

European Energy Network

A voluntary network of European energy agencies

Energy & Gas Saving Plans 2022-2023

Directory of EnR country initiatives to reduce energy consumption and dependency from Russian oil&gas

Initiatives/country

February 2023



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About this report

This publication is a European Energy Network (EnR) report produced under the 2022 Presidency by ADENE, the Portuguese Energy Agency. It aims at providing the best available knowledge based on policy implementation across EnR member countries. The expressed conclusions do not imply policy positions of individual countries. EnR or any person acting on behalf of EnR is not responsible for the use that might be made of this publication. Contact information: EnR Regular Member: Luís Silva, Director of Cooperation and Institutional Relations (<u>enr.presidency@adene.pt</u>).

Supplemental Data spreadsheet can be found at the EnR website: <u>https://enr-network.org/energy-and-gas-saving-plans-2022-2023/</u>

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 EnR Presidency 2022

 ADENE, Portuguese Energy Agency
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 EnR Troika Plus
 2020 Presidency
 2023 Presidency

 2020 Presidency
 2021 Presidency
 2023 Presidency

 Image: Statestands Enterprise Agency
 ADEME, French Agency for Ecological Transition
 dena, German Energy Agency



1. Geopolitical framework

On February 24, 2022, Russian military forces began a military invasion of Ukraine, an act of aggression by the Russian Federation condemned by a majority of United Nations member states when they adopted a specific resolution at the UN General Assembly on March 2.

Prior to that date, Russia was the world's largest exporter of all oil products and natural gas, the second crude exporter and the third largest exporter of coal. However, the Russian invasion of Ukraine has had a disruptive effect on world markets, notably the sharp increase in energy and food prices as a result of the reduction in supply flows from Russia. In addition, it brought to light the extent of the dependency and vulnerability of markets regarding Russian hydrocarbons, in particular the European market, of which the Russian Federation is the main supplier of gas.

As the war in Ukraine escalated, energy security has become a priority for almost every country in the world, with historically high and volatile energy prices increasing fears of the unpredictable impacts of the "first truly global energy crisis", both in terms of energy supply and consumption (e.g., prioritization and rationing) and at the economic and social level (e.g., rising inflation and economic contraction).

Despite efforts to diversify sources of supply and accelerate investments in renewable energy and energy efficiency decided by many countries, energy security imperatives seem to take precedence over climate objectives because, in several countries, in the face of rising prices and/or the availability of resources and infrastructure, decisions have been taken to relaunch the exploration and domestic extraction of hydrocarbons, or to postpone the planned phaseout of nuclear power or coal power plants, which call into question the commitments made and efforts in the field of energy transition and combating climate change.

2. Political response

At the extraordinary meeting of the European Council on 26 July 2022, the European Commission presented the proposal for a Regulation "Save gas for a safe winter". Following a simplified legislative procedure, the Council adopted a revised version of the Regulation by qualified majority, after Member States reached the political agreement on a voluntary reduction of 15% in gas consumption from August, becoming mandatory in the event of an alert. The <u>final version of the Regulation</u> was published on 28 July and <u>adopted at the Council meeting on 5 August</u>.

Introducing measures to prevent emergency power cuts because of Russian gas supply cuts to Europe, this Regulation is the latest in a series of measures to address the current energy crisis in Europe following Russia's military aggression against Ukraine.

To increase the security of the European Union's energy supply, the Regulation aims to reduce EU gas demand by 15% between 1 August 2022 and 31 March 2023, compared to average consumption over the last five years. The reduction target should be pursued by all Member States on a voluntary basis, but in the case of the Council triggering the alert situation in the Union, the target becomes mandatory, despite the exemptions and possibilities for the application of partial or total derogations from the reduction target, which were introduced in order to reflect the particular situations of some Member States.

3. Measures under consideration or implementation in European Countries

All 24 European Energy Network agencies were consulted on measures being considered or implemented to meet the target reductions on gas usage and overall energy savings (information from agencies labelled alphabetically in the supplemental material spreadsheet). Complementarily, research in news outlets on measures being taken for countries who did not yet supply information via official sources (information from news outlets labelled numerically in the supplemental material spreadsheet). Information covers EnR countries, member or non-member states of the EU27.

A total of 13 national Energy Agencies, members of EnR, have directly supplied information:

- SEDA, Bulgaria (BG)
- EIHP, Croatia (HR)
- Motiva, Finland (FI)
- ADEME, France (FR)
- dena, Germany (DE)
- MEKH, Hungary (HU)
- RVO, Netherlands (NL)
- ADENE, Portugal (PT)
- IDAE, Spain (ES)
- SEA, Sweden (SE)
- BFE, Switzerland (CH)
- EST, United Kingdom (UK)
- ENEA, Italy (IT)

Other EU27 and/or countries with EnR agencies are mentioned in this document as information became available via news outlets, although not confirmed via official EnR sources.

