalent yield scale.

#### Proposal 2:

- a) The methodology for determining the size of the minimum monthly electricity consumption requirement for heating during the 5 winter months should be the subject of public discussion and acceptance within the tripartite dialogue. It would be logical that this methodology and this standard, with the accompanying equivalent scale for electricity consumption, depending on the composition of the assisted family (as is proposed to be introduced), be part of the methodology, and respectively, of the minimum, reasonable consumption of electricity for domestic purposes that would be developed in connection with the preparation of social tariffs. This will abolish the current possibility of frequent "manual" changes in the size of the heating standard, which marks a certain conceptual but also operational fragility of the program.
- b) The differentiated minimum heating income for the different socio-economic groups of the population, apart from the income component, which is determined by the system of percentages for the respective group, should also adequately include the consumption standard for electrical heating. The DMIH thus defined could be used as a capped ceiling for the differentiated amount of heating aid (see the next proposal).

Weakness 3: The same amount of heating aid for all recipients, which is now determined solely on the basis of minimum monthly electricity consumption. From the point of view of social justice and solidarity, this places the beneficiaries with relatively higher incomes at a more advantageous position.

#### Proposal 3:

- a) The beneficiaries' labor income should be reduced, for example, by 30%, i.e. with a coefficient of 1.3 when determining their earnings status for access to benefits (similar to the current adjustments to increased pension rates). This will create incentives for working-age workers to avoid unemployment traps, where disposable income from work decreases compared to unemployment benefits and compensations.
- b) Similar to the practice of the mid-1990s, the amount of heating aid should be defined as the difference between the DMI calculated under proposal 2b and the disposable income of the beneficiaries. Thus, the aid will be differentiated according to

the income of the assisted persons and will avoid the sharp opposition between those with income below the poverty line and those with income slightly above the poverty line, who are not entitled to support.

Weakness 4: The program focuses on alleviating heat-related poverty and provides aid only during the winter season. The wider problems related to the alleviation of energy poverty have been out of its scope since the second half of the 1990s.

<u>Proposal 4</u>: The main structural change in the targeted heating program should include its reorientation from heating poverty to energy poverty as well as its transformation from seasonal into year-round.

This can be achieved if there is an explicit political solution according to which relieving and reducing energy poverty becomes part of the strategic objectives of social protection (see the above matrix for structuring policies on energy poverty) and after the planned "divestiture" of the proposed (as temporary) social tariffs by the Ministry of Energy. Thus, naturally, under a liberalized electricity market, the two targeted social protection mechanisms will be consolidated, with the social tariffs being combined with the heating aid. The new, complex energy social benefits retain their target character, i.e. access to them (should be) after a check of the income, property, family, health, etc. status, but they are year-round, with the heating component being active only in the winter season, as it currently is.

The next logical step is, after evaluating the application of the "Consolidated" Targeted Energy Assistance Program, that it should be consolidated with the Targeted Monthly Social Assistance (GMI) program. A prerequisite for a "consolidated" targeted social assistance program for energy poor people is to adopt a definition of energy poverty and to observe the basic principles of targeted social assistance.

In this situation and on the basis of a system of criteria for access to targeted heating aid similar to the one currently applied, the following approach can be proposed for determining the amount of energy aid, which is illustratively based on the 10% rule, i.e., it is assumed that Bulgaria has adopted as energy poor consumers, those whose normative energy consumption is over 10% of their income:

- Standards for electricity consumption per person for different household needs (heating, cooling, lighting, hot water, communications, etc.) are being developed, including an equivalent scale for this consumption depending on the composition of the family.
- Based on the cost of electricity, the equivalent regulatory cost for the respective applicant beneficiary is determined.
- If this expenditure is, for example, more than 10% of the own disposable income declared by the applicant beneficiary (or other national rate established by our country) and if the applicant meets the access criteria, he/she can receive aid<sup>25</sup>.

