Position statement of Environmental Association Za Zemiata (Friends of the Earth Bulgaria) on the draft National Energy and Climate Plan of the Republic of Bulgaria 2021-2023 from 22.12.2023

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Summary:

In summary, the identified issues and gaps in the NECP draft are:

- The draft lacks the data from the energy system modelling which is key for a public and expert discussion, as well as data on its connection with the other sectors of the economy.

- There are no sectoral targets - transport, buildings, but also the share of renewable energy in heating, the share of renewable energy produced by cities, energy communities and individual households, energy derived from sludge produced from wastewater treatment.

- It would be beneficial to have a target for adaptation which can accelerate the implementation of measures at the different levels.

- Planning is needed with regards to reduction of consumption of fossil gas and to set out a final date for fossil gas phase out.

- Planning is needed with regards to reduction of consumption of oil and to set out a final date for oil phase out.

- We see a risk that good quality and efficient recultivation of coal mining will be overlooked.

- There is a lack of recognition of the effects of methane emissions from the oil and gas sectors and from coal mining, and there are no measures to reduce these emissions in accordance with the Global Methane Pledge from the Conference of Parties in Glasgow in 2021.

- There needs to be a clear indication of the greater goal to electrify transport, the heating and cooling sector and the industry which are the main trends in energy development and decarbonisation in the EU and globally. With regards to heating, there should be more incentive to implement the wider use of heat pumps, including industrial heat pumps.

- There is not enough attention to electricity and heat storage.

- There is not enough attention to the potential for developing low-temperature district heating networks.

- Focus should be placed on cooling as well - not only in municipal buildings/public buildings or the service sector, but also as part of the mix of solutions to the increasing summer energy poverty.

- There is no target for energy poverty reduction (and no specific measures).

- There is a lot of discussion on where RES cannot be deployed, but there is no mention of institutional progress on the List of Renewable Energy Priority Zones.
- There are a plethora of pilot projects in different sectors and technologies in order to test new technologies, to develop capacity and know-how and then develop certain things at scale.

- Pilot projects should not depend mainly on public funds and hydrogen should not be used as a one-size-fits all solution or hydrogen storage and consumption technologies to be positioned as a means to extend the lifetime of coal plants.

- Not only is there no attention dedicated to innovative mechanisms such as energy technologies (for heat production and storage), but it has even been said that these are not applicable to Bulgaria.

- There is no assessment of all the complicating cost factors and delays for potential new nuclear capacity, and there is no plan or even mention of the need to manage previously exported to Russia used nuclear fuel.

**Introduction:**

It is probably a coincidence that Bulgaria’s first draft of the National Energy and Climate Plan (NECP), which contains partial policies and measures but no results from the energy modelling, was published on 22nd December 2023, one day after the announcement of the start of the infringement procedure against Bulgaria (a notification letter was sent) due to the fact that Bulgaria has not submitted its NECP draft to the European Commission within the statutory deadline of 30 June 2023. Our assessment as part of the Climate Action Network Europe (CAN) review of the submitted NECP drafts, published at the end of October 2023 was also linked to the practically impossible public participation.

The current published NECP version gives the impression that it solely presents the current policies and measures in Bulgaria but not how they will change to achieve the national interests in line with the energy transition and achieving a safe climate future. NECP is characterised by timidity in naming unpopular measures; and without naming the real problems, it would not be possible to find adequate solutions.

We very much hope that after the publication of the final draft, there will be sufficient time for public consultation - at least eight weeks! We are also hopeful that such time will be granted for comments on the final draft before the deadline for submission to the EC in June 2024.

The position of Za Zemiata (Friends of the Earth Bulgaria) on the version of the updated NECP proposed on 22 December 2023 for public consultation is that the current draft does not meet the objectives of REGULATION (EU) 2018/1999 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the Governance of the Energy Union and Climate Action and does not meet the mandatory conditions set out in the Commission Implementing Regulation (EU) 2022/2299 of the European Commission and the Commission Notice on the Guidance to Member States for the update of the 2021-2030 national energy and climate plans (2022/C 495/02). According to Regulation 2018/1999 the NECP “should set out national objectives for
each of the five dimensions of the Energy Union and corresponding policies and measures to meet those objectives and have an analytical basis.”

Such objectives, policies and measures, as well as their analytical basis, are partially or completely missing in the current document. Rewriting information from various other documents, mostly related to the EU funds absorption, cannot provide these missing elements and much less fulfil the objective of the guiding strategic document “to meet the objectives and targets of the Energy Union” of the EU.

