FAIR ENERGY TRANSITION for all

Fair Energy Transition for All

Final Recommendations

REPORT

National Report of Bulgaria

Results of dialogs about energy transition with vulnerable citizens and experts

September 2022

www.fair-energy-transition.eu

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Disclaimer

This national report is part of the project “Fair Energy Transition for All (FETA)”. FETA is based on focus group research conducted in nine countries in Europe - Belgium, Bulgaria, Denmark, Germany, Spain, France, Italy, the Netherlands, and Poland. FETA is supported by a consortium of Foundations composed of the Fondazione Cariplo, the Deutsche Bundesstiftung Umwelt, the IKEA Foundation, the King Baudouin Foundation, Stiftung Mercator, the Network of European Foundations and the Open Society Foundations. The project is spearheaded by the King Baudouin Foundation and operationalized by ifok, Climate Outreach, the European Policy Centre, and facilitators and policy experts in participating countries. National partners in FETA are Atanor and Levuur, ENEFFECT, Danish Board of Technology (DBT), ifok, Museo Nazionale della Scienza e della Tecnologia Leonardo da Vinci, Berenschot and the University of Groningen, Missions Publiques, Polish Foundation for Energy Efficiency (FEWE), Instituto Sindical de Trabajo, Ambiente y Salud (ISTAS).

If you are interested in a synthesis publication of all countries and further information on the project and the methodology please check FETA’s website: https://fair-energy-transition.eu/what-vulnerable-people-have-to-say/.

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EnEffect

The **Center for Energy Efficiency EnEffect** (https://www.eneffect.bg/) is a non-governmental organization (NGO), registered as a foundation in 1992. Its highly skilled professionals have long and proven experience in energy planning at municipal and national level and in development and application of energy efficient solutions in buildings and industrial systems in Bulgaria and abroad. Its main activities include assistance to the central and local authorities in development and implementation of energy efficiency policies harmonized with the EU legislation; capacity building (incl. municipal energy planning and SEAP development, trainings on nearly zero-energy buildings (NZEB) design and construction, implementation of energy efficiency measures related to end energy consumption, communication campaigns, etc.); development, management and monitoring of demonstration projects; networking on national and regional level; management of Bulgarian EE & RES Fund.

Currently, EnEffect is acting as the Secretariat of the Bulgarian Energy Efficiency Network EcoEnergy providing for policy and technical support to the regional and local authorities to implement sustainable energy policies and practices. As part of the EEE international consortium (Econoler International-EnEffect-Elana), EnEffect manages the Bulgarian Energy Efficiency and Renewable Sources Fund, supported by the Global Environment Facility, the World Bank and the Bulgarian Government.

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EcoEnergy

The Municipal Energy Efficiency Network EcoEnergy (www.ecoenergy-bg.net) is a non-profit organization of Bulgarian municipalities for mutual support and activities related to the local and regional policies for effective use of traditional and alternative energy resources, for ensuring energy safety and opportunities for sustainable development of the municipalities.

EcoEnergy has been established as an informal voluntary association of Bulgarian municipalities in 1997. The initiative came from the mayors of 23 municipalities and in early 2003 the official court registration was officially finalized.

Currently 17 municipalities are active members in the network.

EcoEnergy is also Supporting Structure of the Covenant of Mayors since June 2009.

The network is achieving its mission through the following activities:

- building local energy efficiency policies according to the specific needs and conditions;
- create qualified teams of municipal specialists;
- assists local authorities to develop and implement municipal energy efficiency and renewable energy plans;

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Executive Summary

This report showcases the work process and main results of the Fair Energy Transition for All (FETA) project implemented in Bulgaria since the beginning of the project on 15th October 2020 until August 2022. The project activities are led by the Center for Energy Efficiency EnEffect, in the role of a Facilitator Partner, and the Municipal Energy Efficiency Network EcoEnergy, in the role of National Policy Partner, and supported by experts from the Center for the Study of Democracy, a leading institution in Bulgaria on issues related to poverty and social inclusion.

The report focuses on the three main phases of the project - qualitative research work in focus groups with vulnerable citizens, expert meetings developing policy recommendations in the pre-selected topical areas, and the Fair Energy Forum with broad representation of vulnerable consumers reviewing the produced expert recommendations.

During the first phase of the project, ten focus groups were formed and conducted, covering the whole territory of the country, with the task to share their attitudes and insight on the fair energy transition process, predominantly focused in three thematic areas - energy efficiency, renewable energy, and transport.

