

Unpacking REPowerEU: systemic change as the solution to the energy crisis

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1. Introduction

Recent years have been marked by a series of economic shocks and Russia's full-scale military aggression against Ukraine, which destabilised fossil fuel markets around the world. Significant fluctuations in commodity prices triggered by the COVID-19 pandemic were compounded by Russia's actions, before and during the Ukrainian invasion. The unprecedented spike in natural gas and coal prices, as well as concerns about the physical availability of raw materials in Europe, forced an urgent response from governments, businesses and citizens. Along with other European countries, Poland faced the challenge of quitting its addiction to Russian fossil fuels – and fast.

In May 2022, in response to the expectations of the EU Member States, the European Commission presented REPowerEU plan, which aims to make the EU fully and permanently independent of Russian energy sources by 2030. The plan consists of short- and medium-term solutions focusing on different elements of the fuel and energy system. Its fundamental premise is to accelerate the energy transition, whose direction was set in the European Green Deal and operationalised in the European Commission's proposals under the Fit for 55 package. In practice, the implementation of REPowerEU involves strengthening already existing reforms (e.g. increased ambition in the revision of directives on RES development and energy efficiency improvement) and shifting the financial resources available under existing EU tools towards additional financing of the energy transition. This concerns, in particular, the increase of the Recovery and Resilience Facility envelope with additional funds from the EU ETS and the preparation of new REPowerEU chapters in National Recovery and Resilience Plans.

In this publication, we summarise the current state of REPowerEU implementation, its key elements from the standpoint of the Polish energy transition and crucial recommendations for action at national level.

For a more in-depth discussion of the various elements of the plan related to the development of renewable energy sources and energy renovation of buildings, see the *Unpacking REPowerEU* series of guides prepared by the Reform Institute and PORT PC¹:

- *How does Europe save energy and move away from fossil fuel consumption in buildings?*,
- *Towards healthy and energy-friendly homes*,
- *No more 'energy vampires'*,
- *Photovoltaics – the path to energy independence and low-cost energy in buildings*,
- *Clean energy – the solution to the energy crisis*,
- *Energy communities – the missing piece of the puzzle*.

¹ The guides are available on the [PORT PC](#) and [Reform Institute](#) websites (Polish versions only).

2. Implementation of REPowerEU one year after its announcement

The REPowerEU plan presented by the European Commission in May 2022 includes three key lines of action: 1) accelerating the transition towards clean energy, 2) achieving energy savings, and 3) diversifying the supply of energy sources. These involve a combination of regulatory changes and support for investments to ensure independence from Russian fossil fuels. Importantly, the plan includes both short-term measures to balance the demand and supply of energy carriers on an ongoing basis (e.g. new directions of fuel imports to Europe, incentives for behavioural changes to save energy) and accelerated changes for the long-term energy transition.

One year after the plan was announced, **the European Union managed to secure its short-term energy needs without falling into recession, despite the decline in Russian fossil fuel supplies being much faster than expected.** Moreover, the crisis has given a new impetus to investments in clean energy without leading to a structural return to coal in the European energy sector. In particular:

- Russia's share of gas imports to the EU has fallen from around 40% at the end of 2021 to around 13% at the end of 2022, and an embargo on Russian coal imports to the EU has been in place since August 2022.
- GDP growth in the EU between Q1 2022 and Q1 2023 was 1.3%. After a one-off decline of 0.1% at the peak of the crisis in Q4 2022, the European economy grew again by 0.3% at the beginning of 2023. Thus, fears of an economic collapse caused by the sudden cut-off of Russian gas did not materialise.
- After peaking in August 2022, in 2023, gas prices on the European market have fallen below their pre-February 2022 levels. In May 2023, they are at their lowest since mid-2021 and have returned to the levels seen in the previous decade.
- The EU has more than met the target of filling gas storage before the 2022/23 winter season and is on track to meet the 2023/24 target through a combination of gas supplies from new directions (including the successfully launched joint purchasing mechanism) and an 18% reduction in gas consumption between August 2022 and March 2023 (above the agreed 15% reduction target).
- Despite exceptionally low hydropower production and unforeseen nuclear plant shutdowns, fossil fuel energy production increased by only 3% in the EU in 2022 and is now declining, which could translate into a drop of up to 20% in 2023 compared to last year.² At the same time, there has been record growth in wind and solar power generation in Europe, driven in particular by new PV capacity.

² Estimates from Ember (2023), European Electricity Review 2023.