“Experience in the implementation of Regulation (EU) No 525/2013 has demonstrated the importance of transparency, accuracy, consistency, completeness and comparability of information. Building on that experience, this Regulation should ensure that Member States use robust and consistent data and assumptions across the five dimensions and make publicly available comprehensive information concerning the assumptions, parameters and methodologies used for the final scenarios and projections taking into account statistical restrictions, commercially sensitive data, and compliance with the data protection rules, and report on their policies and measures, and projections as a key component of the progress reports.”

The regional dimensions of INPEC, which are crucial in the energy, transport and environment fields, are missing.

“Regional cooperation is key to ensuring the effective achievement of the objectives of the Energy Union in a cost-optimal manner. The Commission should facilitate such cooperation between the Member States. Member States should get the opportunity to comment on other Member States' integrated national energy and climate plans before they are finalised to avoid inconsistencies and potential negative impacts on other Member States and ensure that common objectives are met collectively. Regional cooperation in elaborating and finalising integrated national energy and climate plans as well as in their subsequent implementation should be essential to improving the effectiveness and efficiency of measures and fostering market integration and energy security.”

These significant deficiencies, the late publication of the incomplete draft, and the lack of an attached draft NECP Environmental Impact Assessment, also prevent the mandatory public participation requirement from being met.

The implementation of policies and measures in the areas of energy and climate has an impact on the environment. Member States should therefore ensure that the public is given early and effective opportunities to participate in and to be consulted on the preparation of the integrated national energy and climate plans in accordance, where applicable, with the provisions of Directive 2001/42/EC of the European Parliament and of the Council (14) and the United Nations Economic Commission for Europe (UNCE) Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters of 25 June 1998 (the ‘Aarhus convention’). Member States should also ensure involvement of social partners in the preparation of the integrated national energy and climate
plans, and aim to limit administrative complexity when fulfilling their obligations with regard to public consultation.

“When carrying out public consultations, and in line with the Aarhus Convention, Member States should aim to ensure equal participation, that the public is informed by public notices or other appropriate means such as electronic media, that the public is able to access all relevant documents, and that practical arrangements related to the public’s participation are put in place.”

Thus, the current NECP project does not achieve the required stability and predictability - a long-standing problem from which the development of the Republic of Bulgaria and its citizens suffers as well as the entire European Economic Area through the non-implementation of common sectoral policies, energy and transport networks and corridors, etc.

“Integrated national energy and climate plans should be stable to ensure the transparency and predictability of national policies and measures in order to ensure investment certainty.”

Some parts of this document, for example the conclusion on p. 17 that “Bulgaria remains one of the most energy intensive economies in the EU and has a high percentage of greenhouse gas emissions. The high energy intensity of the economy and the slow progress in achieving energy efficiency measures impact negatively its productivity and competitiveness” over 15 years after Bulgaria joined the EU, only demonstrate the effect of systematic poor planning on behalf of the responsible national institutions, which is an expected outcome considering the constant postponement of meaningful implementation of EU policies and targets during this period. These delays in reforming and modernising the economy’s sectors are the cause for the aforementioned issues and to the detriment of the high quality and standard of living in comparison to EU average.

IMPORTANT: EA Za Zemiata recommends that a high quality public consultation process is launched as soon as possible, as well as the meaningful participation and mobilisation of the social partners, which focuses on and follows the steps detailed in the Commission Notice on the Guidance to Member States for the update of the 2021-2030 national energy and climate plans (2022/C 495/02).

Strategic planning and goals:

We would recommend that the teams working on the NECP update at ME and MOEW should consult the recently published book "Methodology for Strategic Planning of the National Energy Sector" by Prof. Dr. Eng. Math. Dimo Georgiev Stoilov from Technical University - Sofia and Institute for Nuclear Research and Nuclear Energy at BAS. The book presents important conclusions on strategic planning and modelling and how it should be done. Below we share a few quotes in this regard. An analysis of the final version of the NECP, approved by the EC in 2020, is also available in the appendices available online.
"The interaction of the energy system with other man-made or natural systems is no longer modelled as the influence of individual circumstances, but as the combined development of the systems covered, each composed of its subsystems."

Page 285 - “The process of creating models for the development of the national energy sector requires a pool of highly qualified energy scientists, economists, ecologists, mathematicians and engineers to work in a top scientific environment... now Bulgaria is not only unable to create its own model, but cannot even use ready-made ones."

Page 336 - “Strategic national planning means identifying goals and ways to achieve them. First the national goals and then the energy ones, as stand-alone goals, but also as a prerequisite for achieving the national ones."

Page 343 - "Initially, a set of actions (policies, measures) is identified and each is evaluated both individually and in combination with the others. One of the most responsible planning activities is the selection of an optimal set among all possible actions, which is more than prioritisation."