Based on these findings, special presentation materials were prepared for dissemination to the expert community as well as specific individual profiles, the so-called personas, of persons representative for the main groups involved in the work with vulnerable communities. At the subsequent expert meetings, these findings and outcomes were discussed with a wide range of stakeholders from state institutions, energy experts, NGOs, municipalities and energy service providers. As a result, 3 sets of 10 recommendations each were developed and presented to the attention of both the wider expert community and those involved in the political decision-making process in Bulgaria.

In the final stage of the work, these recommendations were verified with the community of vulnerable consumers and were open for another round of remarks and contributions. The key recommendations selected by the forum were enriched with content and guidance on their future application within the open discussions. They were promoted by the Forum for future advocacy activities with the purpose to stimulate the policy-making process and speed up the development of financial support programmes mitigating the impact of the current energy and economic crisis and leading significant segments of the population out of energy poverty.

1 Overview

Methodology

The project activities in Bulgaria followed the overall FETA methodology of FETA comprising if a three-stage approach: 1) 10 focus groups with representatives of vulnerable spread over the whole territory of the country, 2) two expert meetings for collecting feedback on the analysis of the results of the focus groups and developing policy recommendations, and 3) organizing the Fair Energy Forum where these recommendations were put under scrutiny and verified by the representatives of the vulnerable groups. Within this process, it is ensured that the policies recommendations avoid the misapprehension of the actual context often associated with entirely expert-driven initiatives and are very close to the actual needs and requirements of the main target group of the energy poverty mitigation policies.

Focus Groups

The focus group discussions in Bulgaria were conducted in the period July – August 2021. The locations of the discussions were preselected to represent as diverse socio-economic characteristics of the regions as possible – big cities (incl. Sofia – capital), mid-size towns in different parts of the country and villages. Additionally, two of the discussions were organized in Roma communities in the cities of Sofia and Plovdiv, while two discussions took place in a region with predominantly Muslim minority. A total of 82 participants were involved, of which 48 female and 34 male. The respondents were consistently distributed in terms of age, education, size of the household, access to transport and housing services, reaching a representation close to the statistical spreads of these parameters for Bulgaria.

Expert Meetings

Within the second stage of the proposed methodology, two expert group discussion were organized in Bugaria on 16th February and 16th March 2022. Between them, on 9th March 2022, a discussion forum presenting the new suggestion for energy poverty definition of the Bulgarian Academy of Sciences following the principles of the earlier suggestion by EnEffect took place, which had certain implications on the work of the discussion group. Within the first group, the outcomes from the focus groups were presented in detail, collecting feedback from the experts and outlining key areas of intervention. At this stage, it was decided that policy recommendations should cover three areas – housing, renewable energy and mobility, and that strong emphasis should be placed on communication, awareness and capacity building actions. In the second expert group, a set of sociological surveys' results were presented, which contributed to the development of policy recommendations and guidelines for the future communication activities.

The expert meetings, held in an online and hybrid formats, brought together more than 30 experts representing national and local level policy makers, state administration, energy experts and consultants, non-governmental organisations, consumer associations, etc. They became a part of a stronger movement for internal exchange and non-formal association of organisations working in the field of energy poverty, as many of the participants are currently members of the expert commission for energy poverty and energy efficiency at the National Council for the EU Green Deal.

Fair Energy Forum

The third stage of the project implementation was the national Fair Energy Forum (FEF), organised by EnEffect and EcoEnergy, and supported by the Center for the Study of Democracy. The event took place in the National Place of Culture in Sofia and was attended by a very active group of representatives of vulnerable citizens who were willing to learn and share their views on the policy recommendations in the three areas presented by the organisers. The event started with set of presentations which were followed by facilitated small-group discussions focused on the three thematic areas, and voting for the relevance and importance of the proposed policy recommendations. Subsequently, further discussions were initiated on the communication means and approaches suitable for the citizens' uptake of the promoted policies. The FEF was followed by a press release with the idea to raise the attention to the topic and particularly to the views of the vulnerable people and to support the idea that their participation in such forums is noticed and has a considerable impact on the policy-making process.

