



GREENPEACE



Do not lock Maritsa TPPs with fossil gas!

Sofia, 28th of June 2021

For the attention of: Stefan Yanev,
Prime Minister of the Republic of Bulgaria

For the attention of: Atanas Pekanov,
Deputy Prime Minister of the Republic of Bulgaria

For the attention of: Andrey Zhivkov,
Minister of Energy

For the attention of: Asen Vasilev,
Minister of Finance

Copy to: Rumen Radev,
President of the Republic of Bulgaria

Copy to: Tsvetan Kyulanov,
The EC Representation in Bulgaria

Copy to: Ursula von der Leyen,
President of the EC

Copy to: Frans Timmermans,
Executive Vice-President of the EC for the European Green Deal

Copy to: Elisa Ferreira,
European Commissioner for Cohesion and Reforms

Copy to: Kadri Simson,
European Commissioner for Energy

Copy to: Paolo Gentiloni,
European Commissioner for Economy

Subject: Gas investments in the National Recovery and Resilience Plan (NRRP)

Dear Mr. Yanev,

Dear Mr. Pekanov,

Dear Mr. Zhivkov,

Dear Mr. Vasilev,

Acting in the interest of Bulgarian society, we, the environmental organizations Environmental Association "Za Zemiata" ("For the Earth") - Friends of the Earth Bulgaria, WWF Bulgaria, "Greenpeace" - Bulgaria, E3G and the youth climate movement "Fridays for Future - Bulgaria", express our growing concern about the latest developments in the update of the National Recovery and Resilience Plan (NRRP), including additional investments in fossil fuels. According to the information available to us as of 25.06.2021, received from a series of discussions, workshops and communication with representatives of the caretaker government and the Ministry of Energy, we understand that it is expected the NRRP to co-finance the **construction of 1500 MW of combined cycle gas power capacity in Maritsa basin**, in order to cover the winter peak in electricity production and extend the economic life of some lignite TPPs. As in previous versions of the NRRP, this investment is presented as "transitional". There are expectations that part of this fossil gas (popularly called "natural" gas), burned by the retrofitted plants, is going to be replaced by hydrogen, but the perspective and implementation potential remains vague. The promise of a hydrogen future for the region remains declarative on the part of the state, as the information provided clearly shows that the new facilities are intended to operate only using fossil gas.

We believe that investments in gasification of lignite TPPs, based on fossil fuels, are at the moment absolutely unacceptable considering the climate commitments made by Bulgaria and the EU in relation to the Paris Agreement. We also believe that such investments are completely short-sighted economically and must not be made with public funds, even more as part of the Recovery and Resilience Plan, especially since public funds

for fossil fuel investments are highly unwanted¹ and, after 2025, are expected to be completely discontinued. Last but not least, such actions create a fictitious perspective and unrealistic expectations among the communities in the coal regions of Bulgaria, that the centralized model of the coal industry and its employment and economic activities could be artificially extended. In addition, according to the latest data from the current models² of the Center for the Study of Democracy, we have sufficient alternatives to cover the needs of Bulgaria during seasonal peaks, without additional gasification needed for the Maritsa basin. During the above mentioned consultations, we have been informed that there are alternative proposals for generation of necessary electricity capacity in the Maritsa basin, based entirely on renewable energy sources and energy storage, to cover daily and seasonal peaks.

The NRRP must be the instrument for complete energy and economic transformation towards a sustainable future. We cannot accept temporary and partial solutions, as well as low ambition - this is the least we owe to the future generations of Bulgarians.

We, non-governmental organizations with expertise in the area of climate and energy, and climate activists from Bulgaria and Europe, strongly oppose the replacement of one fossil fuel with another³. Our considerations:

- 1. Economic unprofitability and the so-called "lock-in effect" of solid long-term investments:** Once built, gas projects bind us to the usage of imported fossil gas for industrial, energy and domestic needs, as well as technology that will emit significant greenhouse gas emissions for the decades to come. In order to justify the high investment, gas facilities will have to operate beyond 2035, a date by which

¹ The EP supports greener funds for regional development and cooperation, 23.06.2021: www.europarl.europa.eu/news/bg/press-room/20210621IPR06628/ep-podkrepia-po-ekologhosobrazni-fondove-za-reghionalno-razvitie-i-strudnichestvo

² Green recovery pathways to Bulgaria's carbon neutrality by 2050, Policy Brief No.101, 08.06.2021: <https://csd.bg/publications/publication/green-recovery-pathways-to-bulgarias-carbon-neutrality-by-2050/>

³ For more information, see our European-developed Manifesto against fossil gas - "European Civil Society Gas Manifesto: <https://caneurope.org/20-organisations-release-eu-fossil-gas-manifesto-2035-phase-out/>

EU emissions and energy solutions will have to be radically different to achieve the UN and EU climate goals. Restricting them to work for a shorter period will lead to financial losses and foregone opportunities, and Bulgaria will again face the same situation as the current one with coal - looking for an alternative for energy transformation. The risk of blocking billions of public funds and paying double the price for decarbonisation by the Bulgarian society and business is obvious.