Page 355 - “The discovery and comprehensive assessment of all possible options is a prerequisite for policy decisions leading to the greatest national good." (2017 Modelling for decision-making under uncertainty in energy and US foreign policy - Lauren Culver dissertation).

The author touches upon the issue of the lack of equality of the present and future generations in the context of the depletion of national reserves of non-ferrous materials. This issue is also key in terms of climate justice and the overall ecological footprint and concerns the harder decisions that the next generations will have to make in the face of delayed climate action.

We also support the position expressed by the author for the establishment of a Specialised Energy Development Organization to carry out meaningful planning, and as a necessity for the future security of the country.

Regarding the targets:

In the Communication on the assessment of the draft updated National Energy and Climate Plans on the submitted drafts by the Member States which was published on 21 December, it became clear that the target for the share of RES in the final energy consumption of 29.9% previously submitted submitted by Bulgaria to the EC through the EU Pilot structured dialogue exchange and included in the current NECP draft is below the minimum required for the EU to meet its RES targets. The Bulgarian target should be at least 33% according to the formula set out in Annex II of Regulation (EU) 2018/1999 on the governance of the Energy Union and climate action. Bulgaria's potential to meet RES targets is far as much as 60-70% by 2030.

The energy efficiency targets in the NECP differ from the data submitted to the EC. In this regard we call for a national energy efficiency commitment to be set that exceeds the minimum
reduction under the Energy Efficiency Directive (EED) formula of no more than 13.71 Mtoe for primary energy and 8.85 for final energy consumption.

**Integrated planning = Integrated plan:** There are no references to the 2020 - European Strategy For Energy System Integration. This strategy which looks at the interconnection between energy use in the different sectors and subsectors should underpin overall energy planning or to identify gaps in the interdepartmental planning and these should be addressed in the NECP.

There are only 6 mentions of net zero emissions in the plan - all declarative and with no commitment. There is no information on Bulgaria's involvement in the Net Zero Government Initiative, which the country joined on 9th December 2023 during COP28 in Dubai. We recommend that the country points out the positive commitments it has already made on the road to decarbonisation and show that there is something to boast about. As part of the strategy in a year's time, Bulgaria needs to present a decarbonisation plan for all government operations - trajectory, timeframe, when will climate neutrality be achieved and what are the intermediate steps along the way.

The EC Guidance to Member States for the update of the 2021-2030 NECPs sets out requirements for the inclusion of new measures related to the European Green Deal legislation, RePowerEU and Save Gas for Safe Winter. We accept that RePowerEU is largely covered by the inclusion of commitments and projects under the Recovery and Resilience Plan and the RePowerEU chapter, but other parts of the NECP should not conflict with these commitments - for example with the already mentioned plans for domestic gasification. We need a clear reference to all new EU legislation and how and when our country's legislation will be synchronised with it!

Looking at the EC's comments in relation to the plans presented by other countries from the region, there are systematic gaps in relation to carbon capture and storage utilisation, nuclear energy and the use of fossil gas. We urge that in order to achieve good quality in the final NECP draft, the government should look into the EC's comments regarding other states' plans and take into consideration the factors mentioned to avoid these systemic deficiencies. Here are some examples:

**Nuclear Power Plants**

Lifecycle costs of the new capacities are not taken into consideration. There are no realistic construction timelines, no alternatives on what the country will do in case of serious project delays or the inability to achieve the projected decarbonisation step in a given year. There is no plan or even mention of the need to manage the used nuclear fuel previously exported to Russia. The plans for new nuclear power plant capacities in Bulgaria are not expected before 2030 (the NECP timeframe) but the start of the projects will be in this decade, we do not believe it is justified to not address these long-term issues and we insist that they be included in the plan. It should also be outlined how Bulgaria will compensate for such delays - does the country have a Plan B, since it is relying on such large capacities with such a high share of the energy
mix. Outside of the EC comments, an important example is Poland’s partial energy decarbonisation plan published in the summer of 2023 where the costs for new nuclear capacities are set at the optimistic lower bounds of project costs offered by the project developer and the conservative approach suggests taking at least the upper bounds proposed by a developer. In his book, Prof. Dr. Eng. Math. Dimo Georgiev Stoilov talks about the need to “reconsider the security of critical energy infrastructure, for example the dangers of a nuclear catastrophe in the event of a missile strike on a reactor in Kozloduy NPP and the comparison between the security of energy production under decentralised generation” (p. 354). In this regard, “owners and operators of nuclear sites should identify and implement new measures for increasing the physical and cyber security of these sites, which inevitably leads to “increased costs and energy costs” (p. 351).

It should be considered whether an excessive share of nuclear energy in the energy mix can be well balanced - it is not possible for over half of the energy mix to be nuclear and therefore not very flexible.

If it will be developing its nuclear energy, Bulgaria needs to take into account all factors, risks and financial constraints, which is not currently done.