In conclusion, the overall methodology proved to be operational, is it succeeded to put in the attention of the expert community the point of view of the vulnerable strata of the population, presenting on-the-ground experience and examples which are often misunderstood and/or underestimated in the policy context. This was supported to a significant extent by the availability of parallel sociologic surveys and data from actual renovation projects, thus presenting a complex set of data from reliable sources which proved to be convincing and attractive to various stakeholders. Unfortunately, it has to be noted that there is still extremely low trust in citizens' ability to participate in policy-making, including reluctance to engage in such activities, which was evidenced by the relatively limited number of participants in the FEF, and most notably, by the vary low rate of acceptance of the invitations for participation. This situation should be overcome by repeated and systematic stakeholders' engagement activities particularly in this policy area, and it is firmly believed that the Fair Energy Transition for All project put the beginning of this process.

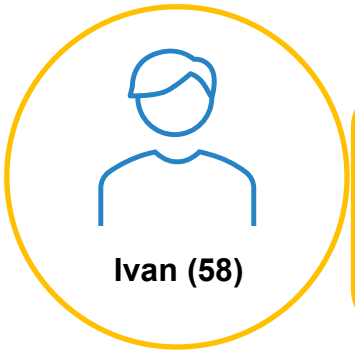
1.1 Personas

The personas were developed based on individuals from the focus groups with vulnerable citizens conducted in the first stage of the FETA process. They were used to present the findings of this qualitative research to the experts' forums, and in turn helped to define the messages and argumentation used in the discussions within the Fair Energy Forum.

Tabelle 1: Personas overview.

Persona	Employment status	Wohnort	Family situation	Housing	Transport
1. Ivan (58)	Employed at minimal salary	urban	lives alone	Own, multifamily building	car
2. Stoyanka (67)	retired	rural	Married, 2 grown-up children	Own, individual house	public transport
3. Sonya (39)	unemployed	Urban outskirts	several siblings	Own, semi-detached house	public transport

4. Sali (42)	Part-time employment	Urban	Married, 3 children	Own, individual house	public transport



Ivan (58)

"China and America are actively discussing the topic, trading carbon emissions. The thermal power plants are very expensive for us. Everything is related to business. At the bottom is human greed: everyone wants such a phone, five apartments, a Ferrari and to go to the Maldives... We are destroying ourselves: Merkel knows it too."

What is he calling for to make the energy transition fair?

The international tensions driven by economic interests are making the energy transition unfair and destructive for the ordinary people. Economic interests should be controlled and limited.

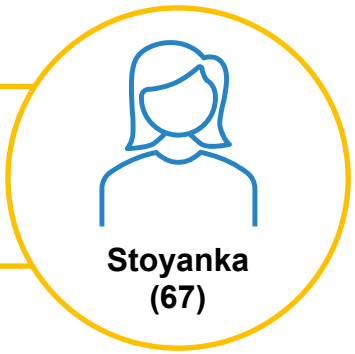
What does he think about the energy transition?

There are technologies available for the energy transition but they are only servicing the interests of the rich: "*Such facilities were built, but they do not serve the population, they serve certain people. And if the transition is to report hollow activity, we are doing it excellently*".

What challenges does he face in his daily life?

He is very much concerned of the growing energy prices for which he feels the politicians are not doing enough: "*They tell us that from here we will use cheaper electricity, then they come out and say that the world market is so expensive, so you will pay more. At the moment, the prices are record high, they are growing, if anyone is interested, they are BGN 440 per megawatt on the Bulgarian stock exchange*"

"What we comment here we do with childish naivety; we are not informed enough to talk about the problems in essence"



Stoyanka (67)

What is she calling for to make the energy transition fair?

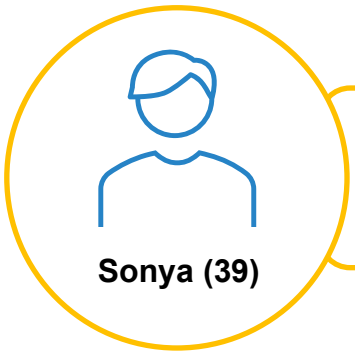
To make energy transition fair, there is one major action to take place – to limit the corruption and to exercise the authority of the EU. However, she does not believe that this would happen: *What a fair transition the EU could possibly make?! So far they have only observed and not reacted to the reports of misuse of their funds, the cutting down of forests and all the outrages in Bulgaria"*

What does she think about the energy transition?

She is afraid of the energy transition because she refers is to scarcity and limitations and does not want to return to the reality which she remembers well from the communist past: *"Shouldn't we be moving towards free and widely available energy, towards abundance and peace?! In these stories, they take us back to communism - then we observed similar regimes".* The suspicion was explicitly and implicitly expressed that the idea of the energy transition was another "trick" to get the population to voluntarily accept the increase in energy prices.

What challenges does she face in his daily life?

