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connect, not divide*



CO-EMEP – Improvement of cooperation for better energy management
and reduction of energy poverty in HU-HR cross-border area

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Analysis of existing regulations and strategic documents regarding energy, energy poverty and social welfare in Croatia

Prepared by Medjmurje Energy Agency Ltd.

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0. Table of contents

- 0. Table of contents..... 2
- 1. Introduction 4
- 2. Regulations and strategic documents regarding energy and energy poverty 7
 - 2.1. Basic principles of regulating energy sector in Croatia 8
 - 2.2. Regulations and strategic documents regarding energy and energy poverty ... 11
 - 2.2.1. General multi-level regulations and strategic documents..... 12
 - 2.2.2. Specific regulations and other relevant documents..... 20
 - 2.3. Conclusions..... 23
- 3. Regulations and strategic documents regarding social welfare 26
 - 3.1. Social welfare system in Croatia..... 27
 - 3.2. Regulations and strategic documents regarding social welfare 30
 - 3.2.1. General multi-level regulations and strategic documents..... 31
 - 3.2.2. Specific regulations and other relevant documents..... 35
 - 3.3. Energy-related social supports 36
 - 3.4. Conclusions..... 38
- 4. Future challenges and recommendations..... 40
- 5. References..... 42

List of figures

Figure 1 – Energy poverty drivers 4
Figure 2 – Motives for regulation competitive energy markets 8
Figure 3 – Key dimensions of EU 18
Figure 4 – Principles of social welfare system in Croatia 28

List of tables

Table 1 – A comparison of key energy goals for 2020 and 2030..... 10
Table 2 – Existing measures to alleviate energy poverty 18

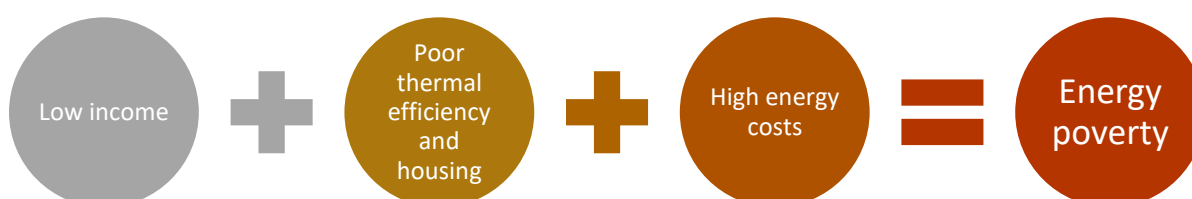
1. Introduction

Energy poverty represents one of the main challenges of this century with whom European Union (EU) and Member States (MS) are dealing. Since addressing energy poverty means making changes to the living environment, it requires involvement of wide range of stakeholders such as building specialists, architects, designers and sociologists who understand household arrangements and dynamics. Furthermore, reduction of energy poverty requires behavioral and usage changes and for that, the involvement of behavioral science and other social sciences is also needed.

A common European definition for energy poverty does not exist, but many MS acknowledge the existence of this problem and its negative impact which is translated into severe health issues and social isolation. Different terms are used to describe persons affected by energy poverty such as fuel poor, energy poor, vulnerable energy consumers or, to a larger sense, at-risk-of-poverty or low-income people. Recognizing the problem and tackling energy poverty goes beyond the issue of income and involves much more. In order to resolve the problem of energy poverty it is important that policy to tackle energy poverty should be integrated with social, energy and environmental policy. In this way, a variety of challenges can be tackled at once. Energy poverty reduction policy has to give a direction to the way in which the housing stock can be made more sustainable so the renovation priorities can be set. It should also include the needs of different groups of households. In addition, to ensure effective implementation of defined policy in tackling energy poverty, cooperation between ministries, regional and local authorities and other relevant institutions (energy and regional development agencies, social institutions, etc.) is crucial.

All across the Europe there are many ways to cope with energy poverty issues and to protect vulnerable consumers, including social tariffs for energy, social subsidies and heating grants to low-income households. However, these are rather passive measures, aiming to preserve the status quo and representing an increasing burden for public budgets without creating economic growth or leveraging private investments. The problem of increasement of energy prices tends to further increase the number of people living in energy poverty, especially if combined with high unemployment rates and with an income that does not grow proportionally with the energy prices. Therefore, the most effective and sustainable way for consumers to reduce their energy bills is through reducing the energy demand of the building by implementing energy-saving and management measures. In the following figure we can see the main energy poverty drivers.

Figure 1 – Energy poverty drivers



Due to economic recession in Croatia that started in 2008 and lasted for seven years, rising electricity and gas prices and low energy efficiency in residential buildings, the number of households in Croatia that are facing energy poverty increased. When we talk about energy poverty and tackling this issue in Croatia, there has been a lack of methodical approach at national level to measure, monitor and combat energy poverty. Like many other European countries, Croatia is also missing a systematic and adequate policy framework to tackle the problem of energy poverty. Currently, there is no official energy poverty definition and no distinction between energy poverty and general poverty in Croatian legislation. The only recognized measures of help (energy) poor households are direct payments of utility bills and incentives for energy refurbishment of houses and multi-apartment buildings. Due to lack of methodological approach at national level, local and regional government units are facing many challenges in dealing with energy poverty and since they don't have relevant national guidelines to follow, they can't define and implement effective measures to combat energy poverty in their administrative area.

The first step in tackling energy poverty would be identification and analysis of existing energy poverty and social welfare policies and legal documents in order to identify the main problems and shortcomings in the implementation of existing policies. The main purpose of development of this document is to analyze existing regulations and strategic documents regarding energy and energy poverty as well as social welfare system and consequently identify areas where they can be integrated together with the aim of reducing energy poverty. Analysis of the existing literature on energy poverty and social welfare was conducted using publicly available resources as well as access to scientific papers. A thorough assessment of Croatian legislation related to energy poverty and vulnerable consumers has been carried out, and the main findings are listed in the following chapters of this document.

The results and findings of the analysis of existing regulations and strategic documents will be used in development of energy poverty definition and identification of the criteria for defining concept and term energy poverty. It will be also used as educational material for regional and local government units during the development of the plans and other relevant documents in order to reduce energy poverty in their administrative area. The terms energy poverty and vulnerable users were first mentioned in energy acts so in the first chapter of the document, regulations and strategic documents regarding energy and energy poverty in Croatia will be analyzed.

Since many people who are dealing with poverty mainly deal also with energy poverty it is important to analyze the regulations in the social welfare system in order to identify the connection and differences between poverty and energy poverty and identify the existing mechanisms for helping socially vulnerable citizens who also deal with energy poverty. Accordingly, in the second chapter regulations and strategic documents regarding social welfare system will be analyzed.

CO-EMEP – Analysis of existing regulations and strategic documents regarding energy, energy poverty and social welfare in Croatia

In the third and final chapter of the document the future challenges and recommendations regarding actions and measures which should be taken in order to tackle and reduce energy poverty will be given.

2. Regulations and strategic documents regarding energy and energy poverty

The terms of energy poverty and vulnerability have officially been presented and brought into mainstream of EU energy policy after the Lisbon Treaty, international agreement which was signed by EU MS on 13 December 2007 and entered into the force on 1 December 2009. The Lisbon Treaty was the main driving force in developing the Third Energy Package (TEP) which aims at improving the functioning of the internal energy market and resolving certain structural problems. TEP defined the following legal requirement to protect vulnerable consumers in energy markets (Directives concerning common rules for the internal market in natural gas (2009/73/EC) and electricity (2009/72/EC)) which MS should meet within their legal framework¹:

- take appropriate measures to protect final customers;
- ensure that there are adequate safe guards to protect vulnerable customers;
- define the concept of vulnerable customers which may refer to energy poverty and to the prohibition of disconnection of electricity (gas) to such customers in critical times;
- ensure that rights and obligations linked to vulnerable customers are applied;
- take measures to protect final customers in remote areas.

The term of energy poverty is recognized in two, i.e. four key EU energy efficiency directives: **Energy Performance of Buildings Directive 2010/31/EU** (EPBD) and **Directive amending the Energy Performance of Buildings Directive 2018/844/EU** which requires that relevant actions to alleviate energy poverty have to be outlined in the national renovation strategy and also the **Energy Efficiency Directive 2012/27/EU** and **Directive amending Directive 2012/27/EU on energy efficiency 2018/2002/EU** that requires a share of measures to be implemented amongst vulnerable households, including those affected by energy poverty. Finally, the role of renewable energy to help fight energy poverty through reduced consumption and lower supply tariffs has been recognized in the **Renewable Energy Directive 2009/28/EU** and **Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources**. Many MS had to take action to address the issue of energy poverty at their national level by developing national action plans and other appropriate documents to tackle energy poverty, aiming at decreasing the number of people suffering such situation. Also, they should ensure the necessary energy supply for vulnerable consumers.

Energy poverty has become a rising problem in Croatia as in most MS. Considering theoretical energy poverty line of 10%, the average households from first six deciles are struggling with the problem of energy poverty². The problem is additionally emphasized by the condition of residential stock because most of residential buildings are family houses built before 1980 and characterized by a high energy consumption

¹ [1]

² [2]

for heating. The assessment of energy poverty in Croatia by using the number of people and households that are beneficiaries of vulnerable consumer subsidies shows that approximately 3% of the total population are energy poor according to the existing legal framework in Croatia. However, according to EU Statistics on Income and Living Conditions, the share of population that cannot keep its home adequately warm amounts almost 10%³.

Based on these results we can see some inconsistency in the policy for addressing the energy poverty problem, since the share of population covered by legally defined measure is not equal to the share of potential energy poor population. Accordingly, the problem of energy poverty in Croatia still remains within social policy and there is a need for development of systematic and long-term approach in dealing with this issue.

Before going into analysis of existing regulations and strategic documents regarding energy and energy poverty it is important to address some basic principles of regulating energy sector in Croatia which is the main driver of economic development in Croatia.

2.1. Basic principles of regulating energy sector in Croatia

Croatia has around four million inhabitants and rich potential for renewable energy and energy efficiency. By regulating energy sector national bodies seek to address “market failure” to deliver desired goods and to protect consumers, society and the environment. The primary driver for regulation infrastructure sectors (public service sectors) such as energy is generally to ensure proper competition and to prevent the growth of a dominant group or single utility services.

In the following figure we can see the main motives for regulating energy markets.