Europe's successful handling of the energy crisis in the short term does not affect the importance of the REPowerEU's long-term measures aimed at reducing fossil fuel consumption through investment in RES and permanently improving energy efficiency.

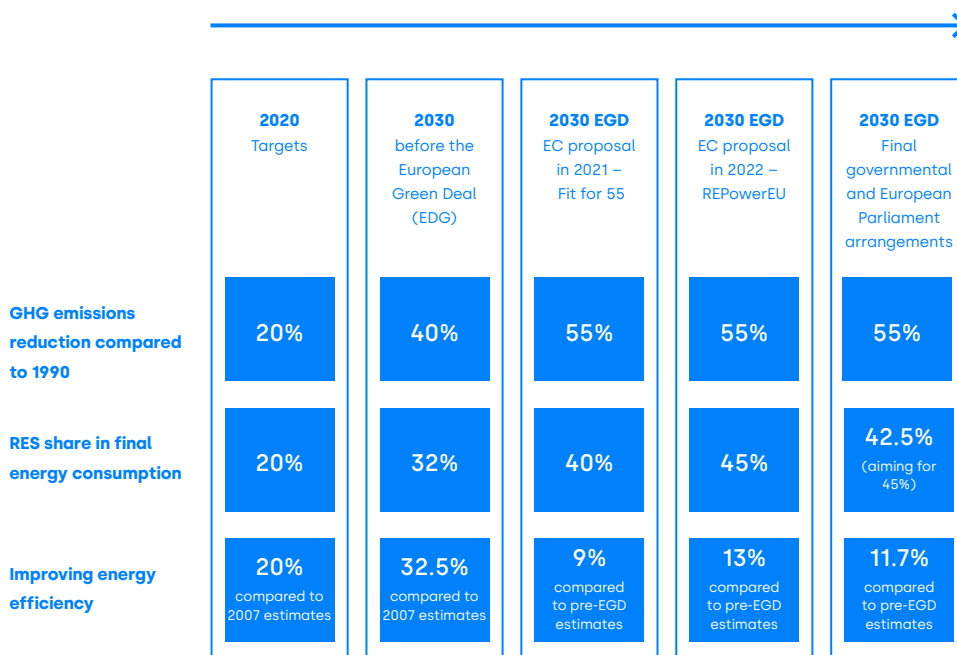
It is important to stress that, despite having avoided a deep energy crisis, Europe still faces the impact of energy price spikes on household budgets and the cost of associated protection measures, which are temporary and do not translate into a permanent reduction of the energy poverty problem. At the same time, the risk of a shortage of imported fuels in the event of supply chain disruptions (such as last year's fire at

an LNG export terminal in the US) and Europe’s high exposure to further fluctuations in gas prices on the global market, as well as geopolitical risks associated with new supply routes, persist.

In this light, **the progress achieved in setting long-term targets and tools to support the energy transition** made since May 2022 is all the more important. In spring 2023, the European Parliament and Member State governments (acting within the EU Council) agreed to increase targets for RES development and energy efficiency improvements by 2030. The final compromise falls between the Commission’s initial 2021 proposals and the increased targets proposed in REPowerEU. Member States have committed to achieving at least a 42.5% share of RES in final energy consumption and aiming for 45% by 2030, as well as improving energy efficiency by 11.7% above projections based on existing national plans by 2030.

Both governments and MEPs have also developed their negotiating positions on amendments to the buildings directive (EPBD), maintaining the direction of change proposed by the Commission. Negotiations on the detailed parameters of reforms meant to accelerate the modernisation of buildings and phase out of heating based on fossil fuels are likely to conclude in the second half of 2023.

Diagram 1. Increasing ambition of the European Union's climate and energy targets



Source: own work

At the end of 2022, Member States also agreed on additional financing for energy transition investments and reforms under the new REPowerEU chapter of their National Recovery and Resilience Plans. The Polish government presented a proposal to update the NRRP incorporating these changes in April 2023, launching a public consultation. The document should be submitted to the European Commission in the coming months.