<sup>&</sup>lt;sup>25</sup> According to the author's estimation, the energy efficiency ratio by 2015 is around 35% using the "10% rule" indicator and applying the normative approach, with the sum of the normative for heating during the winter period (385 kWh) and the average weighted sum of the annual dimensions of the norms

• The amount of the aid is differentiated and is equal to the difference between the normative equivalent energy costs of the specific beneficiary and the 10% share of their disposable income (or other national threshold established for our country); in order to simplify the practical application, instead of the amount of aid to be differentiated by "difference calculated up to the last penny", three amounts of this benefit may be used. For example, they can be allocated to the beneficiaries divided into three groups according to the magnitude of the difference between the regulatory equivalent energy costs and the 10% share of regulatory costs in income.

In this case, it would not be necessary to re-calculate the DMIH in accordance with proposal 2-b.

#### Using Social Tariffs

It has already been mentioned that our country has experience in this regard, as social tariffs were used in the period 2002-2003 in the form of the so-called "first step", which belongs to the so-called "progressive tariffs"<sup>26</sup>. Similar tariffs apply to other countries (Belgium, Cyprus, Greece, Spain, France, etc.) but it is stressed that "... as a rule, they focus on ensuring short-term tolerance – ensuring access to electricity at a fair price (lower than prices in commercial contracts) for certain population groups that identify themselves as the most vulnerable to rising energy prices.<sup>27</sup>" Although these tariffs are, as a rule, temporary, they are criticized for the way they target the vulnerable groups they choose and the adequacy of the support they provide (see Dobbins, Pye, 2016, p. 126).

In the spring of 2016, the ME proposed as a major financial measure for the protection of vulnerable customers the introduction of a social tariff that covers 70% of the market price of electricity, under which the costs would be at the expense of the state.

It is intended to benefit vulnerable customers that meet the following criteria:

- persons over the age of 70 living alone and receiving income only from pensions up to the amount of the defined poverty line in the country for the respective year;
- persons with over 90% reduced ability to work, who require a caretaker in order to function;
- Families with disabled children, who require a caretaker in order to function; persons and families receiving targeted heating allowances under the Social Assistance Act.

offered for social tariffs being conditionally accepted as a norm for the consumption of electrical energy household needs.

The social tariffs can come in one of the following three forms: 1. Progressive tariffs – the more energy a consumer uses, the higher the tariff he pays is. 2. Lower tariffs for certain customers – applied to users who have greater specific energy needs, for example electrical equipment that needs to operate around the clock. 3. Tariffs according to the time of use (see the World Bank report for Bulgaria, 2017, p. 16).

In this way, the choice is oriented towards the so-called. "lower tariff for certain users". The circle of persons meeting these requirements is limited because it is based on specific social criteria, with the exception of beneficiaries of allowances for heating, who are determined based on multiple preliminary socio-economic requirements common to all candidates. Social criteria specify the "vulnerability" of the relevant public, but it is not clear why other groups remain outside their scope that would otherwise qualify under the definition of "vulnerable consumers" offered by the ME, such as unemployed persons with income up to the poverty line, retirees under age 70 with income up to the poverty line in the country for the respective year, etc.

The social tariff is proposed to be applied for a limited monthly amount of electricity that covers the necessary basic electricity needs for households, respectively:

- up to 100 kWh per month for a household that uses district heating or natural gas to heat domestic water, or
- up to 150 kWh for a person/household using an electric water heater for hot water outside heating needs.

It is a positive fact that the ME justifies the amount of the social tariff with its exemplary cost norms to cover the minimum basic household consumption needs for electricity (on used appliances and in general). Without raising the issue of the justification of these norms, <sup>28</sup> they can be seen as a result of the implicit adoption and application of the cost-*normative* method for determining poverty, as well as from the underlying understanding of the role of combating energy poverty (that the provision of a certain amount of energy is not an objective but a means of meeting the needs of the people). The list does not include heating appliances, the reason being that the social tariff will complement the existing social benefits for heating.