The main challenge is the rising electricity price based on the previous negative experience with energy suppliers - monopolists who, together with politicians, use every opportunity to raise electricity prices.



Sonya (39)

"I would also like to have an AAA+ washing machine, but I couldn't afford a more expensive one than class A, and that on credit, but after washing after my hands for a whole year I couldn't do it anymore. And we couldn't afford an economical air conditioner at all."

What is she calling for to make the energy transition fair?

She calls for retaining of the national power production plants as she is afraid that their closure would raise the electricity prices and that cannot be considered fair for the poorer citizens: *"There is a great danger that Bulgaria will be left without energy sources - if the 3 coal power plants are stopped, if the nuclear power plant is closed, we will become completely energy dependent".*

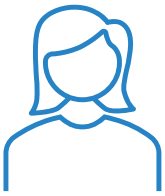
What does he think about the energy transition?

She doesn't know much about energy transition but is sceptic about any new developments in the area, because, she feels, even if the EU has positive intentions, the corruption in Bulgaria will make it unbearable for the ordinary people. *"They may try to help, pour loads of money, but they don't control what happens to them"*

What challenges does he face in his daily life?

She has problems with low incomes, unfairly paid jobs in the area and the constantly rising prices. She considers the public transportation problematic and without any improvements.

"The costs for electricity are devastating, we pay BGN 400-600 per month. But don't imagine our appliances are on all the time. We put them on the evening for a little while to warm up, cook and that's it, a water heater sometimes - there's no way this costs 350 BGN, or even 600 for some.



Sali (42)

What is he calling for to make the energy transition fair?

The concept of fairness is immediately transferred to human rights and the discrimination of the minority of which Sali is part of. Multiple examples are presented, as the energy transition is again discussed only in the perspective of distrust in the system for calculating and billing of the energy costs, which refers to the notion of the corrupted and disinterested state: *"First of all, don't overwrite our bills. We must pay as much as we have used, not to pay the bills for the whole district"*

What does he think about the energy transition?

There is no understanding of the concept of the energy transition. It is referred to as limitations for burning of wood and coal but there is no understanding or first-hand experience with any renewable energy sources: *"They come and check us, they don't allow us to light stoves - coal and wood because they say we pollute the air".* However, certain energy saving measures are already becoming of interest, even though with low level of competence: "*We put plasterboard with (mineral) wool and it helps, it's warmer*"

What challenges does she face in his daily life?

The transport is very expensive for the incomes of the members of the whole community in general. The bills for electricity are very high and the social support they receive is not sufficient. There are problems with discrimination to the community, including by the police, which seem to be the most important ones.

2 Results & Context

2.1 Policy Recommendations

2.1.1 Policy status quo in Bulgaria

In a number of EU countries, energy poverty is recognized as a serious social problem and, accordingly, more or less successful efforts have been made to overcome or limit it. In Bulgaria, measures are also being taken to address the consequences of energy poverty by providing targeted heating aid to the supposedly most needy individuals or families. A major weakness of this type of purely social measure is that it is primarily aimed at reducing the consequences of the problem rather than eliminating the causes of its existence. These reasons fall into the following three categories:

- low household incomes (a consequence of economic poverty),
- high prices of energy and energy carriers compared to the spending power of the population (a result of the conjuncture of the international markets and the dependence of the national energy system on external resources),
- the poor condition of the majority of the existing building stock (due to a lack of desire or objective impossibility for quality maintenance and renovation).

The difficult transition to a market economy, which has been ongoing for three decades in the country, especially in the management of energy markets, as well as Bulgaria's inability to influence the prices of energy carriers, on whose imports it is highly dependent, give little hope that it can seriously influence the first two categories in the short or medium term. However, the condition of the building stock offers a very high potential for energy poverty mitigation through investments to increase the energy efficiency of residential buildings. On the other side, other dimensions of energy poverty, as for example the access to transport and mobility services and the role of renewable energy sources (incl. energy cooperatives) have hardly received any attention by the general or professional audience outside the core aspect of economic and social poverty. For them, and particularly for mobility issues, only individual measures have been discussed in a non-systematic way, usually limited to specific urban contexts or development plans.

As a first step in the process of implementing systematic energy poverty policies with traceable impact at grassroot level, the concept should be officially defined at the national level, bearing in mind that a universal definition valid for all countries of the European Union is extremely difficult to create due to national differences and specificities. By itself, however, the adoption of a national definition would have little meaning and benefit if it is not used to structure national and local policies and differentiate financial assistance in building renovation programs with a view to overcoming the problem. In this way, it is possible to achieve a real reduction of energy poverty and the risk of energy poverty at a systemic level, as well as to provide access to a wider range of energy services to reduce unnecessarily high energy costs for specific groups of households, such as the limitations in the scope of the previous building renovation programs are gradually being overcome.