**Carbon capture and storage/usage** - this technology will have a particularly niche application in hard to decarbonise sectors. The areas

The areas and industries in which implementation is planned should be well described and identified whether there is a theoretical potential for an economically viable space for the captured emissions or following production. These plans and projects cannot simply be stated declaratively.

**Phase out of fossil fuel subsidies** - the document once again says that Bulgaria does not provide fossil fuel subsidies and the subsidy phase out is not relevant. Bulgaria actually provides both direct and indirect subsidies - paying for Maritsa East 1 and 2 carbon allowances under the ETS, fraudulent emission factors for power plants which are well described but overlooked by regulators, cross subsidies for cogeneration power production, long-term power purchase agreements for energy produced in coal-fired power plants, subsidies for the households and the businesses during the ongoing energy price crisis. The European Environment Agency’s November review says: “The estimated 2022 data shows that due to the impact of measures taken by Member States, subsidies increased dramatically to reach EUR 390 billion in 2022.” *For Bulgaria, the 2022 figure is almost half a percent of the GPD.* This figure does not include cross subsidies and hidden subsidies.

Hydro-pumped storage project in Bulgaria - **Yadenitsa.** The project for the expansion of the Chaira hydro-pumped storage plant with the Yadenitsa dam was dropped from the V List of Projects of Common Interest (approved by the European Commission on 19.11.2021) following the recommendation of Directorate--General for the Environment (ENVI), on the basis of Article 5.8 of Regulation 347/2013 - non-compliance with EU legislation (Habitats Directive, Article 4.7 of the Water Framework Directive, etc.).
We do not understand what this project is doing in the NECP. Will it be carried out with national funding in breach of environmental legislation?!

**Electricity:**

In the NECP we expect to see not reliance on more of the solutions from the past, but rather innovation in the search for the formula for improved energy efficiency, accelerated deployment of RES (60-70% by 2030 is quite realistic), better balancing of consumption to avoid as much as possible the forced disconnect of RES from the system in case of energy surplus - balancing of local consumption + regional consumption + interconnectivity and balancing. One of the positives of the plan is the increased attention to the role of the market in comparison to the previous region. But are we really expecting a 50% justified increase of energy consumption for us to be anticipating the need to have such capacities that we saw in the recently published Strategy for Sustainable Energy Development in Bulgaria?

And in case we are truly expecting this, are base load capacities such as NPPs the only way to balance the energy system or could we take a more technologically neutral approach in the next few years and use technologies that have already reached market maturity as well as relying gradually on solutions which are about to enter mass production. This actually is also one of the recommendations made by the International Energy Agency to neighbouring Greece which decided to use gas as a transitional fuel. Going forward, however, the advice of the International Energy Agency is for Greece to reconsider its plans to expand the use of fossil gas and to have more agnostic technological choices.

**Electrification** is the key trend in the energy development and decarbonisation of the EU and the world. It is a near universal answer to the need to decarbonise the heating and cooling sector, the industry, and transport. In the new NECP however, electrification is mentioned only once - as a subheading for the electrification of transport, if we do not count the table of contents where it is present within the same indexed title.

In the **heating and cooling sector**, in the first version of the NECP Bulgaria was a regional leader with regards to the renewable energy target, alongside Greece - both countries had a target of 42.5% by 2030. But despite the impressive goal, which was based on the widespread use of wood biomass in heating, the heating and cooling sector has a huge potential beyond biomass. Bulgaria needs to set a target for the decarbonisation of the heating networks in the country; an aim and goal to electrify heating and more efficient and cleaner use of biomass where it is necessary and with a trend towards its reduction or its use as back-up heating for buildings; replacing fossil gas with biogas (for example in pilot small district heating networks or for industrial consumers, and why not in an energy community). The potential for development of low temperature district heating networks has also not been sufficiently addressed.

NECP should refer to the new EU Energy Efficiency Directive, which introduces a new requirement for municipal heating decarbonisation plans. Considering the lack of sufficient powers, initiative and capacity in the hands of the local authorities, perhaps a **National Plan for Heating and Cooling Decarbonisation** should be formed to bring together the plans created
by municipalities with capacity and to complement and support the work of municipalities which have limited capacity. This should be done within such a timeframe which allows this work to be reflected in the next NECP update so that the decarbonisation of the sector can gain momentum towards the ambitious 2040 targets.

It is unacceptable that the establishment of energy communities in relation to heating and cooling is under “Not applicable at this time”. Of course it is applicable and highly desirable. Bulgaria needs to encourage the development of such communities in all creative forms of cooperation and use of energy for individual needs!