2. **Gas price increase** in the near future due to both the market conditions and the rising carbon emission prices. Bulgaria will have to pay even more for the release of carbon emissions on its territory, which will have a significant impact on the prices of energy produced from fossil gas and the prices for end users - business and households.
3. Any solution that leads to unnecessarily expensive energy is a **problem for the future competitiveness of the Bulgarian economy and postponement of overcoming the problem of energy poverty in Bulgaria**. Expensive electricity from gas power plants, which will eventually be powered up only for a few days a year, will inevitably result in financial difficulty for all producers and consumers of Bulgarian goods and services.
4. **Failure to comply with Bulgaria's climate targets and obligations** to reduce net carbon emissions by at least 55% by 2030 and achieving climate neutrality by 2050 will have negative legal and financial consequences; it may lead to diplomatic isolation of our country within the European Union and further drive away foreign investors seeking renewable energy and a green innovation environment.
5. The construction of 3x500 MW combined cycle gas (CCG) power plants is **unlikely to pass the "do no significant harm" (DNSH) assessment of the European Union Taxonomy** for sustainable finance required for NRRP investments. Although this component is not yet 100% clear, there are clear signals⁴ that the EU's governing institutions will not allow this to happen. As a result, Bulgaria may be the only

⁴ www.euractiv.com/section/energy-environment/news/fossil-gas-has-no-viable-future-eus-timmermans-says/

country in the top 10 carbon emitters in the EU that does not have a clear long-term decarbonisation plan for the energy sector.

6. **Sufficient gas infrastructure:** According to data⁵ of the Energy and Water Regulatory Commission (EWRC) for 2019, the existing gas infrastructure in Bulgaria covers more than twice the gas consumption in the country in one year. Building a new one is completely inappropriate.
7. **The low and falling demand** for fossil gas at the national level in various sectors will deepen as a long-term trend⁶.
8. **The negative effects** of fossil gas on climate, environment, human health and the rights of local communities, some of which are governed by authoritarian regimes outside the EU, will also continue to deepen as a problem.
9. Fossil gas is inevitably associated with the release - at all stages of the production chain - of emissions of the significantly underestimated **greenhouse gas methane**, which currently contributes to a quarter of global warming on an annual basis. Methane emissions are about 80 times more harmful to the climate than carbon dioxide emissions over a twenty-year period. According to the latest data⁷, as coal use decreases in the European Union, **fossil gas is already responsible for more carbon dioxide emissions than coal**. Reducing methane emissions is the strategy with the greatest potential to limit global warming over the next 20 years.
10. **The actual amount of carbon dioxide (CO₂) emissions per unit of energy produced from new combined cycle gas capacities is certainly much more significant** than the value provided in the NRRP. The information submitted to the NRRP that new combined cycle gas capacities will reach a level of less than **250 g of CO₂ per kWh** is **completely misleading and will not be approved by the EC. There is sufficient**

⁵ https://www.dker.bg/uploads/2021/god_doklad_2020.pdf

⁶ <https://csd.bg/publications/publication/green-recovery-pathways-to-bulgarias-carbon-neutrality-by-2050/>
<https://www.euractiv.com/section/energy-environment/news/fossil-gas-has-no-viable-future-eus-timmermans-says/>

⁷ https://iea.blob.core.windows.net/assets/eb3b2e8d-28e0-47fd-a8ba-160f7ed42bc3/CO2_Emissions_from_Fuel_Combustion_2019_Highlights.pdf

information from official sources⁸, and from the side of the industry⁹, that these levels for combined cycle gas turbines are two-three times higher than the parameters presented in the NRRP, especially taking into account emissions from the entire gas life cycle, including methane leakage. **This means that Bulgaria will have the same problem with the price of carbon emissions from gas, as early as 2025, as now with coal, and in reality these plants will not be part of the Capacity Mechanisms.** According to the current legislation (Internal Electricity Market Regulation), power plants emitting more than 550 g of CO₂ per KWh will be removed from this mechanism. These new combined cycle gas power plants, even if they help with the balance of the energy system, will only be able to do so at a very high price, unacceptable to the society and the business.

