Saving Energy for Europe

Contrasting EU states' measures

Measures taken by EU states to reduce gas and electricity consumption vary widely and remain insufficient to put the EU on track to reach its own energy saving targets.



Measures to Reduce Energy Consumption in EU States

Main findings

The European Environmental Bureau (EEB) has examined gas and electricity saving measures adopted by EU states and the findings show large disparities across European countries:

- 8 out of 27 EU states have not yet introduced any measure to reduce gas and electricity consumption.
- Only 12 EU states have adopted mandatory energy reduction measures.
- Countries importing large quantities of Russian gas such as Italy and Germany have introduced the most robust measures on gas savings.
- Less gas dependent countries like France and Spain are also at the EU forefront of energy reduction measures, targeting both public entities and the private sector, households as well as industry and small business.
- Sweden, Finland, Luxembourg, the Netherlands, Austria and Eastern European states tend to have **weaker energy reduction measures** in place.
- Despite being among the heavily gas-dependent countries (between 30 and 40% of the energy mix), the Netherlands and Croatia have only introduced voluntary gas saving measures.
- Romania and Lithuania, despite their heavy reliance on fossil fuels, have not put any measure at all to reduce energy consumption.





Germany France Spain Portugal Denmark Slovenia Belgium Malta Hungary Æ Greece Ireland Croatia Finland Luxembourg Austria **The Netherlands** Czechia Poland Sweden Estonia Cyprus **Bulgaria** Latvia Romania Lithuania Slovakia

Policy recommendations

Our research indicates that the measures to reduce gas and electricity consumption taken so far by EU states are insufficient to meet EU targets. EU targets may be reached if high prices lead to large consumers reducing their consumption. Measures to reduce energy usage also reduce the pressure on rising energy prices, thereby providing effective relief for households and industry.

Governments could do much more to reduce energy consumption. Sufficiency is fundamental not only to achieving climate neutrality, but also to ensure energy security, and yet we see little action.

We propose five additional measures to facilitate gas and electricity consumption reduction in tandem with the current mosaic of EU states' initiatives:



Establish an EU energy savings monitoring task force to track action both at national and EU level and verify the effective achievement of the targets for reducing energy consumption. Each EU state should designate a national contact point responsible for implementing measures of energy consumption reduction and reporting to the monitoring task force.



Promote ample dissemination of the energy savings status through coordinated media across the EU. This could provide positive feedback for citizens' energy-savings efforts. Simple messages could be shared in primetime national TV news and on social media.



Support the fast development of a market for managing gas and electricity demand. This market could consist of a system that rewards the flexibility of consumers (even small, through aggregators) for the intermittent interruption of energy consumption.



Accelerate the diffusion of digital technologies that enable automatic monitoring of energy flows such as smart meters. This would allow people to monitor their energy consumption in real-time and make savings more salient.

Introduce fair and harmonised, EU-wide rules on energy sufficiency measures

#CLIMATE OFCHANGE





the European Union

Background

In July 2022, EU states signed a commitment to reduce energy consumption by 15% between 1 August 2022 and 31 March 2023, in years. This policy agreement is an effort to reduce Europe's reliance on Russian gas in anticipation of the growing demand that comes with the goal to reduce overall electricity demand by at least 10% until 31 March at peak hours.

Research Methodology

The data for this memo is based on open-source research conducted September-November 2022. We tracked various measures relating to energy savings and efficiency. EU states are assigned scores based on the stringency, comprehensiveness and timeliness of the measures they have implemented. The scores are indicated by the colouring in the map in the previous page. The brightest green countries have the most stringent, comprehensive measures that were implemented early in the autumn, while the dark blue countries have not vet implemented any voluntary or mandatory measures.

comparison to the average consumption of this period in the previous five winter months. In September 2022, EU ministers <u>agreed</u> on a non-binding 2023 and on a mandatory target to reduce electricity consumption by 5%