In this regard, it should be mentioned that the development of such a definition is laid down as a reform in the final and already official version of the National Recovery and Resilience Plan under the name "Development of definition and criteria for "energy poverty" for households in the Energy Law for the purposes of market liberalization and financing of energy efficiency projects'. While it would be extremely difficult, if not impossible, to apply the same definition in both cases, the process of the implementation of the reforms had very serios impact on all expert-related FETA activities and was reflected in the policy recommendations for the building

sector and renewable energy as well. In this respect, many of the current members of the Expert Commission for Energy Poverty and Energy Efficiency at the National Council for the EU Green Deal, which is responsible for the elaboration of this definition, have been involved in FETA discussions and expert meetings, and are using the available resources and policy recommendations

2.1.2 Recommendations for the housing sector

In Bulgaria, the housing sector is by far the most recognizable in terms of potential impact on energy poverty mitigation, mostly due to the experience from the national renovation programmes that took place with varied levels of success since 2008. The most recent one – the National Programme for Energy Efficiency of Multifamily Residential Buildings, succeed to bring the benefits of renovation to the actual life experience of many Bulgarians, even though the ambition was low and the quality – dubious. Thus, not only the experts, but also the majority of the vulnerable households had their say on the issues raised, as it must be noted that the expert community and the non-governmental sector are extremely well prepared to enter in discussion regarding both the policy implications and design and the actual implementation of the project, both as administrative process and at the construction site. The policy recommendations that emerged within the FETA process and were verified with the vulnerable consumers at the FEF we split into 4 groups as follows: 1) Access to funding; 2) Benefits of renovation; 3) Applicable financing mechanisms; and 4) Access to information. Below are the details for each of these dimensions.

(1) Access to funding

Considering that since 2016 and with a vision towards 2026 above 3 billion BGN (appr. 1,5 billion Euro) of public investments would be targeted to multifamily building renovation, however only reaching around 5% of the building stock at a 100% grant rate, it is obvious that many of the homeowners (and 100% of those in single-family houses – a little less than 50% of the population) do not have any access to financing for renovation. The only way to intensify the renovation rate is to include a co-financing component, preserving preferential conditions for the vulnerable households, and to ensure regular availability of the financing schemes. Given the fact that the investments took place in two major waves – in 2016-2017, and now in 2022-2023, requiring 100% agreement of the homeowners, and taking into account that many applications were blocked by unwilling minorities (96% of the dwellings being owned by natural persons), the following recommendations have been formulated at expert level:

1. Renovation programs must continue, not be interrupted, and to include single-family buildings
2. Changes to the Condominium Act are needed to facilitate decision-making and prevent the unwilling few from blocking the process

(2) Benefits of the renovation

During the previous renovation programmes, it was often observed that although there were definite benefits for the end users, the achieved savings seldomly reached the calculated ones, often staying at less than 20% rather than the promised 40% and above. Of course, citizens recognize impacts as temperature increase in winter, better comfort, better appearance of the buildings and increased market value, but still, issues as low energy class achieved, poor build quality, lack of monitoring of the performance and responsibility for damages and inconsistencies do not remain unnoticed. Thus, the following recommendations were developed in this area:

3. Additional measures must be taken to ensure that there are no compromises in construction
4. Condominiums must have increased control over the project and its implementation on-site
5. There should be professional project managers to take responsibility for quality on behalf of condominiums

(3) Applicable financing mechanisms

As mentioned above, within the current design of the support programmes, buildings are renovated at 100% grant rate; thus, a limited number of beneficiaries have access to the public funds, and people with all kinds of income receive equal financial support. At the same time, there are financing mechanism and tools which can enable the co-financing from homeowners, including such that would require no upfront payments, so that the loans, when necessary, could be paid off with the generated savings. Similar instruments are even existing in Bulgaria, as e.g. by the Bulgarian Energy Efficiency and Renewable Sources Fund; however, they have very limited applicability when competing with 100% grant programmes, which immensely slows down the renovation process. In this regard, the following recommendations were devised:

6. The expected and necessary transition to co-financing is crucial to provide real support to energy poor households. The full subsidy should be reserved for energy poor citizens only
7. There should be various repayment schemes for interest-free renovation loans, including through surcharges on local taxes or electricity bills, or through the creation of municipal funds to support renovation