On this basis, it can be concluded that the *orientation of the proposed* government measures is wider and aims at shaping and conducting a policy aimed at energy poverty and not just at heating related poverty, which is the right direction. This is also confirmed by the fact that, for the fourth target group (including recipients of heating aid), social tariffs are combined with heating aids, thus introducing elements of the proposed consolidation of the two targeted social welfare mechanisms for targeted social protection.

The Social Tariff for Electricity for Vulnerable Customers is reasonably proposed to be a temporary measure and act for 5 years – until the full liberalization of the electricity market.

On this basis, the following additional suggestions can be made:

<u>Proposal 5:</u> Other vulnerable customers meeting the "income below the poverty line" criterion (such as unemployed persons and pensioners under the age of 70) should be included in the scope of the social tariffs.

<sup>&</sup>lt;sup>28</sup> The approach to their determination is the subject of constructive criticism in a report by the Open Society Institute (see Zahariev et al., p. 10 et seq.).

<u>Proposal 6:</u> It should be explicitly specified which poverty line will be used as a lucrative access threshold – the one accepted by the government, the one calculated by the NSI or any other one.

<u>Proposal 7:</u> Specify whether electricity consumption norms refer to a person or a household (it is now stated that the 100 kWh per month are per household and the 150 kWh per month are per "person/household") In view of this, and given that the heating subsidies currently in force are of a uniform size and are granted to "persons and families", it is advisable that: (a) the above norms should be provided "per person"; (b) together with this, an equivalent household electricity consumption scale should be drawn up to be used for calculating the legal consumption of electricity depending on the composition of the assisted family.

## Identification of other areas for long-term intervention of the policy for limiting the energy poverty in Bulgaria

Without going into detail on this broad issue, the current study outlines possible long-term measures for curbing energy poverty and summarizes the specific measures offered by different national institutions that have been detailed in their officially published documents<sup>29</sup>.

Long-term measures are divided into two types:

- non-financial, mainly affecting the administrative system for servicing the energy poor and providing information about them;
- measures for increasing energy efficiency, mainly related to the reduction of heat losses in dwellings.

In addition to these two types, there are additional measures which help fund the above two sets of measures, as well as the development of a comprehensive strategy.

According to a number of authors, energy poverty is a problem with three main elements, which are referred to as the "Three Pillars of Energy Poverty" – low income, high energy prices and energy inefficient housing (see Thomson, 2013).

Whilst targeted heating aids address the problem of low income and the social tariff targets high prices, long-term measures are mainly related to increasing the energy efficiency of housing.

A well-developed holistic energy poverty policy should include measures for each of the above mentioned pillars. At the same time, implementing these measures requires effective administration to store, maintain and update target group data due to the dynamics of population, income, and housing. The administration of these measures requires data maintenance not only for household income, their structure and peculiarities, but also their housing. Housing data and energy efficiency measures allow setting regulatory standards for determining the real energy needs of each household.

<sup>&</sup>lt;sup>29</sup> See e.g. Economic and Social Council of the Republic of Bulgaria, 2015; http://www.ombudsman.bg/pictures

Therefore, one of the first steps in the development of non-financial measures for energy poverty is the creation of a database for households. In general, non-financial measures do not require large financial resources but are an important precondition for the implementation of other more resource-intensive measures. The most important *non-financial measures* include:

- 1) Creating a database of the households. This measure helps protect consumers by improving their awareness, as well as the awareness of the government and energy companies about the target groups in order to ensure the accessibility of services to all citizens. The measure allows the identification of the number of energy poor and their grouping according to the class of energy efficiency of the dwelling they occupy. In this sense, it focuses on all users and enables them to be subdivided into subgroups. In Bulgaria there is a proposal from the Ministry of Energy to create a register of vulnerable customers whose electricity should not be stopped under any circumstances because of their state of health people with life support equipment in their homes. In order to implement this measure, it is necessary to develop an independent electronic database sharing platform with a different degree of data anonymity according to the user.
- 2) Carrying out energy saving information campaigns is a measure aimed at enriching household knowledge for smart energy consumption and energy saving in the home. The target groups of such information campaigns usually include all users and work with individual groups of vulnerable users in the case of specific projects. Energy-saving projects typically include low-income customers, according to the practice of other EU Member States.
- 3) The introduction of a ban on the interruption of the electricity supply during the winter period is a measure for the protection of the most vulnerable groups during the winter, when heating is vital and life-saving. The measure was regulated by the EU in 2009 with Directives 2009/72/EU and 2009/73/EU but in practice it is still not implemented in Bulgaria. It was proposed by the Ministry of Energy in May 2016 for a wider target group of vulnerable consumers to be identified by the new definition. The introduction of such a measure should also include a mechanism for dealing with accrued liabilities and adequate burdensharing, so as not to burden the system of payments and obligations with energy companies.
- 4) Developing a Code of Ethics for Energy Suppliers is a necessary measure for establishing rules for good supplier behavior. This measure was proposed by the Ministry of Energy in Bulgaria in May 2016 and it implies the need for transparency of the electricity supply rules in order to help consumers.