Read the full analysis below

		Officially Proposed	Measures	Obligatory or Voluntary Measures			Timing	Scope of the Obligatory Measures		
		Measures	Adopted	voluntary	partly	all	measures	public	private	industry
	evaluation	1	2	1	3	4	3	1	2	3
	Germany	×	×		X		×	X	X	X
	Italy	×	×		X		×	X	X	X
	France	×	×		X		×	X	X	X
	Spain	×	×		X		×	X		X
	Portugal	×	×		X		×	X		
	Denmark	×	×		X		×	X		
	Slovenia	×	×		X		×	X		
	Belgium	X	×		X		×	X		
	Malta	X	×		X		×	X		
	Hungary	X	×		X		×	X		
É	Greece	X	×		X		×	X		
	Ireland	X	×		X		×	X		
	Croatia	X	X	X			×			
	Finland	X	X	X			×			
	Luxembourg	X	X	X			X			
	Austria	X	X	X			X			
	The Netherlands	X	X	X			X			
	Czechia	X	×	X			×			
	Poland	X	×	X			×			
	Sweden									
	Estonia *									
dia tang ngangar	Cyprus									
	Bulgaria									
	Latvia									
	Romania									
	Lithuania									
۲	Slovakia									

*Estonia announced on 17 November a communication campaign aimed at citizens to suggest voluntary measures to reduce energy consumption. This measure was not covered by our analysis but it will be included in the next edition.



Measures to reduce energy consumption in EU Member States

The frontrunners

Following our classification, **Spain, France, Italy and Germany** have the most robust measures in place, targeting both public entities and the private sector, households as well as industry and small businesses. Adding to national measures, some towns also have adopted complementary ones.

These include mandates limiting air conditioning use in businesses and orders that advertising signage and shop lights be turned off at night, extending these guidelines as recommendations to private households and municipalities (Spain 2/08/2022 and France 25/07/22). Heating will also be reduced at public swimming pools (France and Germany 6/09/22) and in all buildings (Italy 6/09/22). In addition to the measures taken by the central governments, many local authorities in these countries have set a good example by taking on their own reduction plans. In Paris, for example, public lighting will be limited at the Eiffel Tower and street light bulbs will be replaced with more efficient LED lighting (13/09/22). The town of Thouars has been turning off streetlights from 10 p.m. to 6 a.m. since June while Strasbourg will close museums two days a week instead of one. Some high schools in Brittany will lower their thermostats (5/09/22). Other examples of good practices from the cities of Hannover (28/07/22) and Berlin (27/07/2022) and from the region Bavaria (2/08/2022).

In all above countries, public campaigns encourage citizens to make small behavioural changes to limit their energy use.

Germany is the only country that, besides implementing a combination of mandatory and voluntary measures (21/07/22 and 22/07/22), also has a gas auctioning model in place, which sets incentives for industrial consumers to reduce their gas consumption. The state would reimburse companies if they cut gas consumption by stopping certain production temporarily or longer term, leaving more for critical sectors (21/06/22). Surprisingly, this demand/side management measure has not been adopted by other large industrial gas consumers, such as the Netherlands and Italy.

In France companies will be required to cut their energy use by 10 percent or face enforced rationing of electricity and gas (5/09/22). Businesses had to appoint an "ambassador of energy sobriety" by September, and present blueprints to the government for cutting their electricity consumption by October.



Few mandatory measures and only in public buildings

Portugal, Slovenia, Denmark, Belgium, Malta, Greece, Ireland and Hungary have the next/best set of gas consumption reduction measures in place–a limited set of mandatory measures in public spaces paired with voluntary measures for private entities and citizens.

In Portugal ($\frac{8}{09}/22$), Malta ($\frac{31}{08}/22$), Slovenia ($\frac{26}{08}/22$) and Belgium ($\frac{31}{08}/22$), public sector buildings are required to reduce the use of energy by limiting cooling, heating, and lighting (Portugal and Belgium only) inside and outside of office hours, while households are encouraged to adhere to a set of recommendations outlined through public education campaigns. The Belgian government launched the <u>ikhebimpact.be</u> ("I have an impact") campaign, offering simple tips that can reduce the energy consumption of households and companies to get through the winter.