Here is an example of a quote from the NECP which denies the feasibility of energy communities in heat production or at least denies the role of policies to support and encourage their establishment: “Mandatory phasing out of solid fuel heaters that do not meet the requirements of the Ecodesign Regulations (EU) 2015/1185 and (EU) 2015/1189 and their replacement with other means of heating; In the National Programme for the Improvement of Ambient Air Quality 2018-2020 there is a measure regarding domestic heating - mandatory phasing out of solid fuel stoves and boilers that do not comply with the Ecodesign Regulations in 2020-2024 and the introduction of alternative heating means which contribute to the expected reduction of PM10 emissions from the domestic heating sector. The ultimate aim of the measure is to phase out inefficient solid fuel appliances. v. Where applicable, a description of the policies and measures to encourage the role of local energy communities with regards to their contribution to the implementation of policies and measures outlined in subparagraphs i), ii), iii) and iv). Not applicable at this time.”

The phasing out of inefficient solid fuel appliances in Bulgaria is happening at a very slow pace. And the programmes to replace heating appliances should be expanded to the national scale. Measures to replace stoves should go hand in hand with measures to increase energy efficiency.

“Implementation of a fuel quality standard for coal (nationwide), surrogate measures to reduce the moisture content of firewood used in municipalities that do not meet the PM10 air quality criteria and, potentially, a maximum moisture content of firewood, consistent with the National Air Pollution Control Programme 2020-2030.”

The regulation for the quality of solid fuels (coal and briquettes), used for domestic heating, is already a fact. Regarding the use of wood for domestic fuels, there should be a regulation with standards directed to producers and sellers similar to the standards in the already adopted coal regulation. Consumer requirements remain wishful thinking and are unenforceable, including in terms of control.

**Smart systems** - smart meters, smart transport and smart grids - as much as for the purposes of this position statement we could group them into one category - are mentioned a total of 66 times in the NECP. The potential to balance the electricity grid along this line is completely ignored and the Demand Side Response (DSR) remains primarily along the lines of large consumers. Incentives need to be devised to encourage aggregators on the market and to
encourage behavioural changes in the consumers - through price incentives, by promoting measures to consume renewable energy where it is available and to save it whenever it is in short supply. For example, a household should be encouraged to consume on-site a maximum share of the electricity produced by a rooftop PV installation, an electric vehicle consumer should have an incentive to charge during surplus hours and not charge their car during shortage hours unless it is unavoidable. Heat pump users could be encouraged to use heat storage systems to avoid peak load, etc.

**Energy communities** have been declaratively mentioned around 10 times - without a specific target for targets, policies or programmes which could stimulate their development. And only in the context of electricity but not heating and cooling. Bulgaria will soon see its first energy community, with the assistance of Gabrovo municipality.

Overall, we need a plethora of pilot projects in different sectors and technologies like neighbouring Greece. This should be done with the intention to test new technologies, to develop capacity and know-how and then develop certain things at scale.

**Model of balancing of RES**

"The balancing model in Bulgaria is transparent, provides for equal conditions for balancing, regardless of the technology of production, the size of the facilities and whether they are supplied at regulated or freely negotiated prices."

However, there is no vision for the development of a heat market and access of small producers to the district heating networks. The above quotation sounds too optimistic for the current situation.

In the section on balancing, we also noticed:

Empty texts: here we will insert the text from the cover note on the balancing market from the NRRP (p. 70)

Outdated texts: In this regard, in 2020 it is expected that the phase-out of regulated prices for household consumers and small industrial consumers will begin (p. 70)

We also could not help but wonder when Bulgaria will have an action plan to deal with the threshold of 70% of electricity transmission capacity, while respecting the operational safety limits after taking into account contingencies, starting from 2026 (under Article 15 of Regulation (EU) 2019/943)?
Coal and just transition

We would like to reiterate our request expressed in the CAN Europe and Za Zemiata’s assessment on the Bulgarian NECP update to not allow the unnecessary and unfeasible extension of coal use beyond 2030, and to clearly define the role of coal and carbon intensive regions in the energy transformation of Bulgaria in accordance with the Territorial Just Transition Plans (TJTPs). We would like to recall that the TJTPs were approved by the EC with particular comments exactly due to the lack of interim targets by 2030 for the implementation of the measures in the plans. Such interim targets for coal mines and power plants are more than mandatory for the final NECP version!

- "Preserving the role of local energy resources (coal) and using them in accordance with the requirements of environmental legislation”.

The aforementioned goal, expressed on page 55 in Goals regarding the increase of the flexibility of the national energy system is self-contradictory. Environmental legislation is becoming more and more strict, and with the recent IED updates most of the coal capacities should close tomorrow, if not even yesterday. The current coal capacities have less and less time for an economically viable life with no more than 20-25% coal use by 2030 under the Centre for the Study of Democracy’s (CSD) scenarios, which are also part of the Energy Transition Committee’s work.

