GREEN ALTERNATIVE

Environmental and social justice in Georgia

Green Alternative Comments on Energy Sector Strategy 2019-2023 of the European Bank for Reconstruction and Development (EBRD)

1st December 2022

Dear Sir/Madam,

Green Alternative has the pleasure to provide an opinion on the current Energy Sector Strategy 2019-2023 of the European Bank for Reconstruction and Development (EBRD).

We appreciate the fact that in countries with hydropower-dominated systems such as Georgia current strategy correctly underlines diversification need to overcome over reliance on a single source vulnerable to seasonal fluctuations and climate risks. But on the other hand, we find it troublesome that strategy keeps financing fossil fuel projects – in the oil, coal, and gas sectors.

Georgia commits to EU's green deal and starts developing the roadmap together with European Commission. Therefore, it is important that the Bank's strategy be fully in line with the Green Deal priorities.

Energy efficiency measures (EE)

Number one priority should be given to Energy efficiency. Georgia has vast energy efficiency (EE) potential in the public and household sectors and industry. EE represents a cross-cutting issue as it increases the country's energy security and leads to technological upgrade of the economy. Therefore, EBRD funding for Georgia must be guided by the principle of "efficiency first". It should be focused on the establishment of the energy efficiency measures (industrial, household, buildings, etc.) to private and public entities as well as municipal infrastructure and households with the aim to reduce Primary Energy Consumption and emissions and ensure low energy intensity of GDP, instead of to just "energy saving".

Rehabilitation and retrofitting existing energy infrastructure

In recent years EBRD has given much attention to controversial greenfield HPP projects (Paravani, Dariali, Shuakhevi, Nenskra HPPs) in Georgia that further increased vulnerability of the hydro-dominated system towards seasonal fluctuations on one hand and create fiscal burden for the State budget due to the long-term Power Purchase Agreements. Meanwhile 74% of total electricity generation in Georgia comes from Hydropower plants constructed during the Soviet Union. Most of these plants need urgent technical rehabilitation to increase efficiency and generation of cheap electricity. There is also an increasing need to modernize and optimize the existing assets too to ensure sustainability of energy systems.

Recent rehabilitation of the Enguri HPP with support of EBRD and EIB showed what benefits can be brought by rehabilitation works: Enguri HPP managed to produce more than 1 bln kw.h In January-August (2021) period compared to 2020 and increased its reliability for the energy system.

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EBRD should also support the development of the policies to encourage reinvestment by the private sector to increase safety and security of the existing hydropower, coupled with capacity and technological upgrade (like replacing turbine runners, optimizing system, raising turbine peak efficiency, spillway designs, digitalization etc.).

In addition, EBRD should also consider retrofitting existing HPPs by supporting floating solar plants on the surface of existing reservoirs that will increase the efficiency of both plants (Solar and Hydro hybrid system) and reduce water evaporation.

Diversification and decentralization of renewable energy generation

We fully support the expansion and diversification of the energy mix by developing renewable energy sources and related networks. However, we strongly believe that activities need to be specified in strategy more explicitly.

Due to the seasonal patterns of Hydro generation together with drastic negative environmental, social, and economic impacts, EBRD must stop the promotion of greenfield hydropower plants in Georgia. Instead, it should promote decentralized new renewables and other green technologies, diversifying the energy mix and addressing the needs for clean energy.

Fuelwood accounted for 6% -10% of the total primary energy supply and provided one-fifth of all domestic energy production, making it the second-largest indigenous energy source after hydropower. Of Georgia's 1.2 million households, almost half (around 500 000) use biomass as a fuel. It is consumed primarily as fuelwood for heating, and to a lesser extent, for cooking. Approximately 80% of the consumption is in the rural areas, home to just over 40% of Georgia's population. Therefore, household air pollution represents one of the major challenges for Georgia and needs to be addressed through the development of sustainable energy mix accessibility.

Georgia's vast potential for sun and wind should be exploited while ensuring the protection of country's biodiversity. According to the Electricity System Commercial Operator of Georgia (ESCO) the only windfarm Kartli as a rule, produce more electricity than newly built number of small and medium HPPs in Georgia during the wintertime, when the deficit of electricity is most visible.

In conjunction with new renewables, it is notable that prices for the Li-ion batteries have dropped significantly while technology keeps improving. According to IRENA[2] , Electricity storage will play a crucial role in enabling the next phase of the energy transition. Along with boosting solar and wind power generation, it will allow sharp decarbonization in key segments of the energy market". Stationary electricity storage can provide a range of key energy services affordably. As the cost of emerging technologies falls further, storage is becoming increasingly competitive, and the content of economic services it can provide will only increase. A few initiatives are ongoing in Georgia, and it should receive support through policy measures and different financial mechanisms.

Transparency within the Energy sector

Georgia currently develops the National Climate and Energy Plan (NECP), as required by the European Energy Community, with the secretariat's support (NECP needs to be revised by the end of June 2023). One of the major issues both with NECP and former decisions of the government, including ones supported by EBRD, is the lack of data from one side, coupled with non-transparency of other agreements existing in the energy sector. The Bank should strive for contract transparency within the energy sector due to its potential to impact the sector's macroeconomic parameters. EBRD has potential to support ongoing Georgia’s 2030 startegy development. As a result strategy should be geared towards Georgia’s transition to climate neutral, resource efficient clean and circular economy in line with 2030 targets of the European Green Deal.

Recommendations

Therefore, we ask you to completely stop financing any fossil fuel projects – in the oil, coal, and gas sectors to reduce countries' dependence on fossil fuels and reduce national CO2 emissions. Instead, EBRD should give priority in Georgia to:

1. Energy Efficiency measures;
2. Rehabilitation and retrofitting of existing energy infrastructure;
3. Diversification, and decentralization of renewable energy generation.