Denmark's mandatory measures in the public sector include lowering the temperature in office spaces, turning off lighting in public buildings, and shortening the heating season by 14 days at each end (2/09/22). These mandated changes are paired with an information campaign from the Danish Energy Agency, encouraging employees to turn off lights and screens when not in use. Denmark is one of few countries pushing the conversion of gas/powered households to district heating or electric heat pumps by 2028 (27/07/22).

Greece has implemented a mix of mandatory and voluntary measures (9/06/22). State entities are urged to limit air conditioning and computer usage after office hours. In an effort to reduce state energy consumption by 30% before 2030, the government plans to upgrade state infrastructure to be more energy efficient under a project called "Electra." Households are encouraged to follow 23 recommendations outlined by the Ministry of Environment and Energy's 23 (21/09/22).

Beginning in April 2022, Ireland informed the public about actions they can choose to take to save energy ($\frac{28}{04}$). In September, the Cabinet approved public/sector requirements, including guidelines for office temperatures and lighting ($\frac{7}{09}$).

Hungary has mandated all government and state/run enterprises to reduce gas consumption by at least 25% and is looking into ways to increase domestic production of coal to offset gas usage (8/09/22). There are no measures or recommendations in place for private citizens.

Voluntary measures

Czechia, Finland, Croatia, Luxembourg, The Netherlands, Poland and Austria are focused on voluntary measures carried out through public information campaigns that rolled out in autumn.

In Finland ($\frac{25}{08}/22$) and Croatia ($\frac{4}{08}/22$), campaigns are focusing mainly on heating and hot water use. Czechia additionally offers an energy savings manual, free consultations for energy/efficient renovations and tips ($\frac{20}{7}/22$).

The Netherlands focuses on a national public education campaign targeted at households (2/04/22) and small and medium enterprises (4/07/22). Luxembourg's measures include an offer to consult companies in implementing appropriate measures to reduce consumption of natural gas and electricity, a multimedia campaign to inform citizens of the necessity and economic benefits of saving energy, and a call on local authorities to implement measures at the municipal level



(8/09/2022). Austria is calling on its citizens to make small behavioural changes as it aims to reduce the nation's electricity consumption by 11% (13/09/22).

While the Polish Government has expressed disdain for compulsory targets set by the EC (18/08/22), it encouraged householders to insulate their homes (13/07/22) and introduced a price scheme (14/09/22) that is supposed to benefit energy savings both by businesses and households by combining the energy price rates with the amount of consumed energy. At the local level, the city of Wroclaw has chosen to not host a New Year's Eve Party, have no Christmas illuminations, and limit the hours public bridges will be lit (22/09/22).

No measures in place

Sweden, Estonia, Cyprus, Bulgaria, Latvia, Romania, Lithuania, and Slovakia have not, as of 30th November, implemented any national measures to reduce energy consumption.

In Sweden on <u>22/09/22</u> at a meeting of the parliament's Committee on Industry and Trade, both the caretaker Social Democrat government and the new right-wing government agreed on the necessity to take action to cut power consumption by between 5 percent and 10 percent. As a matter of fact, as of 30 November, no national measures have been taken. Some regions and cities are doing their best both to save electricity in their own buildings and trying to persuade citizens not to use so much electricity during peak load, and to save electricity generally.

In some countries, whereas gas is mainly used for industrial purposes and not for heating homes, high gas prices or supply disruptions have in themselves led to a sharp reduction in consumption. Some stakeholders in these countries also raise an issue related to the fairness of EU's measures: is it fair, for example, to ask Romanians or Latvian to reduce their electricity consumption when they already are among the per capita lowest consumers of electricity in the EU?

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