We cannot waste the opportunity to unlock the potential of green electrification: call to action for PEP2040 and NECP update

The ongoing process of updating the National Energy and Climate Plan (NECP) and the Energy Policy of Poland until 2040 (PEP2040) is an excellent opportunity to identify priority actions necessary to prepare the Polish economy and energy system to accelerate the transition in the coming years. In doing so, special attention should be paid to changes of a systemic nature, requiring the preparation of a comprehensive regulatory environment and the definition of ways for the private and public sectors to finance the necessary investments.

Such a challenge will be green electrification, which encompasses:

- 1) the increased share of electricity in various sectors such as transport or heating,
- 2) together with the development of renewable energy sources, especially wind and solar.

Green electrification is key to limiting Polish dependency on fossil fuels and the reduction of greenhouse gas emissions in the whole economy, thereby maintaining its competitiveness. The development of renewables and electrification are not the only measures to achieve these goals, however, analyses of leading national¹, European², and international³ centers indicate that regardless of the assumed pace of development of other zero-carbon technologies, a leap forward in green electrification is a prerequisite for the success of the transition.

Access to attractively priced⁴ zero-carbon electricity is essential for decoupling transportation from oil imports, deep energy modernization of buildings, and decarbonization of industry (both through direct electrification of processes and the use of clean hydrogen and the application of energy-intensive CCS technologies), and is becoming increasingly important from the perspective of Poland's participation in international value chains due to the growing importance of the carbon footprint for the competitiveness of domestic companies.

Delivering the green electrification of the Polish economy on time and in a cost-effective manner requires coordinating the activities of all energy market participants: producers, grid operators, as well as consumers, who will increasingly be able to cover their energy needs through the development of distributed sources. A special role in this process will be played by the regulations regarding the development and use of the electricity grid. Due to the scale of the necessary infrastructure

¹ The latest <u>KOBIZE analysis</u> from June 2023 indicates more than 200 TWh of electricity produced from wind and solar power in Poland in 2050, with more than 100 TWh from nuclear power.

² A June 2023 <u>report by the European Scientific Advisory Board on Climate Change</u> indicates that the share of electricity in the EU's final energy consumption should increase from about 20% in 2020 to about 50-60% by 2050, with wind and solar playing a dominant role.

³ The International Energy Agency's <u>Energy Technology Perspectives 2023 report</u> indicates that in order to achieve climate neutrality, the global share of electricity in final energy consumption should exceed 50%, and wind and solar power will be the two largest sources of electricity.

⁴ After the situation on the European market stabilised, in recent months <u>wholesale electricity prices</u> in Poland are once again among the highest in Europe.

investments, it will also be necessary to ensure a socially acceptable and efficient legal framework in this area.

Based on available expert studies⁵ and discussions at the sectoral and cross-sectoral levels⁶, we identify the following key areas for the success of green electrification, where cross-cutting actions anchored at the strategic level will be necessary:

1) A new approach to managing the expansion and use of grid infrastructure:

- Developing electricity grid development plans based on a long-term path to climate neutrality by 2050, taking into account accelerating electrification across sectors,
- Introducing clear and transparent regulations for the management of the electricity grid, including, in particular, the connection of sources and energy consumers,
- Basing grid management rules on requirements for the impact of market participants on the system (e.g., ensuring safe operating parameters for sources using a single connection point for cable pooling), rather than on a closed list of permissible solutions. This will provide greater flexibility for combining different generation sources, implementing lowcost measures to increase connectivity, developing storage, demand-side response, and sector integration,
- Adjusting the tariff structure to reflect the costs of the network development and management, and promote the adjustment of the production and consumption profile to the actual situation in the power system, including through investments in energy storage and direct lines,
- Developing a strategic approach to the provision of support for grid development investments: identifying clearly defined areas requiring support, selected based on transparent premises (e.g., subsidies for grid modernisation in selected areas, temporary preferential tariffs for selected solutions at an early stage of their development), which will allow for the effective use of available public funds and the pursuit of a consistent and predictable state policy in this area,
- Involving stakeholders from all sectors, in particular both producers and consumers of energy, in the planning and implementation of the above measures.

2) The efficient rollout of permits for RES, grid infrastructure, and energy storage investments:

- Setting a cut-off date (by the end of 2024 at the latest) for the adaptation of the national regulatory and institutional environment to the requirements of the Renewable Energy Directive (taking into account the amendments currently underway) in terms of the total maximum duration of the permitting procedure (up to 2 years for large projects),
- Introducing an accelerated permitting path for projects involving repowering of existing RES installations,
- Planning and implementing investments in digitization and empowering competencies of representatives of permitting institutions,
- Implementing RES go-to areas (covered by simplified licensing procedures) into the national legal framework,

⁵ Among others, reports by: PWEA and Lublin University of Technology <u>More Renewables in the Grid</u> and Forum Energii <u>To accelerate the development of RES</u>

⁶ Including as part of the Round Tables organized by <u>Reform Institute</u>.

- Monitoring the impact of other reforms (particularly in the field of spatial planning) on the length of licensing procedures, and avoiding changes that will prolong the aforementioned process,
- Translating the above measures into measurable indicators of the current and target duration of procedures in order to evaluate the effectiveness of the implemented changes on an ongoing basis.

Past progress in implementing reforms, despite certain positive changes, is too slow and fragmented. Hence, the identification of potential solutions necessary for unlocking the full potential of green electrification should become a prioritized activity within energy policy. Otherwise, we risk persisting in the trap of decision-making inertia, which will translate into costly delays of necessary investments.

On behalf of the recipients and producers of energy, including companies from the renewable energy, electromobility, sustainable construction, industry, and new technologies sectors, as well as experts from think tanks, we call for creating a space for dialogue and joint development of crucial changes that will unlock the potential of green electrification. We emphasise the readiness for constructive cooperation with public administration and the rest of the stakeholders, to address challenges and prepare solutions for green electrification in Poland.

List of signatories:

- 1. Reform Institute (Fundacja Instytut Reform)
- 2. Green Economy Institute (Fundacja Instytut Zielonej Gospodarki)
- 3. RE-Source Poland Hub Foundation (Fundacja RE-Source Poland Hub)
- 4. Polish Confederation Lewiatan (Konfederacja Lewiatan)
- 5. Polish Chamber of Commerce for Electronics and Telecommunications (Krajowa Izba Gospodarcza Elektroniki i Telekomunikacji)
- 6. Polish Organization of Heat Pump Technology Development (Polska Organizacja Rozwoju Technologii Pomp Ciepła)
- 7. Polish Photovoltaics Association (Polskie Stowarzyszenie Fotowoltaiki)
- 8. Polish Alternative Fuels Association (Polskie Stowarzyszenie Paliw Alternatywnych)
- 9. Renewable Energy Association (Stowarzyszenie Energii Odnawialnej)
- 10. Association Renovation Wave Poland (Stowarzyszenie Fala Renowacji)
- 11. Polish Cement Association (Stowarzyszenie Producentów Cementu)
- 12. Union of Employers Manufacturers of Construction Materials (Związek Pracodawców Producentów Materiałów dla Budownictwa)



Addressed to:

Mr Mateusz Morawiecki, Prime Minister,

Mr Jacek Sasin, Minister of State Assets,

Mr Grzegorz Puda, Minister of Funds and Regional Policy,

Mr Waldemar Buda, Minister of Development and Technology,

Mr Ireneusz Zyska, Secretary of State, Plenipotentiary of the Government for Renewable Energy Sources,

Ms Anna Łukaszewska-Trzeciakowska, Secretary of State, Plenipotentiary of the Government for Strategic Energy Infrastructure.