Figure 2 – Motives for regulation competitive energy markets⁴



The energy sector in Republic of Croatia is regulated by a large number of acts and bylaws. Most acts in this area have been amended several times in recent years in order for national legislation to be harmonized with the EU acquis. The energy sector is one of the most important drivers of overall national economy. All efforts made in the development of this sector guarantee that the key role of energy for the development of Croatia in the future will be even greater. That is why the Croatian Government and

³ [2]

⁴ [3]

the Ministry of Economy and Sustainable Development pay special attention to the development of the energy sector in Croatia.

The reform of energy sector in the Republic of Croatia began in July 2001, when a number of energy related acts was passed by the Croatian Parliament to implement the First Energy Package. By these acts the basic legislative framework for restructuring and reorganization of the energy sector was established. At the end of 2004, the Second Energy Package was implemented through the adoption of new energy related acts: amendment of Energy Act, the new Electricity Market Act and Act on the Regulation of Energy Activities and Production, Distribution and Supply of Heat Energy Act (it's no longer in force). As part of the process of harmonisation of the Croatian legal framework with the Third Energy Package, in 2013 a new Electricity Market Act was adopted and, immediately after that, the new Gas Market Act. Due to the process of harmonisation with EU rules, the new Energy Efficiency Act and the new Heat Energy Market Act were adopted. After the publication of the new energy package Clean energy for all Europeans in 2016, Croatia started to align its national legislation with new European targets defined within this package.

The main act in regulating energy sector in Croatia is **Act on the Regulation of Energy Activities** (OG 120/12, 68/18). Act on the Regulation of Energy Activities regulates the establishment and implementation of the system for the regulation energy activities, the procedure for establishing the energy regulatory body and other matters of importance for the regulation of energy activities. Due to the Act on the Regulation of Energy Activities, the basic goals of the regulating energy activities are as follows:

- to ensure objectivity, transparency and non-discrimination in the carrying out of energy activities;
- to look after the implementation of the principle of regulated access to the network/system;
- to set the methodology for determination of tariff elements of tariff systems;
- to establish an energy efficient market and market competition;
- to protect energy customers and energy undertakings.

Regulation of energy activities in Croatia shall promote efficient and rational use of energy, entrepreneurship in the energy sector, investment in the energy sector and environmental protection. Regulation of energy activities shall be established in order to implement a system of regulated operation of energy undertakings in carrying out of energy activities, and especially those energy activities which are performed as public services and are in the public interest on the one hand, and in order to establish and regulate the energy market on the other hand, all pursuant to the provisions of the Energy Act (OG 120/12, 14/14, 95/15, 102/15, 68/18) and bylaws regulating individual energy activities⁵.

⁵ [4]

The energy regulatory body in Croatia is The Croatian Energy Regulatory Agency (CERA) founded as an autonomous, independent and non-profit public institution who regulates energy activities, i.e., energy sector in Croatia. The founder of CERA is the Republic of Croatia and the founding rights are exercised by the Croatian Government. CERA is responsible for its work to the Croatian Parliament.

The Croatian energy policy and strategy are focused on the EU goals in terms of reducing greenhouse gas (GHG) emissions, increasing the share of renewable energy sources (RES), energy efficiency, security and quality of supply and development of the EU internal energy market, as well as available resources, energy infrastructure and competitiveness of the economy and energy sector. In the following table we can see the key EU energy targets which should be achieved till end of 2020 and 2030 and according to whom Croatia has to adapt while amending existing regulations.

Table 1 – A comparison of key energy goals for 2020 and 2030

	Reduction of GHG emissions	Renewable energy sources	Energy efficiency	Interconnection
2020	20%	20%	20%	10%
2030	≥ 40%	≥ 32%	≥ 32,5%	14%

Due to new defined EU targets regarding energy transition to low-carbon in the following years some mayor changes in Croatian energy sector are expected.

The Energy Development Strategy of the Republic of Croatia until 2030, with a view to 2050 represents a step towards achieving the vision of low-carbon energy and ensures the transition to a new period of energy policy that ensures affordable, secure and quality energy supply without additional burdens on the state budget within state aid and incentives. The process of energy transition will be capital intensive, without incentive measures in terms of state aid, but with the expected greater involvement of the private sector/capital in financing renewable energy sources projects. The development of the Croatian energy sector in the future has to be adjusted according to global requirements in the context of climate change mitigation. Therefore, among other things, the Strategy represents the contribution of the Republic of Croatia to global climate change mitigation process. The energy transition cannot be achieved in isolation, so it is necessary to continue working on the goals of global reduction of CO₂ and other GHG emissions and to support the commitment of the EU to a single climate and energy policy.

2.2. Regulations and strategic documents regarding energy and energy poverty

As it was already stated, the term energy poverty and its institutional framework entered in the legislation of the EU within the TEP, in Directives on concerning common rules for the internal market in electricity and natural gas supply (Directives 2009/72/EC and Directive 2009/73/EC). EU policies create a framework to shape MS approaches to energy poverty so every MS had to develop a framework regarding energy poverty in line with country actual needs. Croatia, as a member of EU from 2013 harmonized its legal framework and follows the EU policy in the area of energy poverty, so Croatian regulations and strategic documents regarding energy poverty are mainly based on EU energy poverty policies. In Croatia, there is no comprehensive definition of energy poverty, nor are there methods for defining and monitoring energy poverty; however, there is public policy which concerns (in part) vulnerable consumers. So, in order to tackle energy poverty, it is crucial to identify common indicators and criteria for assessing energy poverty and vulnerability and based on that collect comparable information and map the energy poverty.

European Economic and Social Committee shared in 2013 an opinion on this issue named 'For coordinated European measures to prevent and combat energy poverty' and stated that energy security and solidarity commitment should be the key drivers in development of European policy for combating energy poverty and encouraging solidarity based on the recognition of a universal right of access to energy. Accordingly, the main aims of such policy should be following:

- to protect individuals from energy poverty and prevent their social exclusion;
- to take action to reduce the factors of structural vulnerability (by guaranteeing basic access to energy at reasonable and stable prices);
- to encourage everyone to assume responsibility for using sustainable and renewable energy resources (and ensuring the transition to a low-carbon society).

In the recent years, the seriousness of the problem of energy poverty has clearly attracted an extensive amount of scientific attention and advocacy work, calling for urgent action at EU and MS level. Although the EU has not adopted a comprehensive definition of energy poverty and energy vulnerable consumers, it has adopted a wide range of provisions to trigger and steer MS action in these fields. The EU approach requires from MS to adopt a comprehensive strategy, including energy and non-energy measures, to address the root causes of energy poverty and to alleviate the condition of energy poor and vulnerable consumers.

Regulations and strategic documents regarding energy and energy poverty can be divided in two main groups: general multi-level regulations and strategic documents and specific regulations and other relevant documents. Each of these groups will be elaborated in the next subchapters.

2.2.1. General multi-level regulations and strategic documents

In order to tackle energy poverty, this problem should be carried out at the national as well as at the regional or local levels in order to pay attention to the variations in socio-economic and ecological factors of a region which influence the success of any intervention in tackling energy poverty. General regulations in regulating energy and energy poverty are acts and relevant bylaws such as regulations, ordinances, decisions and rules.

For the first time, the concept and the status of vulnerable customer in Croatia was defined in the **Energy Act** (OG 120/12, 14/14, 95/15, 102/15, 68/18) following by the **Electricity Market Act** (OG 22/13, 95/15, 102/15, 68/18, 52/19) and the **Gas Market Act** (OG 18/18, 23/20). These three acts were harmonized with the Third EU Energy Package, meaning that they rely on setting the criteria for the status of vulnerable consumer of energy. Energy Act regulates measures for secure and reliable energy supply and its efficient production and use. It defines the development of other acts and bylaws which determine and on the basis of which energy policy and energy development planning are carried out. It also prescribes the performance of energy activities on the market or as public services, and the basic issues of performing energy activities in compliance with environmental protection measures. The Energy Act also defines the basic terms used in the normative regulation of the energy sector.

In the Energy Act, vulnerable consumer is defined as an energy final consumer from household category who, because of its social status and/or health conditions, is entitled to energy supply under special conditions. Energy Act also stipulates the obligation in adopting the **Regulation on criteria for achieving the status of vulnerable consumer** (OG 95/15) which was adopted in September 2015. With this regulation the problem of energy poverty was positioned in the domain of social policy and thus equated with economic poverty. Regulation determines the criteria for acquiring the status of vulnerable consumer of energy from networked systems and the method of raising funds in order to ensure the supply of energy to vulnerable consumers through social support. Due to the Regulation, the status of a vulnerable consumer may have the end consumer of the networked system from the household category who is supplied through the obligatory public service within the universal service and/or the obligatory public gas and thermal energy supply service with the following characteristics:

- he is a beneficiary of the guaranteed minimum fee;
- he lives in a household which is a beneficiary of the guaranteed minimum fee;
- he is a beneficiary of personal disability allowance;
- he lives in a household with a beneficiary of personal disability allowance.

In the administrative procedure, the social welfare institution (in Croatia this is Social Welfare Center) determines the status of the vulnerable consumer and determines the amount of social support to the vulnerable consumer, i.e., the type and the scope of rights that belong to him with regard to the established status and the

manner of participating in energy costs. The Regulation on criteria for achieving the status of vulnerable consumer also prescribes the solidarity fee which all households have to pay in order to raise funds for the payment of aid for the supply of energy to vulnerable consumers. Solidarity fee⁶ is a supplement to the price of electricity for the end consumer from the household category. Accordingly, households have to pay amount of HRK 0.03 solidarity fee kilowatt/hour of electricity to finance electricity costs of vulnerable consumers. Suppliers are obligated to pay amount received from solidarity fees into the country budget as funds intended for reimbursement of energy costs of vulnerable consumers who meet the requirements of special regulations on social welfare. The Croatian Government can determine that funds from other sources which may be paid to the account of the country budget for the reduction of energy poverty of vulnerable consumers. Another regulation important for regulating issues regarding vulnerable consumers is **The Regulation regarding the Monthly Amount of Compensation for Vulnerable Customers of Energy** (OG 102/15). The regulation will be further elaborated in the section related to regulations regulating social welfare system.