Hydrogen is not a mature technology and cannot be a short-term solution for production of electricity:

1. 90-95 percent of the available hydrogen within the European Union is produced from fossil fuels such as coal and fossil gas. Less than 0.1% is green hydrogen from renewable energy sources.
2. The production of green hydrogen will require significant new RES (Renewable Energy Sources) capacity, which must be tied to its wider use by industry, transport and other sectors that will use it as an energy carrier in the mid-to-long term.
3. Hydrogen will not be widely used before the end of the decade due to the lack of efficient (generation and transmission are associated with many losses) and cost-effective technology for its production, lack of hydrogen infrastructure and connectivity at European level. That is yet to be built, and it will take decades.
4. The planned adoption of hydrogen and related hydrogen technologies for production, combustion, transmission and storage is expected to undergo a major

⁸ <https://www.iea.org/data-and-statistics/charts/full-lifecycle-emissions-intensity-of-global-coal-and-gas-supply-for-power-generation-2018>

⁹ https://www.wingas.com/fileadmin/Wingas/WINGAS-Studien/Energieversorgung_und_Energiewende_en.pdf

technological leap in the coming years. However, innovation is still in its initial phase of approbation and many of the answers on implementing this solution, especially those that require large-scale implementation, and hence scale economies, are not developed effectively enough.

5. If there is an urgent need from small peaking plants, those must be powered entirely by non-fossil gas (green hydrogen or biogas). All use and combustion of fossil gas or hydrogen produced from fossil gas must be completely eliminated before 2030.

Open questions:

1. Why locking-in investments in hydrogen infrastructure development only in few parts of the country, given the EU's climate goals, if funds could be redirected to energy efficiency and innovation projects in the field of renewable energy and green hydrogen deployment solely for the most urgent needs of the Bulgarian industry?
2. If investments in fossil gas in the NRRP are really considered profitable and meaningful, then why the participation of Bulgartransgaz was minimized to 9% of the total project amount in the NRRP's third version?
3. We expect from the government an estimate on how the planned 1500 MW of combined cycle gas energy capacity in the Maritsa basin will be financed, how many hours are expected to work per year and what are the scenarios for their payment.
4. Why don't we utilize the huge disturbed territories of the Maritsa basin for RES? We would like to see an objective comparative economic and environmental analysis with an alternative technological solution in the Maritza TPPs - RES and energy storage on the reclaimed land of Mini Maritza Iztok / Maritsa East Mines.
5. How and where green hydrogen will be produced in Bulgaria, taking into account the necessary renewable energy and water, other environmental impacts, its potential use, planned investments and timeframes in the NRRP?
6. By 2030, Greece plans for 60% of RES in its electricity mix, Romania 50%, and Bulgaria - only 30%. Why do neighboring countries, which have access to the same

technologies as ours, plan to balance more renewable energy in their mix, while reducing planned fossil gas investments (including by changing their initial projects in NRRP)?

Our proposal for ensuring energy security and a fair energy transition:

1. Revision of the models and calculations for the need of base load power until 2050, compared to the real decarbonisation scenarios, integration on the European Electricity Market, energy transition and energy consumption by industry and households, as well as the corresponding update of the Integrated National Energy and Climate Plan (NECP) and the Long-Term Decarbonisation Strategy 2050.
2. Ensuring the winter peak in electricity consumption through ambitious measures for energy efficiency of the building stock and the heating of households - there is now sufficient experience gained with renovation and replacement of inefficient heating programs. These programs are ready and need only a little adjustment to be working and effective.
3. Provision of alternative capacity for renewable energy production on the territory of the Maritsa basin - by means of photovoltaics and storage batteries, which could happen mainly on a market basis, as well as by increasing the capacity of the project planned in NRRP for electricity supply on the auctioning principle, due to the lower price of renewables.
4. Reallocation of part of the planned funds to new or existing projects in NRRP related to energy efficiency (project number 9) and renewable energy sources (such as project 10 for renewable energy measures in households, which needs a tenfold increase in its budget) to support Bulgaria's Just Transition.

We expect our comments and proposals to be taken into account in the forthcoming public discussion of the revised version of the NRRP. We are available to provide additional information.

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