(4) Access to information

The recent sociological surveys performed by EnEffect, CSD and other organisations reveled, or rather proved, that while most people know about the existence of the renovation programs, they are not fully aware of the conditions for participation, the process of application, and the different steps of the renovation process (technical passports, energy audits, procurement, selection of companies, construction supervision, etc.). The potential beneficiaries usually do not know what to expect and what to look out for when implementing projects, as they do not have access to professional information. They also do not know and understand how much renovation costs and how long it will take to repay the investment if co-financing is involved, which limits the trust and the willingness to participate. Subsequently, the following recommendations were introduced:

8. There should be professional renovation consultants, potentially as a combination of facility managers and energy consultants.
9. Communication needs to take place at both national, local and even neighborhood level to convince consumers of the benefits of renovation.
10. Municipalities (being the implementing party of the renovation programmes so far) must provide reliable administrative support and provide information on available funding programs, as well as the necessary consulting and construction services (technical passports, energy audits, etc.)

Out of these 10 policy recommendations, 3 were identified as most valuable and important for actual action on-the-ground by the participants in the FEF. These are:

1) Renovation programmes should continue, not be interrupted in time, and should include single-family buildings. It was agreed that it would be fair only if the public

programs reach more people and not only few selected; additionally, background links were made to other of the recommendations, namely that it is important to consider the quality of construction and renovation works and the inclusion of homeowners in the monitoring of quality, and that it has to be clearly communicated to people what the health effects would be.

2) Changes to the Condominium Act are needed to facilitate decision making and prevent the few unwilling owners to block the process. The process would be fair only if a balance between the "public benefit" and the rights of the single owners is found; to this aim, large-scale awareness campaigns should reach people directly and in-person, not through media.
3) The transition from 100% subsidy to co-financing model is crucial to provide real support to energy poor households. The full subsidy should only be reserved for the energy poor. When implementing, it is important to consider what are the real effects, i.e. bills to pay before and after the renovation, and in this way differentiate between energy poor that need bigger (even 100%) support, and the rest.

It has to be acknowledged that some of these recommendation are already recognazed and taken up in the renovation projects under the National Recovery and Resilience Plan. However, there are many missing links, as e.g. the promoted 20% co-financing rate is not backed-up by accessible loan mechanism or preferential conditions for the vulnerable households.

2.1.3 Recommendations for the renewables sector

The topic of individual shared production and consumption renewable energy is still far from the everyday experience of the Bulgarian citizens; however, at expert level, there are already numerous initiatives to push the development of the legislative and administrative framework, overcome the numerous issues connected to the permit and connection process, and stimulate pilot realisations, including in public-private partnership. Unfortunately, due to the continuing political crises and other internal factors, Bulgaria still fails to adopt the applicable EU legislation from the Clean Energy for All 2018 package, and thus the actual market uptake of renewable technologies fails far behind the general level. Nevertheless, organisation as EnEffect, Greenpeace, WWF, Za Zemiata and more, actively promote certain solution – including in the current legislative framework, and possess the capacity, together with the suppliers of renewables technologies and solutions, to promote change in this area, also in respect to enabling vulnerable customers to become part of the new decentralized energy system. In this respect, the following specific policy recommendations were formulated during the expert meetings and put forward for discussion at the FEF.:

1. Introduction of specialized legislation to support energy cooperatives/communities consisting of citizens and legal entities - in accordance with the Directive (EU) 2018/2001 (recast) on the promotion of the use of energy from renewable sources /RED II/ and the Regulation (EU) 2019/943 on the internal market for electricity, and the forthcoming National Energy Poverty Strategy;
2. Encouraging the installation of small RES capacities by end users through reduced administrative burden and creation of a unified service procedure - "one stop shop";
3. Minimizing the administrative steps involved in permit procedures for the construction of small RES installations in order to reduce unjustified delays and refusals to connect to the grid;
4. Optimization of administrative procedures at the local (municipal) level by setting a framework for action at the national level.
5. Introduction of the so-called "virtual net metering" allowing households to participate in the same net metering system and share the electricity produced by a common facility that is not physically connected to their property or meters;

6. Transforming the current "energy aid" scheme for vulnerable consumers into investment support, e.g. for reimbursement of capital costs for RES;
7. Facilitation of procedures and additional stimulation, incl. financially, when building and operating new small RES capacities with proven consumption of a larger part of the produced energy in the property where the capacity is built or within the energy cooperative/community;
8. Simplifying the procedures for net metering of the production of small RES installations and removing the possibility of network operators to unilaterally change the administrative procedures for trading excess energy with the network;
9. Shifting the focus of RES capacity policies from the "electricity-only" concept to the inclusion of integrated heating and cooling systems - together with appropriate incentives for end-users.
10. Development of a strategy to encourage vulnerable consumers to become active participants in the energy transition, incl. by introducing new financial instruments such as local investment funds, revolving grant funds, soft loan schemes, tax reliefs on RES and energy efficiency costs, acquisition of consumer shares in power generation facilities, etc.