Electricity Market Act and **Gas Market Act** prescribe the establishment and maintenance of the register of vulnerable customers. The register must contain the type of preferential treatment of the vulnerable consumer and the special rights that that buyer has in the status of vulnerable consumer. According to both acts, entry in the register of vulnerable consumer is done on the basis of the request of the vulnerable consumer with the presentation of evidence of vulnerable status. These acts define the vulnerable consumer as the final consumer from the household category who, due to his social status and/or health condition, is entitled to the right to the supply of gas and electricity according to special conditions. In accordance with the acts, the relevant social welfare institution determines the level of social support to the vulnerable consumer, i.e., the type and scope of rights that belong with regard to the status and manner of participation in meeting the costs of social minimum gas and electricity consumption. The right to social minimum gas and electricity consumption (determined by the conditions of supply in the apartment or house in which they live, family size, health status of family members and economic status) have the end consumers in the household category who meet the conditions of poverty in accordance with special regulations.

All above analyzed acts don't mention energy poverty as European Directives suggest, i.e., they don't define the status of vulnerable consumer with the help of energy poverty. Defining the term energy poverty instead of vulnerable consumer, would enable better identification of measures to mitigate the social consequences of new acts and lay the foundations for measures that would have both social and environmental effects (the renovation of residential buildings of vulnerable consumers will result with increased energy efficiency, which at the same time will reduce the costs for energy and GHG emissions).

⁶ [5]

Energy Efficiency Act (OG 127/14, 116/18, 25/20) was first enacted by Croatian Government in 2014. Energy Efficiency Act regulates the area of efficient energy use and development of plans at local, regional as well as national level to improve energy efficiency and their implementation. It prescribes energy efficiency measures and obligations of transmission system operators, distribution system operators and energy related market operators. This Act also regulates energy transmission and distribution, the obligations of energy distributors, energy and/or water suppliers and in particular energy service activities, energy saving and consumer rights in the implementation of energy efficiency measures.

The main purpose of Energy Efficiency Act is to achieve the goals of sustainable energy development, to reduce the negative environmental impacts from the energy sector, improve energy security, meet the needs of energy consumers and meet the international obligations of Croatia in the field of reducing GHG emissions by stimulating energy efficiency measures in all areas of energy consumption. The term energy poverty firstly entered in Croatian regulating framework within this act. The act transposes the Directive 2012/27/EU on energy efficiency amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC into the legislation of the Republic of Croatia. Energy Efficiency Act also encourages increased energy efficiency as a priority in households affected by energy poverty. In Article 13 of the Energy Efficiency Act distributors' obligations for accomplishing energy savings through measures of energy efficiency are defined. Distributors are required to achieve energy savings by implementing energy efficiency measures in the households affected by energy poverty and thus helping reduce energy consumption for their end consumers. In order to prescribe these obligations, **Ordinance on the energy efficiency obligation system** (OG 41/19) was enacted. The Ordinance prescribes the elements of energy savings obligation system and the manner of its implementation, which includes determining the share of new savings that will be realized through the system of obligations, methods and periods and reporting deadlines of bond parties, methods for calculating energy savings, rules for transferring realized savings, etc. It also prescribes the obligation to achieve social goal, i.e., reduce energy poverty by encouraging energy efficiency and energy efficiency measures in residential premises of vulnerable consumers in accordance with the regulations on social welfare and in households in specific development areas according to the regional development act in order to achieve energy savings. The calculation of savings resulting from measures taken in final consumption in specific development areas to the holder of savings shall be increased by 10%, whereas the calculation of savings resulting from measures taken in the residential premises of the beneficiary of the fee for the endangered energy buyer to the savings holder shall be increased by 20%.

In addition to acts, the national strategies play a huge role in tackling and combating energy poverty. The strategies which contain some references to energy poverty are **Energy Development Strategy of the Republic of Croatia until 2030 with an outlook to 2050** (Energy Development Strategy), **Low-carbon Development**

Strategy of the Republic of Croatia until 2030 with an outlook at 2050 (Low-carbon Development Strategy) and **Long-Term Strategy for Mobilizing Investment in Renovation of the National Building Stock of the Republic of Croatia** (Long-term Renovation Strategy). These strategies are fundamental documents in the field of energy, energy refurbishment and climate change mitigation as well as in economic, development and environment field.

In the Energy Development Strategy is stated that due to high investments that can pose a significant challenge for certain parts of the economy, it is necessary to link programs for the implementation of certain energy policy measures and the application of new technical and technological solutions with measures to reduce energy poverty. In this sense, it is necessary to develop, adopt and implement a comprehensive Energy Poverty Reduction Program, which will have the following components:

- a unique model for covering energy costs for energy-poor households;
- energy consulting for energy-poor households;
- energy refurbishment and energy efficiency improvement measures in energy-poor households.

Combining these three components of the Energy Poverty Reduction Program will enable a lasting reduction in energy costs in energy-poor households, improve their living conditions and reduce the allocations needed to provide assistance to such households. Energy Development Strategy promotes increasement of energy efficiency which will result in achievement of environmental benefits, reduction of GHG emissions, improved energy security, reduction of energy costs and ultimately combating energy poverty. This will lead to greater competitiveness, increased employment and increased economic activity, which will improve the quality of life of all citizens.

The constant increasement of energy prices for end consumers has a negative impact on citizens' personal consumption, but further encourages the implementation of energy efficiency measures and the development of small integrated photovoltaic systems for their own consumption. In order to solve this problem, in the Low-carbon Development Strategy it is stated that it is necessary to identify energy-intensive industry sensitive to rising energy prices and vulnerable energy consumers (energy poverty) and to develop programs to reduce the burden and strengthen resilience for industry and vulnerable consumers. The focus of the measures should be on the application of energy efficiency measures and usage of renewable energy sources for own consumption, in order to reduce the sensitivity to market prices. Renovating the building stock in Croatia is crucial to reducing energy poverty. According to Article 4 of the Directive 2012/27/EU on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (Directive 2012/27/EU) all MS are required to prepare their **Long-Term Strategy for Mobilizing Investment in the Renovation of the National Building Stock** (Long-term Renovation Strategy) and submit it to the European Commission. In June 2014, the Croatian Government passed the Decision on the adoption of the Long-Term Strategy

for Mobilizing Investment in the Renovation of the National Building Stock of the Republic of Croatia. In the meantime, the above obligation referred to in the Directive has been transposed to Article 10 of the Energy Efficiency Act and it states that the first Long-term Renovation Strategy update shall be drafted by 2017 and that further updates shall be submitted to the European Commission every three years, along with the National Action Plan. The main objective of the Long-term Renovation Strategy is to identify effective measures for the long-term mobilization of cost-efficient integrated renovation of the building stock of the Republic of Croatia (all residential and non-residential buildings) by 2050 on grounds of the established economical and energy-optimal building renovation model. The integrated renovation of the national building stock will result in economic activities, budget revenues, employment growth, improved health and, consequently, in considerable cost reduction in the Croatian healthcare system, reduction of the energy poverty in Croatia and a steady increase of real estate value, while indirect benefits will be visible in the tourism sector, enhanced quality of life and strengthening of the overall national financial stability⁷. According to Long-term Renovation Strategy, family houses are priority category of buildings for refurbishment in order to combat energy poverty and achieve energy savings. The only energy poverty measure described in the strategy is the adoption and implementation of the Energy Poverty Reduction Programme, which should be implemented in the period 2021 – 2030. The measure should be funded through EU funds and country budget, while the ministries responsible for energy and social welfare should be in charge of the monitoring and implementation of the measure, i.e., Programme.

While the above mentioned strategies deal with energy poverty, **Sustainable Development Strategy of the Republic of Croatia** deals with poverty in general and encourages the need to fight against poverty and social exclusion through the implementation of action plans and the introduction of EU social policy objectives into national policy through the participation of state administration bodies, regional and local government units, social partners, civil society organizations, scientific and professional institutions, social welfare institutions and the media.

Energy Efficiency Act prescribes development of **National Energy Efficiency Action Plans (NEEAP)**. NEEAP is a comprehensive implementation document which defines the national energy efficiency policy for the three-year period and at the same time contains an assessment of the planned and achieved energy savings resulted from energy efficiency and renewable energy sources measures. The production of NEEAP includes over 180 different institutions responsible for implementing Croatia's energy efficiency policy at different levels. By now, four NEEAPs were developed and enacted in Croatia. The fourth NEEAP was enacted in January 2019. One of the goal set in the Fourth NEEAP refers to energy refurbishment of family houses in order to achieve energy savings. This goal will be achieved through measure Energy Poverty Reduction Program. This measure refers to development and implementation of a systematic programme for reducing energy poverty through the implementation of energy efficiency measures. The programme shall establish a list of available

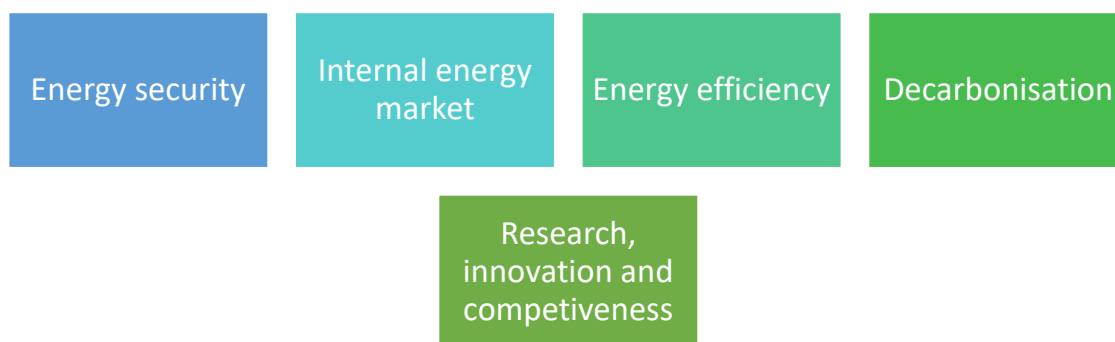
⁷ [6]

measures with co-financing rates. The participants of the programme should have the status of vulnerable consumer. The specific objective of the measure is the establishment of a system that would allow vulnerable consumers to improve energy efficiency in their homes to the level of improved living conditions. Some of the measures which could be included into the programme are: replacement of household old appliances with new high efficiency appliances, replacement of windows, improvement or replacement of heating systems, increasing the thermal insulation of the building envelope, appliance of simple energy efficiency measures, etc. The measure shall also include establishment of a system for following social, demographic and energy indicators in describing energy poverty at a national level, through the existing system for compiling data on the consumption and habits of households. The programme shall also develop possible extension of criteria for gaining the status of vulnerable consumers. In order to encourage energy poverty, another measure defined within Fourth NEEAP refers to capacity building for reducing energy poverty. The objective of the measure is capacity building for reducing energy poverty within local and regional government units and in general public. Capacity building shall include providing information on energy efficiency measures contributing to the reduction of energy poverty and the possibilities of co-financing in this area.