The so-called “American power plants”, whose long-term power purchasing contracts are coming to an end soon, have already announced their plans to reduce their operations to seasonal production (ContourGlobal Maritsa-East 3), while TPP AES Galabovo will discontinue the exploitation of its coal fired capacities in Bulgaria (908 MW). At the same time, the environmental risks associated with the companies’ plans to use alternative fuels - waste as a stand-alone fuel or in combination with biomass - remain a major concern.

In conclusion, the energy transition is already happening but it is not planned, smooth or structured. This can still be fixed by giving more clarity on government policy and measures, including giving clarity to the residents of Beli Bryag and Troyanovo, which are being displaced due to coal mining in Stara Zagora.

In this regard, it is important to set out a clear plan on which lands will be affected by future coal mining in the economically declining coal mining activities of the Maritsa East Mines. We urge that all measures aimed at depopulating the villages of Beli Bryag and Troyanovo be stopped, and that the displacement plan is completely changed. The payment of fair compensations to the inhabitants of the villages that have been forced or will be forced to leave their properties is still pending.

There are no specifics, including timeframes, for the recultivation of affected land, which is important due to the reduction of coal mining activities. The issue of whose financial responsibility the recultivation will be according to the ownership of the sites or the concessions (of state or private entities) is not addressed. There is no data on the current and future (after
the end of its exploitation) surface size of the damaged land in Bulgaria, there is no estimate what funding will be necessary to complete the recultivation and so on.

We see a risk that good quality and efficient implementation of coal site recultivation will be neglected at the expense of corrupt practices, similarly to the closed uranium mines, as well as the potential that the “polluter pays principle” will not be followed. We urge that a procedure be developed whereby citizens from the relevant localities and NGOs can be included in the decision-making process concerning recultivation and that they could monitor it.

**Fossil gas**

The current version of the NECP pays a lot of attention to the development of the gas transmission infrastructure, to local gas extraction and to domestic gasification - all activities that would confirm the turn towards increased fossil gas consumption. Gas, as it is a fossil fuel, in general moves Bulgaria further away from the goal of net zero emissions and risks leading to a new lock-in to fossil fuels.

The overall policy at the European Union level is towards reduced fossil gas consumption. While the objective of diversifying gas sources is understandable, more serious attention needs to be paid on reducing dependence on gas in general. The European Union’s RePowerEU plan in response to the crisis triggered by Russia's invasion of Ukraine says that “In the new reality, the EU’s gas consumption will reduce at a faster pace, limiting the role of gas as a transitional fuel.”

In this sense, attention should be directed not only towards the diversification on the sources of gas, but on reducing dependency.

Za Zemiata (Friends of the Earth Bulgaria) supports Civil Society 10-point plan for a fossil gas phase out by 2035, which in addition to divesting away from the fuel, includes important demands such as the immediate cessation of gas infrastructure expansion, the end of gas production locally and globally and that the life of the gas industry not be extended by hydrogen, etc.

This is why we urge for the reconsideration of the specific text on page 220, according to which “natural gas has the potential for significant and steady growth in industry, energy and residential consumption. Its role as a transition fuel in the decarbonisation process and the drive towards a low carbon economy is also recognised.”

As well as on page 73: “Measures for the rehabilitation, modernisation and expansion of the existing gas transmission infrastructure and the development of interconnection shall be considered and implemented as a matter of priority, as these activities provide additional opportunities to increase the use of natural gas in the country with corresponding economic, social and environmental benefits.”

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1 Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, REPowe EU, 18.05.2022
We should ask what is the reason for giving gas such a prominent role considering the trend of declining gas consumption across Europe? Moreover, the direction set by the EU’s gas legislative package is even towards the drafting of ‘gas network decommissioning plans’.

Serious rethinking is needed of household gasification plans, which is a measure of the Third National Action Plan on Climate Change (2013-2020), extended to 2030. We note that the situation in 2024 with regard to fossil gas is radically different from the situation in the period 2013-2020, as the energy crisis has led to a serious increase in gas prices (a trend since 2021) and brought to the fore the uncertainty of gas supply and the volatility of the fuel price.

Bulgaria is a country with only about 4% of domestic gas consumption, which puts it in an extremely favourable position for phasing out gas from the energy mix for individual households. A programme for household gasification will lead to the need to re-invest in heating switching soon afterwards to comply with the EU requirement not to use fossil fuel boilers in homes after 2040\(^2\). This will lead to an additional financial burden for households, beyond the uncertain and high gas prices. It is important to note that household gas use releases harmful secondary pollutants, such as nitrogen dioxide, and one of its adverse impacts is the proven increase in the risk of asthma in children.