Within the FEF, two of the recommendations were put under scrutiny, with the following implications:

1) Introduction of specialized legislation to support energy cooperatives/communities consisting of citizens and legal entities - in accordance with the Directive (EU) 2018/2001 (recast) on the promotion of the use of energy from renewable sources /RED II/ and the Regulation (EU) 2019/943 on the internal market for electricity, and the forthcoming National Energy Poverty Strategy. It should be only implemented in an integrated manner together with the other measures (as presented in the other recommendations), and in a way that ordinary people (i.e. households) could benefit and not only businesses and well-politically-connected persons.
2) Developing a strategy to encourage vulnerable consumers to become active participants in the energy transition, including through the introduction of new financial instruments such as local investment funds, revolving grant funds, soft loan schemes, tax relief on renewable energy and energy efficiency costs, acquisition of consumer shares in energy generating installations, etc. These should be implemented only if it is integrated with the strategy for market liberalisation; market liberalisation would be fair only if it includes measures for inclusion and protection of vulnerable groups. When developing such strategy, it must include measures for introduction and awareness raising regarding net metering, which is still unknown and missing from the regulations and, hence, the market.

2.1.4 Recommendations for the transport & mobility sector

As mentioned above, at the current stage of market (and social) development, it is extremely difficult to differentiate energy related aspects of the transport and mobility issues from the general context of the financial accessibility and outreach of the public transportation system and the introduction of new mobility concepts and technologies. Already the focus groups conducted in the beginning of the FETA process clearly demonstrated that innovative constructs in that area are largely misunderstood and underappreciated; in both the citizens' and, surprisingly, the experts' groups, questions are often referred to overall social and economic problems, which is indicative of insufficient apprehension of the specific issues related to clean and affordable mobility.

In this context, specific outputs of previous research work and strategic documents (e.g. Vision for Sofia) were used to demonstrate the potential of different conceptual approaches and solutions and their possible impact on energy poverty mitigation. The expert community was also exposed to the FETA cases and challenged to comment on them, with the idea to enable

the formulation of policy recommendations encompassing various and prevailingly energy-related aspects of sustainable mobility. As a result, the following recommendations were elaborated:

1) Improving the quality of urban and intercity public transport when applying requirements for the use of low-emission (environmentally clean) means of transport;
2) Improving the public transport connectivity of isolated rural areas or outlying neighbourhoods in major cities with relevant urban centres, incl. by introducing schemes for integrated urban transport;
3) Improving the quality of the railway infrastructure and creating an integrated model for public transport, providing connections and integration between different types of transport;
4) Development of local strategies to promote sustainable and integrated mobility (promoting carpooling or the use of shared low-emission vehicles such as electric cars, bicycles or electric scooters, introducing a comprehensive set of measures to promote pedestrians and cyclists especially in city centre parts);
5) Development of initiatives and programs by national and local authorities encouraging citizens to adopt sustainable behaviour, such as free public transport days, car-free days in city centres, and electric car-sharing services;
6) Expansion of the network of electric charging stations, incl. on the main intercity roads;
7) Increasing consumer awareness of the advantages of low-emission transport and, above all, of electric mobility;
8) Development of programs for free subsidies and preferential or low-interest credits to replace polluting cars with low-emission ones.
9) Strengthening control over compliance with pollution standards by motor vehicles;
10) Development of specialized programs and financial instruments to support vulnerable consumers to use low-emission personal vehicles.