3. Key pillars of the energy transition under REPowerEU

3.1 Energy-efficient and zero-emission buildings

In line with the 'energy efficiency first' principle, the pillars of REPowerEU included solutions to improve the energy efficiency of buildings. Furthermore, buildings consume as much as 40% of the EU's final energy. Consequently, the EU has opted for a combination of measures to improve the energy efficiency of buildings (e.g. insulating homes) and replace heating sources to become less dependent on fossil fuels in this sector. Stepping up action, the Commission has also proposed ending public support for investment in fossil fuel heating in buildings by 2025 and introducing a Zero Emission Buildings (ZEB) standard, which will eliminate the direct use of fossil fuels in all new buildings from 2028. According to the EC's announcement, retrofits of the most inefficient buildings (so-called energy vampires) would begin in the second half of the decade. While investment in retrofitting buildings will bring long-term financial, health and environmental benefits, it requires mobilising resources for upfront investment. This creates a pan-European framework for national action, which combines requirements for new and retrofitted homes with priority for renovating the most energy-intensive buildings.

Importantly, Member States will have access to a range of funding sources to support citizens in retrofitting their buildings. These include funds disbursed as part of the implementation of the National Recovery and Resilience Plan (including new funds under the REPowerEU chapter), as well as other European funds and funds obtained from the sale of emission allowances in the current (EU ETS) and new (ETS2) emissions trading system.

Due to the introduction of the latter – i.e. ETS 2, which will cover, among other things, emissions from individual heating sources – there will be also a new Social Climate Fund available from 2026, with Poland set to be its largest beneficiary. The Social Climate Fund aims to support social groups most vulnerable to increased climate policy ambitions and the redistribution of its costs. The Fund's allocation, along with the national contribution (effectively financed by the sale of the national ETS2 allowance pool), will amount to more than PLN 70 billion, which can be used to support Poland's residents, especially those at risk of energy poverty, in insulating their homes. However, the effective and full use of these substantial funds will depend on the actions of the Polish government. Therefore, it is necessary to prepare a robust plan for the effective use of the Fund and other available financing sources to support investment in the renovation wave of Polish buildings.

3.2 Unlocking the full potential of RES

The second strategic area of action under the REPowerEU is to accelerate the development of RES to allow a rapid transition away from fossil fuels across the economy. Here, the Commission's key proposals include measures to address the slow and complicated permit procedures for large-scale renewable energy generation projects and recognise RES development as an overriding public interest. In areas with lower environmental risks, Member States should identify RES go-to areas on land and at sea with shortened and simplified authorisation procedures.

Solar energy has a special place in the REPowerEU plan. In the 'Solar Energy Strategy' adopted in May 2022, the European Commission indicated a target of 320 GW of installed solar power capacity in 2025 and 600 GW in 2030. This will be possible by simultaneously accelerating investments in rooftop panels, large-scale installations and the expansion of the European PV industry.

Importantly, the REPowerEU's crucial renewable energy initiatives involve strengthening existing and previously planned RES development initiatives. Therefore, national implementation of REPowerEU will require not only implementing new EU regulations but also catching up with the implementation of current directives, such as the creation of a coherent framework for the development of energy communities in Poland.

3.3 Leading role of national governments in implementing necessary reforms and investments

Although the provisions of Directives are jointly agreed upon at EU level by Member State governments and citizens' representatives in the European Parliament, the ultimate responsibility for their implementation lies with national decision-makers. It is up to the Polish government to shape reforms enabling the removal of administrative barriers to RES investments, identify RES go-to areas and decide to what extent building renovations should happen through incentives and to what extent through orders and bans. Similarly, it is the Polish government's responsibility to prepare a reviewed NRRP that would unlock additional funds to meet the REPowerEU objectives, and implement it smoothly. However, meeting this commitment will be much more difficult without a robust public debate and an early start of substantive work on the necessary reforms and investments.

The lack of a comprehensive strategy that takes full account of the new European objectives and the technological and market changes that are forcing an acceleration of the energy transition essentially prevents the efficient prioritisation of legislation and the use of available financial resources. For this reason, it is vital to move away from the reactive model of managing the energy transition in Poland, which focuses on ensuring the longest possible transition periods and postponing system changes in the energy sector, towards designing public policy in advance, based on a long-term vision of achieving climate neutrality and taking into account the socio-economic benefits that are associated with investments in new energy technologies.