The measures for increasing energy efficiency, as already mentioned, can be divided into two groups – technical and behavioral. Behavioral measures are related to the reasonable consumption and management of energy in the home through the use of smart meters. The technical ones are divided into low-cost and high-cost ones. The low-cost measures are related to increasing the efficiency of

appliances and the introduction of smart meters to measure energy consumption. The high-cost measures include building renovations which may include several measures at the same time.

Low-cost measures include:

- the insulation of gaps around windows, doors, floors and walls, low energy lighting, energy-efficient household appliances, small water and energy saving devices, small energy consumption monitoring devices, pipe insulation and window insulating films;
- the use of intelligent meters for providing information on account content, allowing customers to monitor energy consumption in real time and control it to their liking. This reduces unreasonable consumption and saves unnecessary costs.

Sets of these energy efficiency products and services can be delivered to consumers at a low cost as a package of equipment, appliances and energy efficiency information.

The benefits of low-cost measures for increasing the energy efficiency of buildings are much smaller than those of high-cost measures, but they allow for the reduction of a certain amount of energy in poor households, thereby alleviating the burden of long-term bills. There are currently no low-cost programs in Bulgaria.

High cost measures include:

- the insulation of walls, windows, ceiling, floor, pipes, replacement of radiators, boilers and the complete renovation of several of these elements at once.
- the renovation of dwellings usually a major measure in energy efficiency strategies, targeting specific target groups according to different criteria, specific for the different EU countries.

In Bulgaria, the latest active renovation program for residential buildings is targeted at all multi-family residential buildings according to the type of building. The program is aimed at all residents, lacking focus on energy poor and vulnerable customers. In the Mechanism for the Protection of Vulnerable Customers, proposed in 2016, the Ministry of Energy proposes that the future application programs in Bulgaria should prioritize multifamily buildings in which more than 30% of the residents fall under the "energy-vulnerable customers" category.

Minimum energy efficiency requirements and building energy class passports (certificates) are needed in order for home renovation programs to work well (including both low-cost and high-cost measures). Minimum energy requirements and energy passports allow access to standardized and transparent housing information and provide advice on how to improve energy efficiency. The introduction of housing information from energy passports also helps to adequately analyze energy poverty, calculate the "regulatory energy consumption", and measure the real effect of policy implementation.

In Bulgaria it is necessary to develop a legal framework for enforcing the measure with the relevant normative documents and to develop new units for monitoring and control at the Sustainable Energy Development Agency (SEDA). Difficulties also exist with the introduction of a methodology for calculating energy

performance at the pan-European level, as 35 different methodologies already exist, according to the EC report.

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Financing measures for energy-poor households are an integral part of energy poverty policies, as well as the formulation of a comprehensive strategy. They can be summarized as follows:

- 1) The redirection of the energy savings obligation schemes entirely to the "Household" sector. This measure allows for the creation of a market mechanism in which energy suppliers play the role of competing intermediaries in search of the best target groups and the poorest households with the most inefficient housing, in order to realize the largest savings.
- 2) The structuring of an Energy Poverty Assistance Fund, which is to be funded by both the state and the free market traders and electricity producers, in order to support vulnerable groups.
- 3) The establishment of a unit for tracking and monitoringenergy poverty, and of mechanisms for the systematic monitoring of the achievement of the set goals. Under the proposals for a new Article 29 of the Energy Efficiency Directive 2012/27/EC, each Member State must create a set of criteria for assessing energy poverty, monitor the number of households affected by energy poverty and report on the development of energy poverty and the measures taken to prevent it.