Within the FES, the following two recommendations were subject of discussion, with the following implications

1) Improve the public transport connectivity of isolated rural areas or outlying districts in large cities with the respective urban centres, including through the introduction of integrated urban transport schemes. According to the participants, it is important to consider the needs of specific groups of consumers using public transportation, as well as their habits, e.g. old people living in rural areas or pupils, minority groups in city outskirts, etc. When implementing, it is also important to consider and promote the possibilities for "shared transport" options also.
2) Raising consumer awareness of the benefits of low-emission transport and, in particular, of electric mobility. According to the participants in the FEF, the energy transition would only be fair if it offers preferences for CNG-powered vehicles and not only e-vehicles (CNG is still considered as "clean" and still the cheapest option in Bulgaria and about 1/4 of the vehicles are using it - note by facilitator). Maybe providing another explanation to the above statement, it was inferred that it is also important to consider the lack of information about the benefits of low-carbon mobility, incl. the incompleteness of information on the internet. Additionally, it is deemed as very important to consider the possibilities of building cycling infrastructure (incl. shared bikes), which should be with high quality, integrated in a network and not single lines, and combined with the public transport.

2.1.5 Communication

As evident from the descriptions above, the communication activities targeted to raise the awareness of potential beneficiaries/investors in all three areas were a major focus of discussion both in the expert meetings and the citizens' forums. As per the conducted sociological surveys and desk analysis of the policy actions performed so far, communication

is extremely important and a key factor for the clean energy transition, especially in situations regarded as “risky“ (especially from policy-makers), as e.g. the transition from 100% grant financing for building renovation to more sustainable co-financing schemes. Within the expert community, there is a recognisable consensus that the level of awareness of the journalists is very law - very similar to that of policy makers, and immediate steps should be taken in this direction. On the other hand, multiple studies show that, besides national TV and prominent web channels, the key channel for information is world-of-mouth. In this regard, there is a need for clear-cut national level communication strategy on sustainable energy solutions that help mitigate energy poverty which should be undertaken at both national, involving general-purpose media, and local level, exemplified by community action lead by the local authorities and opinion leaders. In this respect, specific recommendations were formulated in this horizontal area as well, as follows:

1) Communication should take place at both national and community level to convince users in the benefits of sustainable energy solutions;
2) Communication should be delivered by professionals and the necessary investments should be provided by the support programmes;
3) If applied properly, communication could turn the vulnerable citizens from nepotist to proponents of renovation, as they will be the ones that would benefit the most;
4) The efforts of civil organisations to maintain communication activities should be supported and they have to join forces to optimise the effect of their projects;
5) Specific training for media representatives should be performed.

3 Conclusion

The approach of the FETA project has proven to be highly successful in collection of grassroot evidence for both the practical implication of energy poverty and the attitudes and expectations towards the fair energy transition which is expected to dominate the social landscape in the next decade. The results effectively demonstrate the still very low levels of awareness among the vulnerable groups, which is an explicit signal for the need of intensive and pro-active communication campaign lead by the public authorities to explain the various aspects and benefits, closely correlated to the actual needs and real-life experience of the citizens. To this aim, additional research should be performed, potentially with the involvement of communication professionals, with the goal to promote efficient pathways for increasing the shared knowledge and understanding of the main target groups towards the key processes and impacts of the fair energy transition. This certainly also implies the parallel development of the legal framework and dedicated financing schemes ensuring that new profit-generating opportunities are explored in a way that no one is left behind.

At expert level, there is a considerably better understanding and strong engagement in policy actions targeted to mitigate potential negative consequences and promote new opportunities related to the energy transition. This is particularly evident in the area of renovation of residential buildings, but other topics as energy communities and sustainable mobility are also gaining pace, specifically considering the impact on energy costs and the possibilities to engage previously “forgotten” peripheral social groups and minorities. While it is clear that there is still a long way to go before the formation of a shared expert opinion and political pressure in these two areas (with renewable energy production moving at a considerably faster pace), the already consistent action in the area of building renovation provides a solid proof for the importance and value of the coordinated action to establish shared grounds and informal collaboration patterns among the expert community.

In conclusion, it may be argued that the FETA process in Bulgaria has been among the outstanding developments in the past years, shifting key stakeholders’ groups towards building shared knowledge in the field of energy poverty. This process also involves collaboration with other projects and initiatives, including by integrating their results, e.g. from sociological surveys, various discussion formats and other qualitative and quantitative methods to explore citizens' attitudes and expert solutions. This has given a strong impetus to the work on developing a national definition of energy poverty, as well as towards the design of various programmes in support of vulnerable groups. We strongly believe that this work will continue in the future in a sustainable way, given that the majority of the experts involved at various stages of the FETA process are also among the members of the Energy Efficiency and Energy Poverty Committee to the national Advisory Council for the European Green Deal, responsibly not only for the development of energy poverty definition, but also for carrying out key reforms and channelling financing towards sustainable energy investment projects.

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