The resulting list, presented in the next pages of this document, attempts to capture generic types of measures towards similar goals in different countries. The list includes both measures already approved and under implementation, as well as measures which were considered for implementation. The decision to include both arose from the fact that even measures which are not yet implemented or are simply being equated in one country might prove useful for the debate and the process of selecting measures to apply in other countries. Following the same rationale, measures which are not mandatory, but are being pursued/fostered/incentivized as recommendations, with targeted communications to consumers, commerce and services or industry, were also included. Many of these may produce immediate effects in energy savings but depend on behaviour change by consumers and businesses and are not directly enforceable by public policy.

A full list of measures and references can be downloaded as a spreadsheet from the EnR website¹. A final note on the role of EnR agencies in the implementation and monitoring of energy savings plans and initiatives is also presented in section 4.

¹ https://enr-network.org/energy-and-gas-saving-plans-2022-2023/



Measures were divided in 9 sections, with subsections, as follows.

J.	y Production, Storage & Distribution Production
	Storage and distribution
	Energy market mechanisms
3.2 Reside	ential buildings
	Immediate domestic energy consumption reduction Long term measures to reduce gas dependency Retrofitting to reduce energy consumption
3.3 Comm	ercial and Service buildings
	Immediate energy consumption reduction
	Retrofitting/monitoring to reduce energy consumption Long term measures to reduce gas dependency
3.4 Indust	ry
	Temporary measures Long term savings
3.5 Public	Administration
	Buildings
	Public space & equipments
	Governance
3.6 Mobilit	ty, Transport & Fleets
3.7 Educa	tion & Training
3.8 Inform	ation & Awareness
0.0 1110111	Immediate savings – behaviour recommendations
	Immediate savings – transports
	Long term savings – home retrofits
	Generic communication
3.9 Other	
	National plans Businesses

Individual measures are labelled by their focus on energy/gas savings, water savings, both energy/gas and water savings, or no associated savings estimated from measure. They are also classified according to the period in which they are expected to take effect, according to the following caption:

Savings of Energy/Water	Description
4	Energy/Gas savings
٥	Water savings
4 → & ♦	Water & Energy/Gas savings
	No associated savings
Impact (short/long term)	Description
$\mathbf{\Sigma}$	< 3 months
\mathbf{X}	3 - 9 months
	> 9 months

The list is not exhaustive, since several measures might be implemented in more countries than the ones listed. It intends to be an inventory, as comprehensive as possible, of potential measures with examples of countries applying them, rather than a complete listing of measures taken in individual countries.



3.1 Energy Production, Storage & Distribution	Savings	Impact	Countries
Production			
Natural gas from other geographies			Various
Increase domestic natural gas extraction		Σ	HU
New natural gas reserve exploration			HU; UK
Return to coal power production (replacing gas)		Ζ	DE; HU; IT
Increase coal extraction		Ζ	HU
Export ban on energy carriers and firewood		Ζ	HU
Postponement of the nuclear energy phase out		Σ	DE; HU; SE
Expansion of nuclear power		$\overline{\mathbf{X}} \overline{\mathbf{X}} \overline{\mathbf{X}}$	SE
Optimize and modernize hydropower (incl. reduced permits for plant modernization)			SE, ES
Expand wind power on- and off-shore (legislation revision, process streamlining, reduce time to obtain permits, compensations for residents, incentives for municipalities)		XXX	SE
Investment in H2 production, storage and import using IPCEI mechanism		$\Sigma \Sigma \Sigma$	NL; PT
Expansion of biogas generation		$\Sigma \Sigma$	DE; IT
Renewable auctions announced		$\Sigma \Sigma$	ES
Revision of the national energy security plan		$\Sigma \Sigma \Sigma$	UK
Encourage decentralized energy production using RES			PT
Storage & Distribution			
Planned power outages in the autumn (1h residential area cuts)	4	$\mathbf{\Sigma}$	SE
Replenish existing storage until winter (Gas Storage Law and or initiatives)		$\mathbf{\Sigma}$	AT; DE; IT
Extra gas storage initiatives		$\mathbf{\Sigma}$	DE; AT
Expansion of LNG infrastructure		$\Sigma \Sigma \Sigma$	DE <u>; IT</u>
Simplified injection of renewables gases on the gas grid		$\Sigma \Sigma$	ES
Simplified grid & infrastructure licencing		$\Sigma \Sigma$	ES; IT
Develop a district heating & cogeneration strategy to relieve the electricity system			SE
Energy market mechanisms			
Windfall tax (on different sectors and oil & gas products)			UK, HU
Proposal of a European price-cap on gas			IT
Credit lines for gas acquisition and storage		Σ	DE
Incentives for storage and self consumption of renewables		$\Sigma \Sigma$	ES