In a communication from the European Commission on **A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy** published on 25th February 2015, it has been noted that integrated management is needed to ensure that all energy-related activities at the EU, national, regional and local level contribute to the energy and climate objectives of the EU. This means that the governance system should be based on the principles of integration of strategic planning and reporting on the implementation of climate and energy policy and on coordination between actors responsible for climate and energy policy, at EU, national, regional and local level. Therefore, on 11th December 2018, **Regulation (EU) 2018/1999 of the European Parliament and of the Council on the Governance of the Energy Union and Climate Action** stipulates the development of integrated national energy and climate plans for a ten-year period. Croatia developed first Integrated National Energy and Climate Plan for the Republic of Croatia for the period 2021-2030 in 2019.

The Integrated National Energy and Climate Plan for the Republic of Croatia for the period 2021-2030 (INECP) builds on existing national strategies and plans. It provides an overview of the current state of energy sector and the energy and climate policy. It also provides an overview of the national targets for each of the five key dimensions of the EU and the appropriate policies and measures to achieve those targets, for which an analytical basis should be established. In the Figure 3 we can see the key dimensions of EU energy policy.

Figure 3 – Key dimensions of EU



In the INECP, particular attention should be paid to the targets to be achieved by 2030, which include the reduction in GHG emissions. energy from renewable energy sources, energy efficiency and electricity interconnection. It should be ensured that the INECP is consistent with and contributes to the Sustainable Development Goals. INECP also supports development of the Energy Poverty Reduction Program (EP Reduction Program) within the framework of which a model of support to affected households will be developed in order to combat energy poverty. According to INECP, EP Reduction Program should include measures to eliminate energy poverty with the following goals:

- to provide energy consulting for all energy-poor citizens of the Republic of Croatia;
- to establish a system of measuring and monitoring energy poverty indicators at the national level;
- to establish a system of increasing energy efficiency at the level of energy-poor households and households at risk of energy poverty.

Within the EP Reduction Program, the list of priorities for the implementation of technical measures, the degree of co-financing and sources of funding will be also elaborated. In the following table we can see existing measures to reduce energy poverty in Croatia and documents where they are described in detail.

Name	Document
Compensation of energy costs of vulnerable customers	Regulation on criteria for acquiring the status of vulnerable energy customers from networked systems (OG 95/15)
Capacity building for eliminating energy poverty	4th National Energy Efficiency Action Plan
Programme for elimination of energy poverty	4th National Energy Efficiency Action Plan

Table 2 – Existing measures to alleviate energy poverty⁸

⁸ [6]

The problem of energy poverty is recognized on all levels including local and regional. According **Multi-level governance and cross-sectoral cooperation to fight energy poverty**, the opinion published by European Committee of the Regions in 2019, local and regional authorities are on the front line in the complex fight against energy poverty, as they can identify the citizens affected and pinpoint the specific causes of the problem and provide directly practical advice and guidance to citizens. They have key powers in relation to energy efficiency and energy production policy, through their own energy companies, housing associations, cooperation with the private sector, project funding, guidance, etc.

According to Energy Efficiency Act regional government units have the obligation to develop **Energy Efficiency Action Plans** for three-year period and **Annual Energy Efficiency Plans**. Energy efficiency annual and three-year plans are more systematic presentation of energy efficiency measures prepared in accordance with the Energy Development Strategy, the fourth NEEAP, the Energy Efficiency Act and other relevant regulations.

The main purpose of development of the three-year **Energy Efficiency Action Plan** is to determine guidelines for the implementation of energy efficiency improvement policy through the realization of energy savings and respecting the energy needs of the region and the principles of sustainability and environmental protection. Energy Efficiency Action Plan contains an overview and assessment of the situation and needs in energy consumption, long-term goals including the indicative energy savings target of the county, energy efficiency measures and sources of funding for their implementation, calculation of planned energy savings, monitoring and implementation of the plan and the method of financing the plan.

The Annual Energy Efficiency Plan contains a detailed overview of energy efficiency measures that planning institutions plan to implement at regional level during the next budget year. It consists of two main parts, analysis of implemented measures for the previous reporting year and calculation of achieved savings and calculation and proposal of activities for the current year in order to achieve planned energy savings and implementation of planned activities in accordance with current strategic guidelines and documents of local and regional governments. By development of these documents at regional level, the necessary energy and financial savings will be achieved, which will ultimately reduce the negative impact on the environment from the energy sector, improve security of energy supply and meet the needs of all energy consumers through the use of renewable energy sources and the implementation of planned energy efficiency measures. By developing these documents, regional government units, especially those most affected by poverty are able to include measures to combat energy poverty according to the actual needs and requirements in their region.

Local government units according to Energy Efficiency Act can also develop Energy Efficiency Action Plans but by now only small number of local government units in Croatia developed Energy Efficiency Action Plan. By developing this document, local

government units define their curs of action in order to increase energy efficiency and reduce energy poverty in their administrative area. In the coming years, it is expected that the interest of individual local government units in developing relevant documents for reducing energy poverty will increase.

2.2.2. Specific regulations and other relevant documents

In addition to general multi-level regulations regarding energy poverty which are developed in order to transpose the EU acquis related to energy and energy poverty reduction policies into Croatian legislation, it is necessary to point out a number of other documents (programmes, sustainable energy and (climate) action plans) which are developed and implemented within initiatives and projects with the aim of reducing the problem of energy poverty. The main goal of this group of documents is not only to contribute to the reduction of energy poverty, but also to ensure the necessary cross-sectoral dialogue and transparent and participatory development, monitoring and evaluation process of energy and social policies.

In January 2019, the Croatian government finally adopted a Conclusion on the development of the **Energy Poverty Reduction Programme**, which includes the use of renewable energy sources in residential buildings in assisted areas and in areas of special state concern. In the development of Energy Poverty Reduction Programme the following institutions should be involved: Ministry of Physical Planning, Construction and State Assets, Central State Office for Refurbishment and Housing, Ministry of Regional Development and EU funds, Ministry of Economy and Sustainable Development and Environmental Protection and Energy Efficiency Fund. The Energy Poverty Reduction Programme will be prepared in accordance with the Energy Efficiency Act, and the funds required for the development of the Program will be provided in the Financial Plan of the Fund for Environmental Protection and Energy Efficiency for 2019 with projections for 2020 and 2021. The Program will define the holders of the Program activities, the assessment of the necessary funds for the implementation of the Program and the positions in which the funds for the implementation of the Program are provided. Implementation of the Program through the implementation of measures to reduce energy poverty in addition to the benefits of energy savings in accordance with the Energy Efficiency Act and contribution to energy efficiency goals in the Republic of Croatia will improve the quality of life in Program applicable areas and will have a direct impact on the stay and settlement of the population in these areas. According to current situation, the Energy Poverty Reduction Programme is still not developed even though almost two years has passed since the initial decision was made.

In year 2014 according to Second NEEAP Croatian Government enacted the **Programme of energy renovation of family homes 2014-2020** (Energy Renovation Programme) where it is stated that energy poverty is one of Croatia's growing problems which is a consequence of increases of energy prices, and, though there is still no clear definition, its existence is shown in the inability of many citizens to maintain adequate

heating in their homes. It is recommended that the Ministry of Social Politics and Youth, as well as social welfare institutions become more involved in carrying out and co-financing measures for the most vulnerable citizens and in this way contribute to a solution to the problem of energy poverty with which a long-term reduction in state subsidies for energy expenses for the socially vulnerable citizens can be secured. Additionally, Energy Renovation Programme states that in carrying out these measures, local administrative units, together with social welfare institutions and competent bodies should provide additional funding for the socially vulnerable citizens, of up to 85% of the total investment expenses⁹. Energy Renovation Programme was updated in May 2020 by giving special attention to energy poverty, i.e., by targeting vulnerable groups of citizens at risk of energy poverty.

Energy Renovation Programme defines the publication of a public call for energy refurbishment of family houses for vulnerable groups of citizens at risk of energy poverty and sets out the eligibility criteria for applying to the public call. The aim of this part of the Energy Renovation Programme is to contribute to meeting the requirements of EU directives in a way that targets the most vulnerable group of citizens. In this sense, this part of the Energy Renovation Programme is a pilot project to combat energy poverty, which needs to be upgraded and expanded in the next period, in accordance with the future comprehensive definition of energy poverty and energy poverty measures defined in the INECP and the Renovation Strategy. In this context, the basic criterion for participation in this part of the Programme is that the owner of the family house or a member of the household residing in the family house is a beneficiary of the guaranteed minimum fee. In June 2020, the Fund for Environmental Protection and Energy Efficiency opened the public call for owners and co-owners of family houses in energy class D or lower, with a specific line of funding for vulnerable groups of citizens at risk of energy poverty. By adding social criteria social welfare centers were able to coordinate energy certificates and help the most vulnerable citizens apply for funding. For the citizens who are at risk of energy poverty, renovation of their family houses is fully funded by the Fund for Environmental Protection and Energy Efficiency. An additional HRK 32 million was allocated for this purpose.