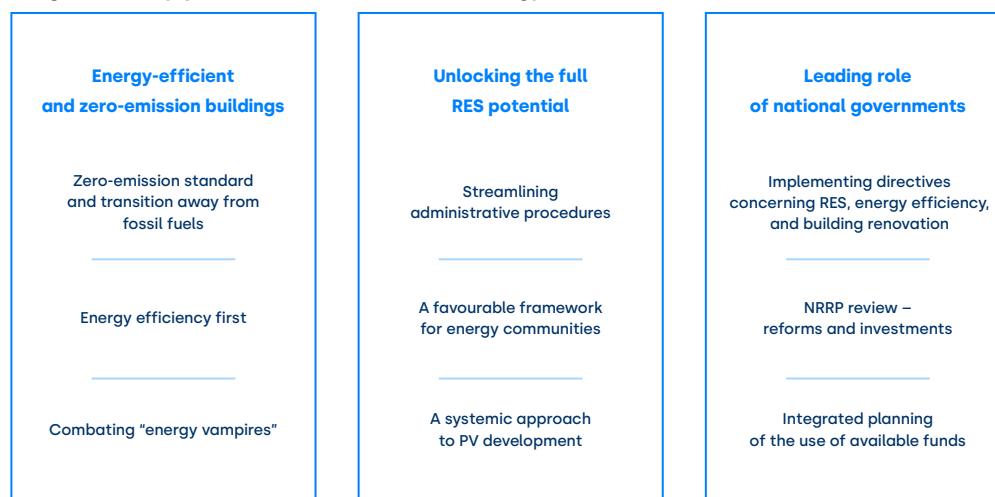
The REPowerEU initiatives implemented at the European level provide the framework and tools necessary to accelerate the energy transition at national level. Their effective implementation at national level and the distribution of the associated benefits and expenditures depends on the decisions taken by the Polish government and the quality of the processes implemented.

4. Summary and recommendations

One year after the REPowerEU was presented, Poland and other EU Member States face a vital challenge: moving away from day-to-day management of their energy crisis response to the implementation of strategic measures to accelerate the transition away from fossil fuels in the coming years. The plan's success and fully unlocking

the potential benefits of energy transition for citizens depends on decisions taken at national level in two areas: energy renovation of buildings and accelerating RES development. Below is a set of recommendations that would enable a smooth implementation of REPowerEU in Poland.

Diagram 2. Key pillars of the REPowerEU energy transition



Source: own work

Recommendations for energy-efficient and zero-emission buildings:

- revising support schemes concerning the objective of transitioning away from fossil fuels in buildings, including **phasing out subsidies for fossil fuel boilers** from 2024 at the latest,
- **banning the use of fossil fuel boilers in new buildings, increasing national energy efficiency requirements** for new buildings and heating systems in existing buildings,
- rapidly introducing a new energy classification of buildings that will identify the least efficient (the so-called 'energy vampires') and plan for the gradual and cost-effective upgrading of the entire building stock to a zero-emission standard,
- including the **fight against energy vampires** in the broader process of streamlining and digitalising the tools used to manage building modernisation in Poland, combined with increased support for the poorest citizens in terms of energy retrofit programmes.

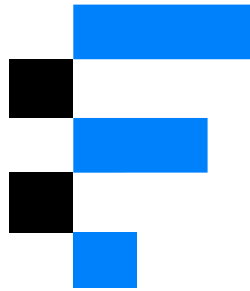
Recommendations for unlocking the full potential of RES development:

- **simplifying and accelerating permit procedures** for RES (including repowering), drawing on good practices from other European countries,
- identifying **RES go-to areas** with low environmental and social risks associated with RES investments while introducing an **incentive system** for local governments and communities in which the go-to areas would operate,
- recognising RES investments and related network investments as **public interest investments**,

- creating conditions for the rapid development of **energy communities** in Poland, including the development of a clear and non-discriminatory legal framework enabling all citizens to be involved in communities and financial support for pioneering initiatives,
- implementing comprehensive measures for **PV development**, including distributed installations on buildings, large-scale PV farms and expanding the supply chain.

Recommendations for ensuring the leading role of national decisions in implementing REPowerEU:

- immediate initiation of work on **national solutions to implement the updated provisions** of the Renewable Energy Directive (RED), the Energy Efficiency Directive (EED) and the Energy Performance of Buildings Directive (EPBD), including thorough and wide-ranging public consultations and completing the necessary analyses on the modification of existing and implementation of new support instruments and regulatory solutions,
- taking into account the public consultation results in **the NRRP review** and preparing the final form of the new REPowerEU chapter, ongoing monitoring of implementation progress, in particular, the achievement of milestones for the necessary reforms and investments to accelerate the energy transition,
- developing **an integrated approach to the use of available financing sources** for the transition (including EU funds, revenues from the sale of EU ETS allowances, the new Social Climate Fund) based on updated strategic documents outlining Poland's path to 2030 targets and a vision for achieving climate neutrality by 2050,
- carrying out a **wide-ranging information campaign** on planned changes and assistance programmes, both in terms of building retrofits and accelerating RES development.



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