

Recommendations of the Expert Council on Energy Security and Climate

on the necessary measures to be taken to mitigate the impact of the current energy crisis on energy consumers and the economy

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Context

Europe is in the midst of a deep energy crisis that threatens to trigger an economic crisis. The causes are complex, but it is primarily due to Russia's aggression against Ukraine. The crisis in the fuel markets, particularly gas, is spilling over into the electricity markets, which is currently being compounded by the drought in Europe and problems with the availability of French nuclear power plants. The situation is fraught with a high degree of uncertainty, as both the scale and permanence of the reduction in supplies from Russia (where a complete halt in gas supplies has to be taken into account) is unpredictable, and the level of risk and depth of the crisis during the coming heating season will depend both on factors completely beyond our control (such as the weather) and on the timely completion of infrastructure investments (in the case of Poland, the Baltic Pipe) and the level of gas contracting (and, in the case of Poland, coal).

The fuel situation is very difficult and there is a need to prepare seriously for winter, when demand for resources and energy will increase, and when we may experience spikes in demand (due to exceptional and/or exceptionally persistent frosts), which should prompt intensive efforts not only to diversify and acquire further sources of supply, but above all to save energy, also in Poland. **In the current situation, saving energy should not only be an economic but also a patriotic duty.**

On 18 July, the Expert Council on Energy Security and Climate met to discuss in detail the situation related to the availability and price levels of fuels (coal and gas), electricity and heat and the principles for maintaining the country's energy security. The starting point of the discussion was the recognition that:

- We are entering a period of high fossil fuel prices. **The energy emergency may last for several years** and will certainly be strongly felt in the next year, when stocks (gas, coal) are depleted and the financial reserves of societies, economies and countries are significantly reduced. Fossil fuel prices are very high because they reflect a critical situation of limited supply and high demand, but also continued market uncertainty, very high volatility and political challenges.
- An additional challenge is the period of increased political strife in Poland (exacerbated by the upcoming elections and the difficult economic situation), which is not conducive to taking balanced, rational decisions—something Russia is undoubtedly counting on. **In a crisis, it is important to act across political divides.**
- Poland is currently a good example of solidarity with Ukraine. It **should also have a strategic interest in maintaining and strengthening pan-European solidarity and contributing to the strengthening of energy security for the whole of Europe**, including through the implementation of measures supporting fuel and electricity savings. A well-planned and coordinated reduction of demand for fossil fuels and reduction of electricity consumption will help to overcome the energy crisis more quickly and also avoid economic shocks. The crisis-management strategy should be based on maximising

cooperation within the EU and focusing on a common—equitable—solution to potential fuel shortages.

The members of the Council agreed on the following recommendations indicating urgent actions to complement the activities already undertaken by Poland related to diversification of sources and acquisition of new supplies. The basis is certainly reliable information. Actions that can lead to a reduction in demand in the short term are very important. It is also necessary to prepare for various energy shortage scenarios. Above all, vulnerable consumers and key industries must be protected with financial support. The foundation, however, lies in systemic measures, i.e., measures that may not bear fruit this winter, but are key to increasing Poland's resilience to the crisis in subsequent years.

Recommendations

A. Reliable and transparent information

1. The basis of public policy should be the provision of **reliable, wide-ranging and transparent information to the public and businesses on the state of the country's energy and economic security (insofar as the country's security policy allows)**, including information:
 - a) on the current level of fuel and energy consumption and the change from the previous period.
 - b) on the state of filling of gas storage facilities and the level of coverage of stored demand with current consumption,
 - c) on the degree of gas contracting,
 - d) on the degree of contracting and coal stocks,
 - e) about the availability of conventional power plants,
 - f) on current and forecast electricity and fuel prices,
 - g) where gas/coal/electricity rationing may become necessary
2. Both the propaganda of success and the creation of panic should be avoided. **Reliable information builds trust in decision-makers and strengthens acceptance of the necessary (difficult) measures.** The public must be informed that the coming winter may be difficult.

B. Short-term reduction in energy demand

1. The first step to be taken is to **encourage changes in energy use** that will reduce demand for fuel, electricity and heat in the short term. Some desirable actions are:
 - a) **A nationwide campaign** encouraging people to minimise, by identifying specific solutions, their energy consumption, in particular to reduce heating costs.
 - b) Obligation for all energy distributors (electricity, gas, heat) to provide, along with the utility bill, **information comparing the consumption of small and medium-sized consumers with the average consumption of consumers with similar profiles and the most efficient in this group**, as well as energy saving tips.
 - c) Direct measures targeting multi-family **property managers** with heating infrastructure and at the system heat level (delaying and shortening the heating season, lowering the temperature of the heat supply, insulation interventions).
 - d) **Expert website** describing actions to be taken immediately (e.g., better energy management, temperature minimisation).