One very important initiative which is also focused on the issue of energy poverty is Covenant of Mayors. The Covenant of Mayors was launched in 2008 in Europe with the ambition to gather local governments voluntarily committed to achieving and exceeding the EU climate and energy targets. When officially joining the Covenant of Mayors, signatories commit to developing a **Sustainable Energy Action Plans** (SEAP) within two years. Many Croatian local governments (cities/towns, municipalities) joint the initiative and developed SEAP. SEAP is a key document that shows how the Covenant signatory will reach its commitment by 2020. It uses the results of the Baseline Emission Inventory to identify the best fields of action and opportunities for reaching the local authority's CO₂ reduction target. It defines concrete reduction measures, together with time frames and assigned responsibilities, which translate the long-term strategy into action. In 2014 The European Commission

⁹ [8]

launched the Mayors Adapt initiative. Based on the same principles as the Covenant of Mayors, this sister initiative was focusing on adaptation to climate change. Mayors Adapt invited local governments to demonstrate leadership in adaptation, and was supporting them in the development and implementation of local adaptation strategies. In 2015 these two initiatives officially merged into new initiative The Covenant of Mayors for Climate & Energy. The signatories of the new initiative commit to developing a **Sustainable Energy and Climate Action Plans** (SECAP). SECAP is the key document that shows how signatories of Covenant of Mayors on Climate and Energy will reach its commitments by 2030 and defines concrete measures for both climate mitigation and adaptation, with timeframes and assigned responsibilities, translating the long-term strategy into action. A large number of Croatian local government units joined the initiative Covenant of Mayors for Climate and Energy and developed SECAPs for their administrative area. The development of SECAPs contributes to the energy transition which has long become a reality all over the world. The energy transition has become a global phenomenon affecting energy supply structures and the way citizens and companies can contribute to rapid decarbonization. The Global Covenant of Mayors for Climate and Energy, including all its global regions, has developed a new global Common Reporting Framework that integrates mitigation and adaptation planning, monitoring and reporting in a single format and introduces a third area which deals with the issue of energy poverty which includes ensuring reliable access to safe, affordable and sustainable energy. In the near future, all signatories of the Covenant of Mayors for Climate and Energy will be obliged to define activities that address the issue of providing fair access to safe, affordable and sustainable energy, i.e., avoiding energy poverty. In the context of the development of SEAPs and later SECAPs, cities and regions are invited to identify the presence of energy poverty and, where relevant, to draw up a strategy to address the problem, identifying who is affected and what activities will be taken to help them. In order to facilitate the work of the signatories towards the integration of activities related to energy poverty, the following three questions should be answered¹⁰:

1. Energy Poverty Assessment: Is my municipality/city affected by energy poverty?
2. Identifying vulnerable citizens: Who are the most vulnerable citizens in my municipality?
3. Designing activities: How can I create effective activities related to energy poverty?

The Croatian local government units, the signatories of Covenant of Mayors for Climate and Energy will during the development of SECAPs have the opportunity to include measures for reducing energy poverty in order to support the global goal in combating energy poverty.

Local and regional government units as key drivers of development at the local and regional level are also, according to Energy Act obligated in their development

¹⁰ [9]

documents to plan the needs and manner of energy supply and harmonize such documents with the Energy Development Strategy and Action Plan for the Implementation of the Energy Development Strategy. These development documents referred to **development strategies of regional government units** and **implementation programs of local and regional government units** and other relevant planning documents. Implementation programs of local and regional government units are a short-term strategic planning documents related to the multi-annual budget adopted by the mayor, chief or prefect which describe priority measures and activities for implementing goals from related, hierarchically higher strategic planning documents of national importance and of importance for local and regional government units. Regional Development Strategy is a basic strategic planning document of a regional government unit in which development goals and priorities for the county are determined in order to strengthen its development potentials, with special emphasis on the role of large cities and cities of county headquarters in encouraging development and the development of less developed areas. Among other defined priorities within those documents, environmental and nature protection, energy management, the use of renewable energy sources and the promotion of energy efficiency stands out. Achievement of these priorities will contribute to the main goals of the new **EU strategy for growth and development Europe 2020**. One of the basic priorities defined in the Europe 2020 strategy relates to sustainable development through resource efficiency and a "greener" and more competitive economy. The Europe 2020 strategy encourages the building of competitive society based on a low-carbon economy, environmental protection, prevention of biodiversity loss and the introduction of efficient "smart" electricity grids.

Increasing evidence indicates that local and regional government units are aware of the problem of energy poverty so they, on their own initiative and in cooperation with other experts, work intensively on identifying energy-poor households in their administrative area and accordingly make recommendations for combating energy poverty. Development of recommendations for combating energy poverty and conducting research to identify energy-poor citizens in their administrative area in cooperation with relevant institutions is the starting point in dealing with and design local policies aimed at reducing energy poverty.

2.3. Conclusions

In recent years, energy poverty has been recognized as a growing problem which has led to the need to establish a European legislative framework to combat it. To help MS in their efforts to combat energy poverty, the European Commission finances the EU Energy Poverty Observatory (EPOV). The central aim of EPOV is to engender transformational change in the availability of information about energy poverty in Europe, and indicative measures to address this challenge. It collects and publishes Europe-wide energy poverty data and aims to improve the state of the art on energy poverty detection, measurement and reporting by creating a public forum for the exchange of knowledge on the issue, and the identification of possible policy

solutions¹¹. EPOV is part of a growing drive to consolidate energy policy at the EU level and is reflected in the recent EU and Clean Energy Package proposals.

Croatia defined the concept and status of vulnerable customer/consumer in 2012 in the Energy Act and in 2015 implemented first measures in a form of vulnerable customer subsidy. Until the adoption of the Directives of the Third Energy Package, Croatia was trying to alleviate the problem of energy poverty by energy tariffs lower than the market value and by the social allowance within the social policy system. Except the customers who were entitled to social allowance, there were no clear criteria for any kind of allowance for the energy consumption. Since the Third Energy Package does not allow energy prices below market value because it impedes the proper functioning of the energy market, Croatia has started to implement new measures in the field of social and energy policy.

In order to create the preconditions for defining vulnerable consumers, determining the energy poverty threshold and create adequate energy poverty reduction policies in Croatia, it is necessary to implement a series of interrelated activities which include raising awareness of energy poverty, situation analysis and creation of public policies in the field of energy poverty. So far, a number of methodologies have been proposed to define energy poverty, but the debate on what constitutes energy poverty and what indicators should be used to monitor it is continuing. Regardless of the methodology for defining energy poverty, which is important to statistically monitor changes in society and assess policy performance, as a first step it is necessary to establish systems to protect those energy consumers who are at risk of energy poverty. Accordingly, Croatian government, in order to reduce energy poverty actively works on development of energy poverty policy which will be effective in combating energy poverty. In regulating energy poverty Croatian Government enacted numerous acts whose main purpose is to prescribe certain obligations regarding the definition of the term energy poverty and the role of relevant institutions in its reduction. The main role of acts is to transpose the energy poverty obligations defined in the European directives into national legislation. They also prescribe the development of certain strategic and planning documents which will encourage reduction of energy poverty at national, regional and local level.

Strategic and planning documents as implementation documents help to define national objectives and priorities in combating energy poverty and concrete measures for reducing energy poverty. The main strategic and planning documents where energy poverty has been highlighted as growing problem and where some recommendations regarding its reduction are given are: Energy Development Strategy of the Republic of Croatia until 2030 with an outlook to 2050, Low-carbon Development Strategy of the Republic of Croatia until 2030 with an outlook at 2050, Long-Term Strategy for Mobilizing Investment in Renovation of the National Building Stock of the Republic of Croatia and Integrated National Energy and Climate Plan for the Republic of Croatia for the period 2021-2030. All strategies prescribe the need to develop, adopt and

¹¹ [11]

implement a comprehensive Energy Poverty Reduction Program which will have the following components: unique model for covering energy costs for energy poor households; energy consulting for energy poor households and energy refurbishment and implementation of energy efficiency improvement measures in energy poor households. Combining these three components, the Energy Poverty Reduction Program will enable a lasting reduction in energy costs in energy-poor households, improve their living conditions and reduce the allocations needed to provide assistance to such households.

3. Regulations and strategic documents regarding social welfare

The Republic of Croatia, as a welfare country, assures the right to assistance to all its citizens under the same conditions. Social welfare system includes a series of benefits and services aimed at securing subsistence to the persons who have been left without any subsistence means. It includes assistance such as financial support throughout social benefits and institutional care for people who are unable to take care of themselves or who cannot cover full costs of such care. The structure of social welfare systems is different all across Europe, but they are deemed to have similarities such as social protection, ex-post benefits for traditional needs, large role for 'passive' transfers during non-employment (pensions, unemployment, disability, sickness, maternity, family dependents, etc.), target households with various family members, etc.

According to the data published by the Croatian Network Against Poverty (national non-governmental organization of associated legal and natural persons who care for poor and excluded social groups, and advocate, promote and implement public policies that contribute to improving the situation of poor and socially excluded social groups) who is also a member of European Poverty Network since 2014, two poverty categories can be defined: absolute poverty and relative poverty.

Absolute or extreme poverty is a situation in which persons do not have the basic conditions for survival; e.g., they are starving, do not have access to clean water, adequate housing, sufficient clothing or medicine, and are struggling for a living. Relative poverty is a situation in which some people's lifestyle and income level are significantly worse than the standard of living in the country or region in which they live. People are poor if their income and resources are so inadequate that it does not allow them to enjoy a standard of living that is considered acceptable in the society in which they live. Thus, due to poverty, they experience multiple difficulties in the form of unemployment, low income, poor housing conditions, inadequate health care and barriers in the areas of lifelong learning, culture, sports and recreation. They are often excluded and marginalized from participating in activities (economic, social and cultural) that are the norm for other people and may have limited access to fundamental rights.

Since 2010, the term "risk of poverty or social exclusion" at European level has been agreed as an indicator that defines the share of the population in one of the following situations:

- lives below the relative income poverty line (60% of median or average household income);
- severe material deprivations are in the situation;
- lives in a household with very low work intensity.

The social welfare system and social benefits in Croatia are regulated by numerous acts and bylaws which will be elaborated in further text.

3.1. Social welfare system in Croatia

Croatian social welfare system is based on the principle of subsidiarity, which implies the responsibility of the individual and the family for their own social security, and the role of the state is to help in this, with the aim of preventing, mitigating and eliminating social vulnerability. The social system in Croatia is mainly decentralized, which ensures the implementation of an effective poverty policy. This means that local and regional government units are entrusted with a larger number of public tasks and thus their financial, personal and organizational capacity to take on more serious tasks is strengthened. Social rights that are fully decentralized, i.e., financed by local and regional government units are as follows: housing and heating costs, financing of kitchen services and the operation of a shelter for the homeless. Local and regional government units can also provide funds for financial and social services to increase the scope of what is not defined by main social welfare act.