The adoption of an energy poverty strategy is an important measure for Bulgaria. That is why a large number of independent institutions are coming out with opinions and reports on the topic. The prerequisites for the development of a successful strategy are: the establishment of a clear definition of energy-poor households; the adoption of a system of indicators for measuring, monitoring and assessing energy poverty; as well as the drafting and adoption of national definitions of key concepts related to energy poverty. On this basis, clear objectives for public policies, coordination units between the different institutions, etc., can be developed. In this way, every element of energy poverty (low income, high prices and low-quality housing) is reached. Thus, a base for much needed administrative and financial instruments is created in order to address the problem. The absence of each of these five elements in a comprehensive policy would be a hindrance to the effective tackling of the problem.

To summarize, the specific measures proposed by the various institutions include (see Matrix 3):

- the introduction of a national support scheme for the replacement of appliances with higher energy efficiency and the free replacement of measuring instruments (Ombudsman of the Republic of Bulgaria);
- the creation of a fund for supporting the energy poor, which is to be funded by the state, the free market traders and the electricity producers (Ombudsman of the Republic of Bulgaria, the Confederation of Independent Syndicates in Bulgaria (CISB);

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- the establishment of local municipal councils, providing vulnerable consumers with guidance and technical assistance on energy efficiency (CISB);
- encouraging the role of trusted information intermediaries, such as consumer associations, local authorities and public institutions, as a source of advice on an effective energy strategy for households (CISB).

Matrix 3

Areas and measures for long-term intervention of the policy for limiting the energy poverty in Bulgaria (summary)

Group	Measure Type	Target Group	Offering institution
Non-	Conducting information campaigns for saving energy	All consumers	ME, CISB
financial	Creating databases with customer information	All consumers, vulnerable clients	EC, ME (Vulnerable Clients Register)
	Introduction of a ban on the interruption of the electricity supply during the winter	Vulnerable clients	ME, EU
	Developing a Code of Ethics for Energy Suppliers	All consumers	ME, Ombudsman of Bulgaria
Long- term	Increasing the energy efficiency of residential buildings:  A. Refurbishment of buildings  1) High cost measures — complete insulation of walls, windows, ceiling, floor, pipes, replacement of heating systems (radiators, boilers)  2) Low cost measures — energy efficient appliances (lighting, appliances, small energy saving appliances, water saving appliances, small measuring devices); elementary thermo-insulation of joinery and living quarters  3) Intelligent meters and information on account content	All consumers, vulnerable clients	ME, EU, CISB, Ombudsman of Bulgaria
	B. Introduction of Minimum Energy Efficiency Requirements and Certificates for the Energy Class of Buildings	All consumers	EU
	Redirecting energy saving obligation schemes to the "Household" sector, with a focus on energy poor individuals	Energy poor	EU
	Adoption of strategic documents for combatting energy poverty	Energy poor	ME, EU, CISB, Ombudsman of Bulgaria, Open Society Institute, academic researchers
	Establishment of a unit for monitoring energy poverty and assessing the fulfillment of the set objectives	Energy poor	EU, Open Society Institute, academic researchers, CISB
Additional	Offering the possibility of debt restructuring	Vulnerable clients	ME, Ombudsman of Bulgaria
Additional	Establishment of a fund for supporting the energy poor	Energy poor	Ombudsman of Bulgaria, CISB

In conclusion, the well-known fact that the policy for limiting energy poverty in Bulgaria cannot be an initiative and responsibility of an individual institution should be mentioned. Political will and consensus are needed in order for solutions to be reached, including ones aimed at optimizing the social protection system, which is based on resource security, public support and interinstitutional coordination.

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