2. **Public administration should set an example for cost-saving measures.** It is necessary to implement as soon as possible measures on the part of the government administration and local self-governments to reduce the use of electricity in the public domain (e.g., motorway junction lighting, lighting of public buildings and road infrastructure of towns and communes, reduction of energy demand for air-conditioning and heating in public facilities. It is also necessary to introduce regulations enforcing restrictions on energy use in public facilities (e.g., large shopping areas and distribution centres, shops, restaurants, hotels, cinemas, airports, railway and bus stations.
3. It is necessary to **implement market mechanisms to reduce industrial energy consumption** with the least negative impact on the economy **and to use the flexibility of industrial demand** to maximise the use of generation from renewable energy sources.
 - a) It should be possible for **consumers and independent aggregators in the electricity and gas market** to offer demand reduction regardless of the content of their energy supply contract.
 - b) It is essential to **complete the reform of the balancing market** and system services for electricity in order to use the full capacity of consumers and aggregators to provide demand flexibility services, which will help to increase the use of renewable generation and optimise the use of conventional generation.
 - c) **Paid demand flexibility intervention mechanisms for gaseous fuels** need to be implemented urgently.

C. Crisis scenarios and rationing programmes

1. It is necessary to prepare crisis scenarios and to develop new or optimise existing **programmes for rationing heat and electricity and fuels** in the event of shortages.
2. Gas and coal rationing may be necessary. While households are particularly protected, the impact on industry can have a knock-on effect with dramatic consequences for the economy. It is therefore important to:
 - a) Set clear, public **sector and entity segmentation** (for major industrial users) with priorities for securing energy supply, taking into account the effect on both businesses and the economy and considering the effects of production reductions on national supply chains, particularly in sensitive sectors (e.g. food) as opposed to less-sensitive industries (e.g., non-critical consumer goods).
 - b) Define, popularise, and test **decision-making and communication mechanisms** incorporating successive degrees and ranges of constraints.
 - c) Prepare regulations and **support/compensation mechanisms** for companies affected by supply constraints.

D. Protecting consumers from the effects of high prices

1. It is important to maintain a **price signal that will encourage people to save energy and undertake investments (thermal modernisation, heat pumps, PV)** that will minimise the impact of the crisis. It is certainly necessary to support vulnerable consumers, that is, the poorest, providers of key public services (hospitals, etc.) and industrial consumers, crucial to maintaining national security.
2. In the case of households, **effective and socially just protection of consumers from the effects of high fuel and electricity and heat prices should be based primarily on the income criterion.** It is crucial to create **tools to solve the problem of energy poverty systemically**, including in the future.

3. Shield measures should be implemented primarily through social and possibly industrial programmes and **should not undermine efforts to transform** the heating and district heating sector towards decarbonisation.
4. Particular attention should be paid to **digitally excluded households** that will not be able/able to benefit from the support programmes being prepared due to lack of internet access. Social welfare institutions should be involved.
5. **The desire to prevent shock increases in energy prices due to the inflationary impulse and the social impact is understandable**, but it is important to keep in mind what effects some instruments may have on the state budget (and therefore on the ability to provide other basic public services) and on the sustainability of the current crisis. Therefore, an attempt should be made to optimise the selected instruments, give a clear time limit for support to induce investment and pro-efficiency behaviour, and consider measures that spread energy price increases over time.