This is why we call for a significant re-examination of the role of gasification as a solution for households. Instead, measures focusing on electrification of the heating sector and the deployment of energy-efficient heat pumps in combination with RES and storage measures would be appropriate.

This year, the EU Regulation on methane emissions reduction in the energy sector is due to be finalised, which aims to reduce the emissions of this greenhouse gas in the energy sector, especially leakages from gas infrastructure, including emissions from imported fossil gas. Several measures - which also have a low cost - to avoid these emissions are already in place. These include Leak Detection and Repair (LDAR) measures, where leak detection should be as frequent as possible, and ideally continuous, and repairs should be carried out immediately after leak detection. LDAR measures will inform and strengthen the currently weak measures for Measurement, Reporting and Verification (MRV) in the fossil fuel sector. Other measures include Ban of Routine Venting and Flaring (BRVF) practices when they are not conducted in the context of an emergency, but rather due to a lack of incentives (e.g., are commercially unattractive or regulations are lacking) to intercept and process fossil gas.

There also should be significant reconsideration of the plans for:

- Reconstruction of cogeneration plants and central heating boilers with natural gas turbines;
- Increasing high-efficiency cogeneration;
- Improving generation efficiency at existing coal plants.
- Fuel switching - from coal to natural gas.

\(^2\) Commission welcomes political agreement on new rules to boost energy performance of buildings across the EU. European Commission, 7.12.2023
The European Union aims to stop the use of Russian fossil gas altogether but there is also a visible trend to reduce the dependence on imports and the use of fossil gas in general. **The horizon for the use of this fuel is short - if we have to be realistic, 2035-2040 for its last applications**, combined with a gradual reduction in use. Any investments need to be aligned with this horizon and with the need to phase out fossil gas use. It is short-sighted for Bulgaria to be planning the continuation of household gasification when the rest of the EU increasingly moves towards electrification rather than direct burning of gas in households.

The NECP still contains outdated generic definitions for the role of fossil gas as a transition fuel that require reasoned specifications - when will it be used? Why is it unavoidable in some sectors? Will fossil gas consumption be limited elsewhere so that there is more capacity for use where it cannot be avoided? For example, a large consumer such as Sofia District Heating (Toplofikaciya Sofia) can move towards reducing the use of fossil gas as a fuel and towards increased deployment of RES, heat storage and low temperature systems, and fossil gas use can be used only for peak seasonal needs.

**The desire to push for local production** is also at odds with the European trends to reduce oil and gas consumption. Such a target should not have its place in the National Energy and Climate Plan in 2024 if we want to achieve net zero targets and move towards the sustainable development of Bulgaria’s energy sector and economy. The development of a new gas field carries economic, social, climate and environmental risks. The extraction of gas emits a significant amount of methane, a potent greenhouse gas that has until recently been greatly underestimated. It has a strong warming potential (80 times greater than carbon dioxide over a 20-year period). We believe that investments in new fossil gas fields are extremely overdue and at this stage will lead to a potential lock-in to significantly longer than necessary fossil fuel use, as well as divert (both human and financial) resources from the much needed clean energy investment. It is no coincidence that many governments are encouraging the cessation of exploration activities as they prefer to invest in clean renewable energy rather than fossil fuels.

Given the current difficulties in the coal phase out and considering that such a phase out will have to begin for fossil gas as well, we recommend that Bulgaria move clearly in the direction of future-proof renewables, rather than risk a new lock-in to fossil fuels - any new investment in fossil fuel extraction carries the risk of stranded assets and is futile in the long run.

In conclusion, the report of the European Scientific Advisory Board on Climate Change, released on 19 January, strongly criticises the criteria for fossil gas included in the EU Taxonomy, speaking of "the risk of lock-in to fossil fuels" and "policy inconsistency". The report’s recommendation is clear: "treat natural gas investments as unsustainable"!

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3 Позиция на „За Земята“: Разработването на нови находища на газ в България трябва да се преосмисли. За Земята. 20.07.2023
**Hydrogen** - “Hydrogen and electricity from renewables and the improved energy efficiency are the key elements of the European Union’s ultimate goal, which is also being worked on intensively in Bulgaria, and this will help build a climate neutral energy system.

The word ‘hydrogen’ is used 100 times in the current NECP version and is given the role of a near-universal solution for decarbonisation. At the same time, globally the potential of green hydrogen is highly overestimated. While it has its benefits and space/use, the technology has yet to be proven and developed and remains a niche solution for the hard to decarbonise sectors which use fossil gas. We see a big focus towards using hydrogen in mobility rather than for industrial use, as is recommended in the [Clean Hydrogen Ladder](#).