Before further analysis of the social system in Croatia, it is necessary to look at the statistics. According to the latest data from the Croatian Bureau of Statistics for 2019, the at-risk-of-poverty rate in the Republic of Croatia is 18.3%. The data from the Croatian Bureau of Statistics also follow indicators related to persons at risk of poverty or social exclusion, and it refers to both persons at risk of poverty and those who are severely deprived or, live in households with low intensity work. Very low work intensity refers to a situation in which persons live in households where no one works or works very little (able-bodied members work up to 20% of the total number of months in which they could work in the reference period). According to this indicator for 2019, 23.3% of persons in the Republic of Croatia were in such a position. In total, there are about 100.000 households in the Republic of Croatia in this vulnerable group, of which 32.5 thousand are single-member households and 68.3 thousand are households with two adults and two children¹². According to the established data, it can be seen that over 7% of the citizens of the Republic of Croatia live in conditions of severe material deprivation. This indicator refers to people living in households who cannot afford at least four of the nine items without significant problems, such as: they are not able to afford adequate heating in the coldest months, they are not able to afford a week of vacation away from home, they are unable to afford a meal containing meat, chicken, fish or a vegetarian equivalent every other day, they are unable to pay an unexpected financial expense or are late in paying utility bills, etc.

In the following figure we can see the main principles of social welfare system in Croatia.

¹² [12]

Social welfare principles

Social justice
Freedom of choice
Availability
Individualisation
Integration of the beneficiary into the community
Timeliness
Respecting the beneficiary's human rights and integrity
Prohibition of discrimination
Providing information about rights and services
Participation in decision-making
Confidentiality and personal data protection
Respect of privacy
The right to a complaint

Figure 4 – Principles of social welfare system in Croatia¹³

Beneficiaries, rights and conditions for their realization, as well as other issues of importance for social welfare, are defined by the **Social Welfare Act** (157/13, 152/14, 99/15, 52/16, 16/17, 130/17, 98/19, 64/20, 138/20). Beneficiaries of rights in the social welfare system pursuant to the Social Welfare Act are:

- single people and households who do not have sufficient funds to meet basic living needs and are not able to achieve them through their work, from property income, from the person liable for maintenance or in any other way;
- a child without parents or without adequate parental care, a young adult, a child victim of domestic, peer or other violence, a child victim of trafficking in human beings, a child with disabilities, a child and a young adult with behavioral problems, an unaccompanied child outside the place of his/her residence without the supervision of a parent or other adult responsible for caring for him/her and a foreign child found in the territory of the Republic of Croatia without the supervision of a parent or other adult responsible for caring for him/her;
- a pregnant woman or a parent with a child up to one year of age without family support and appropriate living conditions;

¹³ [13]

- a family that needs professional help or other support due to disturbed relationships or other unfavorable circumstances;
- an adult with a disability who is unable to meet basic living needs;
- an adult victim of domestic or other violence and a victim of trafficking;
- a person who, due to old age or incapacity, cannot take care of basic living needs on his own;
- a person addicted to alcohol, drugs, gambling and other forms of addiction;
- homeless;
- other persons who meet the conditions prescribed by the Social Welfare Act.

Generally speaking, vulnerable groups, i.e., groups with an increased risk of poverty and social exclusion are those with low incomes (unemployed, elderly people without a pension, certain categories of pensioners, single-parent families), vulnerable ethnic minorities (Roma), people with disabilities and groups which are less numerous but face the challenges of extreme poverty (homeless, former addicts or prisoners) and others. It is important to emphasize that not all beneficiaries of rights in the social welfare system can be called “poor” because for some individuals (people with disabilities, the disabled, the sick) the use of social assistance is not necessarily closely related to low income, but high costs, as is the case with institutional treatments that require long-term care.

Citizens can receive social assistance in the form of cash or in-kind benefits and in the form of a care. In the current system, social services are provided by the state through a network of social welfare centers that have public authority to decide on the exercise of citizens' rights to social benefits and services on the basis of legal provisions. The rights in the social welfare system under Social Welfare Act are: guaranteed minimum fee, compensation for housing costs, compensation of heating costs, compensation for personal needs of accommodation users, one-time fees, fees related to education, personal disability allowance, allowance for help and care, career parent status or career status, compensation for the time before employment, social services (first social service, counseling and assistance, home help, psychosocial support, early intervention, assistance in inclusion in education and regular education programs (integration), stay, accommodation, family mediation, organized housing) and compensation for the vulnerable energy consumer. The recognition of the right in the social welfare system, except for compensation for housing costs and the right to heating costs, is decided by a decision of the locally competent social welfare center, as a rule according to the applicant's place of residence. The recognition of the right to compensation for housing costs is decided by the local government units and the City of Zagreb, in accordance with the provisions of the Social Welfare Act and special regulations. The recognition of the right to compensation for heating costs is decided by the regional government unit and the City of Zagreb, in accordance with the provisions of the Social Welfare Act.

The main institution within social welfare sector is the Social Welfare Center, a public institution that decides on social welfare rights and provides social services to particularly vulnerable groups of citizens. Minimum financial standards and criteria for financing material and financial expenditures of social welfare centers and heating costs for wood-heated users are determined by the **Decision on minimum financial standards and criteria for financing of material and financial expenditure of social welfare centers and heating costs for wood-heated users** (OG 128/19, 148/20). Social services other than the social welfare centers provide following institutions:

- a social care home/community service center;
- home help center;
- associations, religious communities;
- other legal entities and craftsmen;
- natural persons as a professional activity;
- foster families.

The whole social welfare system in Croatia is computerized within application called SocSkrb which has been in use since 2011. SocSkrb is a computer application owned by Ministry of Labor, Pension System, Family and Social Policy which functions as a web application by which social welfare centers in Croatia are connected with each other and with Ministry of Labor, Pension System, Family and Social Policy. Each user of social rights or services has various socio-economic indicators entered in the application: household members, health status, employment status, education, risky behavior, housing status, active cash benefits and services from the social welfare system, data from records of income and tax receipts. administration, ownership of a vehicle or vessel, the existence of enforcement on accounts, etc. There is also the possibility of calculating the poverty index for a household or a single person, if all the characteristics are entered for an individual household. It is important to emphasize that Social Welfare Center can be a source of all necessary data, but only for the beneficiary rights or services of this Center.

3.2. Regulations and strategic documents regarding social welfare

The EU lays down common rules to protect social security rights when moving within Europe (27 EU MS, Iceland, Liechtenstein, Norway, Switzerland and the United Kingdom). The rules on the coordination of social welfare systems do not replace national systems with a single European system. Each country can decide who will be insured under its legislation, what benefits will be granted and under what conditions. Accordingly, Croatian Government while creating national social welfare policies follows the EU recommendations while the European Commission supports and complements our policies in the areas of social inclusion and social protection.

The Europe 2020 strategy for smart, sustainable and inclusive growth sets targets that would lift at least 20 million people out of poverty and social exclusion and increase the employment rate of the population aged 20-64 to 75%¹⁴. The Europe 2020 flagship initiatives, in particular the **European Platform against Poverty and Social Exclusion and the Agenda for New Skills and Jobs**, support efforts to achieve these goals. The European Commission, through a package of social investment measures, offers MS guidelines for modernizing the social welfare system with a view to lifelong social investment.

As this is the case in all sectors in Croatia, social welfare system is also regulated throughout the acts and related legal bylaws which were amended after the enactment of a key act in regulating social welfare system in 1997. The social welfare system in the Republic of Croatia is marked by changes and shifts towards an active welfare state, where it is necessary to emphasize and support social cohesion, and help and protect vulnerable members of the community, in partnership with all social service providers.

The regulations and strategic documents regarding social welfare can be divided in two main groups: general multi-level regulations and strategic documents and specific regulations and other relevant documents which could be enacted without legal obligation.

3.2.1. General multi-level regulations and strategic documents

The main purpose of general multi-level regulations and strategic documents is to ensure the protection of the interests and well-being of socially vulnerable persons. The main general multi-level regulations include acts, regulations, decisions and ordinances.

The main act in regulating social welfare system is **Social Welfare Act** (157/13, 152/14, 99/15, 52/16, 16/17, 130/17, 98/19, 64/20, 138/20). Social Welfare Act as the basic act regulates the manner of performing and financing social welfare activities, principles, beneficiaries, rights, the procedure for exercising these rights and other issues of importance for performing this activity (professional staff in social welfare, data filling systems, inspection and administrative supervision). This act transposes the following directives into the legal order of the Republic of Croatia: Directive 2006/123/EC on services in the internal market, Directive 2004/83/EC on minimum standards for the qualification and status of third country nationals or stateless persons as refugees or as persons who otherwise need international protection and the content of the protection granted, and Directive 2011/36/EU on preventing and combating trafficking in human beings and protecting its victims. According to Article 26 of Social Welfare Act, the guaranteed minimum fee is the right to a monetary amount that ensures the satisfaction of the basic living needs of a single person or a household that does not have sufficient funds to meet basic living needs. As stated in the Social

¹⁴ [14]

Welfare Act, all recipients of guaranteed minimum fee have the right to compensation for housing costs (Article 41) and the right to compensation for heating costs (Article 43).

In addition to the Social Welfare Act, other important acts and bylaws governing the field of social welfare and social benefits in the Republic of Croatia are: **Family Act** (OG 103/15, 98/19), **Temporary Maintenance Act** (OG 92/14) and **Foster Care Act** (OG 115/18). Family Act governs marriage, the relations of parents and children, adoption, guardianship, the effects of an extramarital union between a man and a woman, and the procedures of the competent bodies in connection with family relations and guardianship. Temporary Maintenance Act determines the beneficiaries of the right to temporary alimony and regulates the acquisition of the right to temporary alimony and the amount of temporary alimony, jurisdiction, procedure for exercising the right, payment and return of the amount of temporary alimony, financing, records and supervision and other issues important for temporary alimony. Foster Care Act regulates the issues related to foster care as a form of providing social accommodation services, conditions and manner of performing foster care and the rights and obligations of service users, foster parents, social welfare center and other legal entities participating in foster care support.

In 2015, after signing the Agreement on Measures in combating Energy Poverty by representatives of the leading electricity suppliers in Croatia **the Regulation on the Monthly Amount of Compensation for Vulnerable Energy Consumer, the manner of participation in settling the energy costs of the beneficiary and the actions of the competent social welfare centers** (OG 102/15, 140/15) was enacted. The Regulation defines the amount of compensation for the vulnerable energy consumer, the manner of participation in settling the energy costs of the beneficiary of the right to compensation for the vulnerable energy consumer and the actions of the competent social welfare centers regarding the recognition of the right to compensation for the vulnerable energy consumer. The fee for a vulnerable energy consumer is determined in the amount of up to HRK 200,00 (26,00 EUR) per month. The competent social welfare center issues a coupon for subsidizing the costs of electricity for the month in which the right to compensation for the vulnerable energy consumer is recognized to the user of the right to compensation for the vulnerable energy consumer.