3.2 Residential Buildings	Savings	Impact	Countries
Immediate domestic energy consumption reduction			
No cuts on domestic consumption			SI
Temperature restrictions	4	Σ	SE; IT; PT
No gas heating for swimming pools	4	Σ	DE
Long term measures to reduce gas dependency			
Banning or phasing out gas from housing	4	$\overline{\mathbf{X}} \overline{\mathbf{X}} \overline{\mathbf{X}}$	AT; NL; UK
Mandatory hybrid heat pumps from 2026, incl. changes to building codes	4	$\Sigma \Sigma \Sigma$	NL
Boiler upgrade scheme (financial incentive)	4	$\overline{\mathbf{X}} \overline{\mathbf{X}} \overline{\mathbf{X}}$	FI; UK
Retrofitting to reduce energy consumption			
Energy saving & efficiency subsidies and programmes [incl. solar boilers, (hybrid) heat pumps, clean heating systems, insulation, connections to heat network, small-scale wind turbines and solar panels]	4	XXX	NL; PL; BG; PT
Optimize heating (heating check and hydraulic balancing)	4	$\Sigma \Sigma$	DE
Co-financing energy retrofits of multi-apartment bldgs & houses	4>		HR; BG

3.3 Commercial & Service Buildings	Savings	Impact	Countries
Immediate energy consumption reduction - commercial space	S		
Temperature restrictions	4	Σ	FR; DE; GR; IT; LV; LT; ES; SE; PT
Doors closed on air conditioned spaces	4	Σ	FR; ES; PT
Outdoor heating systems off	4	Σ	PT
Shop window light restriction	4	$\mathbf{\Sigma}$	FR; ES; PT
Shop lighting level reduction	4	Σ	FR; PT
Turning off heating after working hours and in unused spaces in shopping centers	4>	Z	PT
Commercial activity hours restrictions (proposed)	4 γ & ♦	Σ	IT
Cut off air renewal at night	4	Σ	FR
Reduced working hours for swimming pools and cooler water	👉 & 🍐	Σ	AT
No gas heating for swimming pools	4	Σ	DE
Regulate heating setpoints for swimming pools (water and ambient temperature)	4 → & \	X	PT
Regulate DHW setpoints	👉 & 🍐	Σ	PT
Retrofitting/monitoring to reduce energy consumption			
Energy saving & efficiency subsidies and programmes (incl. solar boilers, (hybrid) heat pumps, insulation, connections to heat network, small-scale wind turbines and solar panels)	4	XXX	NL; BG; PT
Periodic energy efficiency inspections on public access bldgs every 2years	47	$\Sigma \Sigma$	ES
Optimize heating& cooling systems (heating check and hydraulic balancing, start&stop systems)	4>	X	DE; PT
Foster preventive maintenance, incl. insulation of heat networks & maintenance of heating systems (burners, AC)	4>		PT; GR
Foster RES for swimming pools (water, showers, heating)		$\Sigma \Sigma \Sigma$	PT
Long term measures to reduce gas dependency			
Mandatory hybrid heat pumps from 2026, incl. changes to building codes			NL
Setting requirements to install solar PV in public and commercial bldgs			SE



3.4 Industry	Savings	Impact	Countries
Temporary measures			
Energy intensive sectors authorized to use oil		$\mathbf{\Sigma}$	GR
Gas auction to reduce industrial gas consumption - industrial suppliers or large consumers can post bids to provide gas via a balancing energy platform	4	XX	DE
Voluntary reduction recommendation/agreements (can become mandatory if not complied with), incl. compensation mechanisms for industry cuts	4	XX	SI; GR
Energy Cost and Investment Support Program (for manufacturing companies also investing in EE and retaining employees)	47	ΣX	HU
Long term savings			
Investments (R&R plan) to decrease industrial emissions	47		SE (as most countries under the R&R facilities)
Factory rescue program: targeted investments in energy efficiency and energy production for strategic sectors, provided companies retain staff (includes a guarantee and loan program at low interest rates)	4	XXX	HU
Adoption of measures w/ short payback times	4	Σ	PT
Temperature regulation for industrial refrigeration in accordance w/ food safety regulations; Doors and curtains in cold storage facilities	47	\mathbf{X} \mathbf{X}	PT
Maintenance and optimization of water supply and drainage facilities	4- & 👌	$\overline{\mathbf{X}} \overline{\mathbf{X}} \overline{\mathbf{X}}$	GR; PT
Increase water efficiency for industrial processes	≁ & ∖		PT