**Transport**

The decarbonisation of transport sets a strong ambition thanks to the new European target. For Bulgaria, as well as for the entire region, the ambition for RES share in transport by 2030 has increased to around 29-30%. Once again, achieving the target and developing trends such as electrification are declaratively stated without a full list of possible approaches, policies and incentives. For example, the only mention of electrification is in the subheading on page 117 - “iii. Policies and measures to achieve low-emission mobility (including the electrification of transport )."

NECP should describe the options for achieving this RES share - including biofuels, synthetic fuels based on RES energy, use of electricity in transport - individual, freight, urban but also in the railway network in Bulgaria. Railways can aim to use 100% energy from renewables in their operations, including by meeting their needs with their own renewable installations, considering the large amounts of industrial space and roof space available to the Bulgarian rail in the station areas.

Another specific example from the text is the complete absence of the **issue of oil dependency** of the national transport system, as well as an analysis of the causes, targets and measures for overcoming it, despite this being a requirement in the Regulation 2022/2299 and the Commission's Update Guidelines (2022/C 495/02). We also call for planning for the reduction and end date of oil use.

**Energy efficiency**

The current non-final version of NECP, in one form or another, repeatedly makes the claim to put energy efficiency first. On page 17, the following is stated:

"**Bulgaria continues to be one of the most energy-intensive economies with a high percentage of greenhouse gas emissions in the EU. The economy’s high energy intensity and slow progress in meeting energy efficiency targets are having a negative impact on its productivity and competitiveness.**"
Energy efficiency and energy efficiency are amongst the most affordable and fastest-returning means to kick-start decarbonisation while achieving the required 12.1% reduction in primary energy consumption relative to 2020 and 11.1% reduction in final energy consumption by 2030.

We would like to pay attention to a quote on page 21, which states:
"Bulgaria's main priority for ensuring energy security is the diversification of the sources and routes for natural gas supply, the efficient use of local energy resources and the development of energy infrastructure."

Here we should remind the Ministry of Energy and the Ministry of Environment and Waters of what is written in a footnote on page 158, section 3.4. Dimensions “Internal energy market”, quote “Policies and measures need to reflect the principle “energy efficiency first”. Reading the current version of the NECP, we have doubts about the understanding of the term "energy efficiency first", and the possible trajectories for achieving it by the leading ministries in the country.

Despite the positive words about the importance of energy efficiency in a number of documents on which NECP is based, the reality is completely different. A recommendation that we have already made multiple times is the need to prioritise the discussed principle in relation to the need to supply primary energy sources in Bulgaria. Designing, comply and implementing an array of policies and measures to increase energy efficiency in the different sectors, and especially monitoring the achieved results against the achievement of the above mentioned percentages for primary and final consumption are the key prerequisites for the satisfactory implementation of the NECP.

In this respect, we call for a national energy efficiency commitment that exceeds the Energy Efficiency Directive (EED) minimum reduction formula of no more than 13.71 Mt to for primary energy and 8.85 for final energy consumption.

Several recommendations to improve energy efficiency and reduce fuel poverty in the residential sector:

- To review the aims and effectiveness of the Long-term Residential Renovation Strategy Strategy as part of the NECP discussions. The current rate of building renovation and the resulting energy savings are grossly insufficient and are at odds with the European policies for decarbonisation of the building stock by 2050 and the interim indicators set.
- NECP would be the appropriate space to specify the amount of investment needed in energy efficiency as part of the Decarbonisation fund in the different sectors.
- To devise a number of programmes and funding instruments to support the renovation of multi household and individual household building stocks, working with different financial options while respecting the EU principle of "Leaving no one behind". Leaving no one behind means enabling as many people as possible (including those currently or in the long-term categorised as energy poor) to actively participate in the energy and social transition process.
- To strategically solve widespread issue with energy poverty in Bulgaria in accordance with the definition in the Energy Efficiency Directive (EED), and to address the need to support a just transition for energy poor and vulnerable households under the Social Climate Fund.
- To follow the principles of the Energy Performance of Buildings Directive (EPBD) in the Bulgarian programmes and instruments to allow assessment of the achieved results and
energy savings based on specific parameters (area in square metres of buildings, energy savings per square metre, and investments).

- To attract private funds to support building renovation, through a long-term and continuous policy until 2050. The uncertainty of timelines and programmes discourages private financing for energy efficiency investments.
- To complete the one-stop shop reform for building renovation, and to implement it in practice. Additional services such as training energy auditors, liaising with financial institutions, training installers, and local energy champions are just a few of our ideas.
- To develop safeguards for vulnerable energy consumers in the process of market liberalisation.
- To develop targeted policies to move energy poor and vulnerable customers out of these categories.

We remain open for feedback on the position statement:
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