Two important decisions relevant for calculation of the amounts of guaranteed minimum fee, supply needs of users and other rights from the social welfare system are **Decision on the basis for calculating the amount of the guaranteed minimum fee** (OG 114/14), **Decision on the amount of the living costs of users** (OG 9/19) and **Decision on the basis for calculating the amount of other rights from the social welfare system** (OG 114/14). The decisions were enacted according to Social Welfare Act. The basis on which the amount of other rights from the social welfare system is calculated is HRK 500,00 and the basis on which the amount of the guaranteed minimum fee is calculated is HRK 800,00. The amount of living costs fee of beneficiaries is determined by the type of beneficiary depending on the age and health status of the beneficiary and is proportional to the duration and scope of the

service of accommodation with the foster parent in relation to the basis on which the amount of rights in the social welfare system is calculated. Another decision which should also be considered is **Decision on the amount of foster care allowance** (OG 9/19). The fee for the work of a foster parent who performs traditional foster care is determined depending on the number and type of beneficiaries, in relation to the basis on which the amount of rights in the social welfare system is calculated. In addition to above mentioned decisions, it is also important to mention **Ordinance on the manner of cooperation between the social welfare center and the services responsible for employment in the implementation of measures for the social inclusion of able-bodied beneficiaries of the guaranteed minimum benefit** (OG 66/15). This Ordinance prescribes the manner of cooperation between the social welfare center and the employment service in implementing measures of social inclusion of able-bodied beneficiaries of the guaranteed minimum fee, in order to ensure timely and secure exchange of data on beneficiaries related to assessing their needs and providing appropriate support. enable users to provide quality and efficient services based on individual needs, with a view to their employment and social inclusion.

Local and regional government units play a key role in combating poverty and social exclusion in their administrative area. According to Social Welfare Act, they are obligated to keep records on social welfare rights in their administrative area. This obligation is stated in the **Ordinance on the content and manner of keeping records and documentation, as well as the manner and deadlines for submission of reports by local and regional government units** (OG 35/19, 24/20). In addition, these records include data on right to compensation for housing costs, transport costs and right to compensate heating costs. As it was stated in the subchapter 2.2.2. within this document, local and regional government units enact relevant development documents (regional development strategies, implementation programs of local and regional government units) where they determine county/city/municipality goals and priorities in order to strengthen its development potentials, with special emphasis on the role of large cities and cities of county headquarters in encouraging development and the development of less developed areas. Most regional and local government units prioritize raising the quality of life and well-being of citizens, which includes poverty and social exclusion, i.e., encouraging the social inclusion of disadvantaged groups and reducing poverty, including energy poverty.

According to Social Welfare Act regional development units have to establish the Social Welfare Council for the purpose of planning and developing the network of social services and exercising the rights, obligations, measures and goals of social welfare in its administrative area. The Social Welfare Councils consist of various stakeholders from the public, private and non-profit sectors. The Social Welfare Council proposes the **Social service development plan** as a strategic document in the field of social welfare on the most vulnerable citizens. These documents serve as good basis for designing comprehensive social policies at regional level which goal is quality planning of social services and their effective implementation. The Social service development plan includes an overview of the socio-demographic and economic characteristics of

the county, an overview of the social protection system with a description of institutional capacities and non-institutional social service providers according to beneficiaries. Based on the analysis of the capacity and availability of the social services network and the assessment of the specific needs of groups at higher risk of social exclusion, the priorities and strategic and operational goals for the development of institutional and non-institutional social services have been determined. The strategic development goals are harmonized with the relevant national and European framework in the field of social welfare, as well as with the county development documents and guidelines. Although regional planning of social services is regulated by act and based on the practice of drafting social plans (some counties have gone through this process twice), the biggest challenge remains the implementation, monitoring and evaluation of measures defined by the plans.

In addition to above mentioned legal acts and relevant bylaws, in order to determine the direction of development of the social policy of the Republic of Croatia, several strategic documents dealing with social welfare issues have been developed. Working group for the development and monitoring of the implementation of the strategy for combating poverty and social exclusion prepared the **Strategy for combating poverty and social exclusion in the Republic of Croatia** (2014 – 2020) in 2014. The Strategy is a fundamental document that enables a systematic and joint approach of all relevant stakeholders in solving the problem of poverty and social exclusion, while ensuring a minimum standard for the most vulnerable part of society, and preventing new phenomena of poverty and social exclusion. The strategy contains a brief and clear picture of the current state of poverty and social exclusion in the Republic of Croatia, as well as the causes that led to this state and the social and economic projection as a basis for action. It is clearly stated who are the most vulnerable groups in society exposed to poverty and social exclusion, with the principle of orientation towards the individual and his needs. The Strategy defines eight strategic fields in combating energy poverty and social exclusion. One of them refers to housing and energy availability where it states that in accordance with the Energy Act, the status of vulnerable energy consumer should be granted to households defined by the competent social welfare institutions as socially disadvantaged (Regulation on criteria for achieving the status of vulnerable consumer). The Strategy also refers to the **Decision on the amount of the fee for the use of the space used by the production facilities for electricity production** (OG 84/13, 101/13, 72/15) in which it is stated that energy producers are obliged to pay a fee to local government units (cities/towns and municipalities). The Strategy states that the collected funds from this fee will be used to support social welfare programs as well as for assistance to energy vulnerable categories of citizens, which is only a recommendation stated in the Strategy. The Strategy encourages efficient energy management in building construction at the national, regional and local level as one of the key strategic measures. This could be achieved by establishing mechanisms to improve the energy efficiency in households in order to reduce the financial burden on citizens and ensure the availability of energy through subsidizing energy costs for households at risk of energy poverty.

3.2.2. Specific regulations and other relevant documents

In addition to above mentioned acts in regulating social welfare beneficiary rights and other issues within social welfare system, some other acts whose provisions can be also applicable to social welfare system. Acts from other areas such as pension, health care, employment, etc. which should be taken into account are: **Child Allowance Act** (OG 94/01, 138/06, 107/07, 37/08, 61/11, 112/12, 82/15, 58/18), **Pension Insurance Act** (OG 157/13, 151/14, 33/15, 93/15, 120/16, 18/18, 62/18, 115/18, 102/19), **Maternity and Parental Allowances Act** (OG 85/08, 110/08, 34/11, 54/13, 152/14, 59/17, 37/20), **Labor Act** (OG 93/14, 127/17, 98/19), **Employment Mediation and Unemployment Rights Act** (OG 16/17), **Free Legal Aid Act** (OG 143/13, 98/19). In addition to these acts an important role have **Decree on the amount of the minimum wage** (OG 106/19) and **Decree on the amount of the minimum wage for 2021** (OG 119/20) which will be in force from January 2021.

One relevant document refers to **Social Action Plan on understanding the social aspects of the Energy Community** (Social Action Plan). The Social Action Plans were intended to serve as a roadmap to develop and implement necessary measures to deal with social consequences in a socially responsible manner. The whole idea of developing this document came from the Treaty on Establishing the Energy Community which defines social stability alongside economic development as one of the primary interests for MS for which the access to stable and continuous energy supply is essential. Chapter IV of the Treaty (Articles 31 – 33) further promotes the social aspects of the energy acquis in the context of provision of energy to citizens and its affordability. During the implementation of the Treaty, i.e., the social consequences of its implementation, a **Memorandum of Understanding on Social Issues of the energy community** was adopted. He became the starting point for development of Social Action Plan on understanding the social aspects of the Energy Community. Croatia developed this document in 2013. which main goals are :

- improving the living and working conditions of workers in the energy sector, anticipating and resolving the negative impacts that the restructuring of the sector will have on them: protection of workers' rights, improvement of working conditions and protection at work, equal opportunities for men and women, education, rewarding improvements in energy efficiency at work and similar activities;
- encouraging social dialogue that will ensure the development of the energy sector in line with social needs, both on the production side (domestic producers, supply routes, renewable energy sources) and on the consumption side (energy efficiency, fiscal and tax policy), consumer information and education play a key role. The energy sector must provide a reliable, high-quality, available and affordable service. Special attention must be paid to the design of measures to protect the most economically vulnerable social categories.

Other specific regulations which are connected to social welfare system are **Strategic plan of Ministry of Demography, Family, Youth and Social Policy, Social Welfare Strategy for the Elderly in the Republic of Croatia 2017 – 2020, National Strategy for Equalization of Opportunities for Persons with Disabilities from 2017 to 2020** (OG 42/17) and **Ordinance on minimum conditions for the provision of social services** (OG 40/14 , 66/15). National Strategy for Equalization of Opportunities for Persons with Disabilities is a strategic document which directs the implementation of the policy towards persons with disabilities. Its main goal is to make Croatian society as sensitive and adapted as possible to the necessary changes in favor of equalizing the opportunities of persons with disabilities, i.e., to create conditions for their active inclusion and equal participation in society by preventing any discrimination and strengthening all forms of social solidarity. Ordinance on minimum conditions for the provision of social services prescribes the minimum conditions for the provision of social services (minimum conditions of space and equipment for providing services; type, and minimum content and scope of service in relation to an individual beneficiary group) and the manner of work of the commission that examines their fulfillment (structure and duration of direct professional work with users, structure and duration of other jobs and conditions and minimum number of professional and other workers for a particular service).

In order to reduce the problem of poverty and social exclusion by measures and programs define within strategic documents that contain a number of goals and activities, it is necessary to provide the necessary resources and cross-sectoral action.