E. Urgent measures that will produce results in the medium term (up to a few years)

1. It is necessary to **unlock the potential of renewable energy** and set more ambitious targets for its development in the 2025 and 2030 perspectives. Renewable energy reduces dependence on fossil fuels, although not much can be done in view of the coming winter, but in the following years Poland will be more resilient to price shocks and fuel blackmail, in particular thanks to the development of heat pumps correlated with wind and solar energy and accelerated thermo-modernisation of buildings. Renewable energy reduces wholesale electricity prices and provides additional electricity to the NPS, replacing fossil fuels. In order to increase Poland's energy security, it is necessary to **simplify administrative procedures in obtaining permits and connections as much as possible** and to **unblock investment opportunities in onshore wind energy, including self-production at industrial consumers**.
2. Consideration should be given to an optimal reform of the wholesale electricity and gas market, in consultation with the rest of the European Union, in a way that, on the one hand, does not disrupt optimal economic performance and, on the other hand, limits windfall profits in the sector and reduces the impact of the wholesale market on end consumers' bills.
3. It is very important in the context of the next winter and the following years to analyse the scenarios of demand for gas and other fuels and make rational decisions in the area of: building/leasing a floating FSRU near Gdansk and increasing gas storage capacity in Poland by accelerating the construction of new storage capacities and optimising fuel contracting so as to ensure energy security on the one hand and not to generate stranded costs in the future on the other.
4. It is in the interest of Europe as a whole to rebuild as soon as possible the connection between Poland and Ukraine via the Rzeszow-Chmelnitskiy line, which could, on the one hand, significantly reduce electricity prices for Polish consumers and generate additional revenues for Ukraine, and, on the other hand, be a strengthening of Ukraine's energy security in the event of further escalation of hostilities (which is becoming particularly evident in the context of Russia's recent disconnection of the Zaporizhzhia nuclear power plant from the Ukrainian electricity system). Market coupling should involve cooperation on the implementation of EU energy market rules and climate and environmental policies.
5. Funds from the **National Reconstruction Plan** should be mobilised as soon as possible. Poland needs additional funding to mitigate the effects of the energy crisis, including **energy efficiency, electrification, and grid expansion**.

6. **Measures to promote energy efficiency in buildings should be given high priority** and include:
- a) Development of the existing **network of certified energy advisors** through the organisation of technical support centres at the national and local levels.
 - b) Implementation of **stricter energy consumption standards** for new and deeply thermo-modernised buildings into building law and implement consumer awareness mechanisms through a building energy class system.
 - c) **Support for vocational training** to ensure an adequate number of well-qualified workers involved in thermal modernisation.
 - d) Implement additional public support and market mechanisms to enable mass renovation of buildings (system support for ESCOs, tax credits, PPPs, combination of subsidy and market mechanisms).
7. **Resilience to external fuel shocks will already be strengthened in the medium term by progressive electrification combined with the development of RES, networks and energy efficiency.**
- a) The basis is the **formulation of clear medium-term policy goals** on the need for electrification, energy efficiency, and RES development, and the grid to mobilise the market and inform citizens. In particular, wind energy correlates very well with increased electricity demand in winter.
 - b) It is crucial to implement solutions to activate demand flexibility among households and SMEs as soon as possible. Dynamic tariffs will support the management of the current balancing situation in the energy system and allow optimal integration of RES and electrification of transport and heating.
 - c) The state should support **the supply chain and the development of the installation and construction market**. A sectoral agreement for heat pumps and the thermal insulation industry is urgently needed, and it must be followed by a series of measures, regulations, and support schemes.
 - d) The deadline for the legally enshrined phasing out of **coal in individual heating (which is 75% imported)** should be brought forward to **2030 at the latest** (the PEP currently states a target of 2030 in urban areas and 2040 in rural areas) and a legally enshrined phasing out of other fossil fuels in individual heating in line with the revised Energy Performance of Buildings Directive (EPBD) should be introduced.
 - e) Tools should be implemented to promote **flexibility in heat pump operation for consumers** (flexibility in markets, dynamic electricity tariffs, heat storage), including the introduction of a 'smart' standard for heat pumps (through a higher level of subsidy for heat pumps whose operation is integrated into the electricity market—higher power consumption during off-peak hours) to limit the increase in peak electricity demand.
 - f) It should be made **compulsory to design heating installations adapted to receive low-temperature heat** (in new buildings and those thermally modernised under support programmes) and to successively implement new operating standards for district heating networks by lowering their operating temperatures.
 - g) **A national bioenergy plan** should be developed and the national potential for sustainable woody biomass and organic waste streams feeding biogas plants in particular should be determined as a starting point for prioritising sectors with a demand for these feedstocks, and **quality parameters for**

biomass approved for sale to households should be introduced in the relevant legislation.

In summary, in the current situation, the priorities are: reliable and transparent information, coordinated and partly regulatory-enforced reduction of demand, protection of consumers from price increases, and systemic measures that will have an effect within several months to several years. At the same time, care must be taken with long-term solutions that will make us more resilient to potential crises in the future. This is an issue that the Council will be addressing in future documents.