3.3. Energy-related social supports

Energy poverty has emerged as major dimension of poverty in recent years and featured in recent social and energy literatures. There is often a two-way relationship between the lack of access to adequate and affordable energy services and poverty. The relationship is a cycle in which people who lack access to cleaner and affordable energy are often facing with deprivation, lower incomes and the means to improve their living conditions while at the same time using significant amounts of their very limited income on expensive and unhealthy forms of energy that provide poor and/or unsafe services. According to EU goals and recommendations regarding poverty and social exclusion, Croatian Government strives to develop a unified social policy integrated with energy policy in order to comprehensively address and reduce the problem of energy poverty. In order to ensure financial assistance to socially vulnerable citizens in covering some necessary living costs, Croatian Government developed several measures and initiatives in helping energy poor citizens:

According to existing legislation, by now several energy related social supports were developed and implemented at national and regional level. The Article 41 of the Social Welfare Act prescribes the compensation for housing costs which also includes the costs of rental, utility fees, electricity, gas, heating, wood and other costs. The right to compensation for housing costs is recognized to the beneficiary of the guaranteed

minimum fee. The right to compensation for housing costs is recognized by the local government unit, up to the amount of half of the guaranteed minimum fee granted to a single person or household. Compensation for housing costs can be granted in two ways: in cash directly to the beneficiary or the local government unit pays partially or full amount of the bill to the directly authorized legal or natural person who performed the service.

The Social Welfare Act also prescribes the compensation for the heating costs (Article 43) for beneficiaries of the guaranteed minimum fee who heat with wood. Such persons are provided with 3 m³ of wood once a year or approve a monetary amount to cover that cost in the amount determined by the responsible regional government unit. In order to provide funds for compensation for heating costs, the local government unit submits a request with data on the beneficiaries of the guaranteed minimum fee that is heated on wood to the responsible regional government unit.

Local and regional government units are, according to Article 43 of Social Welfare Act, obligated to keep records and documentation on the exercise of rights in the social welfare system as well as other rights from social welfare determined by general acts of local and regional government units.

Households who are currently in a position of material vulnerability and are therefore unable to meet some basic living needs have the possibility to request one-time settlement fee (for example electricity or heating bills). The social welfare center grants the right to a one-time settlement.

All existing energy related social supports refer to financial assistance, which, although it helps citizens to some extent, does not solve the basic causes of life in energy poverty, nor its consequences. Accordingly, in order to reduce energy poverty, it is necessary to define mechanisms that aim not only to mitigate the inability to pay energy bills, but also those that mitigate all the consequences of energy poverty – impaired health and comfort of housing and that also combat its causes. Such a mechanism is the implementation of energy efficiency measures in vulnerable households. Croatian Government recognized the importance of energy renovation of single-family houses, especially those inhabited by families living in energy poverty so they implemented energy efficiency measure which refers to energy renovation of family-houses.

Family houses make up 65% of the housing stock in Croatia and are responsible for 40% of total energy consumption at the national level. Most family houses in Croatia were built before 1987 and have almost no or only minimal thermal insulation (energy class E and worse). Such houses consume 70% of energy for heating, cooling and domestic hot water preparation, and energy efficiency measures can significantly reduce their consumption, in some cases up to 60% compared to the current one.

Croatian Government, the Ministry of Construction and Physical Planning (now Ministry of Physical Planning, Construction and State Assets) and the Ministry of Environmental and Nature Protection adopted the Program for Energy Renovation of Family Houses, implemented by the Fund for Environmental Protection and Energy

Efficiency (FEPEE). The goal of the Program is to increase the energy efficiency of existing houses, reduce energy consumption and CO₂ emissions into the atmosphere and reduce monthly energy costs, with an overall improvement in the quality of life. At the same time, planning such interventions implies the engagement of local companies and experts, i.e., encourages economic activity. Amendments and adjustments to the Program were made for the first time in 2015 and for the second time in 2020. Following the adoption of the Amendments to the Program, the FEPEE in 2020 continued with the national funding of the Program for energy renovation of family houses. On 25 June 2020 FEPEE published two public calls one for citizens – co-owners of existing family houses of energy class D or worse in continental part of Croatia and C or worse in coastal part of Croatia and second for vulnerable groups of citizens at risk of energy poverty. Under the social criteria, set out in the Amendments to the Programme, social welfare centres coordinated certified energy auditors to help in the application process to the citizens most at risk of energy poverty. The envisaged energy renovation measures and the cost of energy auditors for this group of citizens will be fully financed by the FEPEE.

3.4. Conclusions

Social welfare is an organized activity of public interest for the Republic of Croatia, whose aim is to provide assistance to socially vulnerable persons and persons in unfavorable personal or family circumstances, which includes prevention, promotion of change, assistance in providing for the essentials for living, including support to individuals, families and groups, with the aim of improving the quality of life and empowering the beneficiaries to independently provide for their essentials for living, as well as to actively participate in the society. Social system in Croatia is mainly decentralized so local and regional government units in cooperation with social welfare centers play a huge role in helping socially vulnerable citizens. The social welfare system is regulated through relevant acts, bylaws and strategic and planning documents which main purpose is to help socially vulnerable citizens and improve their living conditions.

When we talk about the term energy poverty within the Croatian social welfare system, as a concept, is still mainly related to general poverty. Even though low-income households are usually worst affected by energy poverty, general poverty cannot be fully equated with energy poverty. Defining energy poverty should be based on social, economic and energy criteria, such as inability to afford adequate levels of energy services and low energy efficiency of dwelling and appliances. However, a better coordination of energy and social policies are necessary to address both issues at the national, local and regional level.

According to legal documents, there are some energy related social supports in covering some household's cost. They are more than welcome, but aren't enough to solve the problem of energy poverty, because they are based on the consequences and settlement of costs, and only secondarily on the cause or raising the energy quality

of the home. Energy efficiency should be the first step in the fight against energy poverty because it contributes to reducing energy consumption and expenditure and has positive effects on the health and comfort of living. Measures to reduce energy poverty are both information and counseling, all of which point to the need for multisectoral action, in which direction public policies, plans and programs are moving. However, only in the intensified dynamics of their implementation, and with the assumption of continuous provision of funds, can the necessary social effects be achieved.

4. Future challenges and recommendations

The current situation in the EU regarding the energy poverty levels, based on the most recent data for key measuring indicators from the EU Energy Poverty Observatory, indicate that the estimated number of energy poor citizens varies between 50 and 125 million people¹⁵. Energy poverty is defined as the inability of households to maintain adequate levels of energy services at an affordable cost. It significantly reduces the chances for social development, worsens the living conditions and the living space needed for learning, social contacts, meeting cultural needs and quality youth growth. In other words, it puts citizens facing energy poverty in an inferior and unequal position in the chances for social advancement, acquisition of work competencies and realization of labor rights, etc.

Energy poverty is caused by three main factors: low income, high energy need and high energy prices. The European Commission has been pushing the need to enhance consumer protection and help energy poor consumers already from the second energy package (Directive 2003/54/EC and Directive 2003/55/EC). The third energy package (Directive 2009/72/EC and Directive 2009/73/EC) introduced the concept of energy poverty and let the final responsibility to each MS¹⁶. Although the number of countries that recognize energy poverty formally in legislation or policy is rising, the majority of MS, including Croatia do not have a formal definition.

In the package Clean Energy for All Europeans, the European Commission has proposed a series of measures to reduce energy poverty through energy efficiency, mechanisms to protect against grid disconnection, as well as better definition and monitoring of this topic at MS level through integrated national energy and climate policies and plans. Therefore, the EU legal framework relating to energy poverty has undergone some changes. Energy poverty is mentioned in the new Energy Efficiency Directive (2018/2002), the new Energy Performance of Buildings Directive (2018/844) and the Management Regulation (2018/1999). The Electricity Directive (2009/72) also refers to energy poverty, and its revised version is the result of a political agreement reached in December 2018. In mid-October 2020 EC published a recommendation regarding energy poverty where it is stated that energy poverty is a situation in which households are unable to access essential energy services. With nearly 34 million Europeans unable to afford to keep their homes adequately warm in 2018, energy poverty is a major challenge for the EU¹⁷. The document gave further recommendations to the long-standing discussion on energy poverty in Europe and can be related to renewed references to the need for a “just transition” in EU policy.

Energy poverty is a growing problem, so the EU encourages the definition of measures to reduce it. Following this, in January 2019, the Croatian Government adopted the Fourth National Energy Efficiency Action Plan until the end of 2019 with capacity building measures to reduce energy poverty and the development of the

¹⁵ [11]

¹⁶ [10]

¹⁷ [15]

Energy Poverty Reduction Program. Furthermore, in January 2020, Ministry of Physical Planning, Construction and State Assets started the process of Amendments to the Program of energy renovation of family houses 2014-2020, since they make up 65% of the housing stock and consume 40% of energy. As they generally have poor insulation, they consume up to 70% of energy for heating and hot domestic water production, and it is estimated that the measures from the Energy Poverty Reduction Program would reduce consumption by up to 60%. Ministry of Physical Planning, Construction and State Assets and Central State Office for Reconstruction and Housing started to work on the development of Energy Poverty Reduction Program, which includes the use of renewable energy sources in residential buildings in assisted areas and areas of special state concern for 2019 – 2021. Energy Development Strategy of the Republic of Croatia until 2030 with a view to 2050 (enacted in March 2020) mentions the need to develop, adopt and implement the Energy Poverty Reduction Program, and envisages the adoption of a Long-Term Strategy for Renovation of the National Building Fund until 2050 (enacted in March 2019) with measures to reduce energy poverty. Further steps/recommendations in reducing energy poverty in Croatia are: define and measure energy poverty, avoid delays in the implementation of the measures and continuation of the funds, increase the role of local and regional authorities and ramp up the renovation of building stock.

The issue of energy poverty has also been recognized and risen within social welfare system because of the link between poverty in general and energy poverty. The connection stems from a cycle in which people who lack access to cleaner and affordable energy are often facing with deprivation, lower incomes and the means to improve their living conditions while at the same time using significant amounts of their very limited income on expensive and unhealthy forms of energy that provide poor and/or unsafe services.

According existing legislation, mainly in Social Welfare Act and The Regulation on the Monthly Amount of Compensation for Vulnerable Energy Consumer, the manner of participation in settling the energy costs of the beneficiary and the actions of the competent social welfare centers there are defined some energy related supports to socially vulnerable citizens who are the beneficiaries of guaranteed minimum fee. These benefits are more than welcome, but they don't solve the problem of energy poverty nor its consequences. The main measure in reducing energy poverty is energy efficiency because it contributes to reducing energy consumption and expenditure and has positive effects on the health and comfort of living. Measures to reduce energy poverty are both information and counseling, all of which indicate the need for multisectoral action, in which direction public policies, plans and programs are moving. Accordingly, to reduce energy poverty it is important to integrate energy and social policy and harmonize it with future EU targets in achieving 60% GHG emissions reduction by 2030 and net-zero emissions by 2050.

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