3.5 Public Administration	Savings	Impact	Countries
Buildings			
Lighting and devices off in public administration bldgs after working hours	4	Σ	ES; GR; PT
Temperature restrictions in public bldgs	4	Σ	IT; FI; PT; GR; HU
Doors & windows closed on air-conditioned spaces	47	$\mathbf{\Sigma}$	PT; GR
Outdoor heating systems off	47	$\mathbf{\Sigma}$	PT
Ban mobile AC & fan heaters	47	$\mathbf{\Sigma}$	DE
Turning off heating in empty spaces, corridors, foyers or stairwells of public buildings/offices	4		DE; GR
Turning off heating after working hours in public buildings/offices	4	$\mathbf{\Sigma}$	PT; GR
Natural gas boilers replaced by biomass in some public institutions		$\Sigma \Sigma$	HU
Cut hot water in public bldgs (incl. showers in swimming pools & sports' halls)	4 ∕- & ♦	X	AT; DE
Coordinated in person/remote work/learning to turn off bldg heating/energy consumption for prolonged periods	47	X	FR; AT
Investment in efficient windows, window shields and heating&cooling in bldgs	4>		GR
Mandatory implementation of all measures suggested in energy audits w/payback <5years	47		HR
Setting requirements to install solar PV in public and commercial bldgs	4		SE
Specific short- and long-term energy savings plan for public buildings	4 → & \	<u>X</u> - <u>X</u> X	FI
Adjust water temperature seasonally	4 ≻ & ♦	Σ	PT
Promote use of natural light to reduce energy use for lighting	47	Σ	PT
Adjust lighting levels and adapt schedules to actual user needs	4	Σ	PT
Implement smart energy management systems to optimize consumption (incl. monitoring)	4		PT; GR



3.5 Public Administration (cont.)	Savings	Impact	Countries
Public space & equipments			
Public lighting restrictions (Monuments, Xmas lights, street light dimming or turn off every other street light)	4>	X	AT; BG; DE; IT; PT; GR
Commercial ad lighting off at night	4	Σ	FR; PT
Turn off fountains (or working hours' restrictions)	👉 & 🍐	$\mathbf{\Sigma}$	DE
Increase energy efficiency of public lighting (LED, sensors)	4	$\Sigma \Sigma \Sigma$	IT; PT
Adjust garden irrigation systems to reduce water use & waste	👉 & 🍐	Σ	PT
Reduce floors, vehicles & equipment washing frequencies and use more efficient systems; replace toilet flushing systems for more efficient solutions	٥	X	PT
Governance			
Mandatory consumption reduction in all public services (mandatory implementation of the above-mentioned measures in PT)	4		GR; PT
25% gas consumption reduction mandatory for all state institutions and state owned companies	4	X	HU
Energy Manager nomination to monitor consumption through a digital platform	4		GR; PT
Digital Platform to monitor energy savings in the public sector	4		GR; PT
Expedited public tender mechanisms for energy efficiency retrofits in public bldgs	4>	ΣX	ES
Funding for public sector decarbonization	4	$\overline{\mathbf{X}} \overline{\mathbf{X}} \overline{\mathbf{X}}$	UK; PT
Longer winter school break and public administration leave of absence	4	Σ	HU

3.6 Mobility, Transports & Fleets	Savings	Impact	Countries
Temporary tax reduction on diesel and petrol		Σ	SE
Increasing remote work	4	Σ	ES; LT; PT
Financial support for environmentally friendly cars (climate bonus cars, primarily electric) and for public transport fleets	4		SE; PT

3.7 Education & Training	Savings	Impact	Countries
Specific training for public administration officials, providing tools and awareness for resource efficiency	4		PT
Supplemental training for Inspection Specialists for solar thermal and solar PV systems to propose energy efficiency measures	4>		PT
Supplemental training for Energy Management Specialists to promote energy optimization plans	4>		PT
Water efficiency training for installers of water using products	۵		PT

3.8 Information & Awareness	Savings	Impact	Countries
Immediate savings - household behaviour			
Indoor temperature recommendations (incl. management and adaptive comfort, such as clothing)	4	X	HR; IE; SI; ES; DK; CH; PT
Efficient use of appliances recommendation (e.g., off peak hours use, avoidance w/ line drying clothes, turn off wifi routers & TV when away, use stairs vs elevator, etc)	4	X	HR; IE; FR; DK; CH; PT
Shorter showers	4 → & ♦	$\mathbf{\Sigma}$	NL; DK; CH; PT
LED lighting recommendations	4	$\mathbf{\Sigma}$	HR; CH; PT
Encourage efficient consumer choices for appliances and services	4	$\mathbf{\Sigma}$	PT
Immediate savings - transports			
Public transportation and active mobility recommendation	4	Σ	HR; FR; PT
Reduced speed to save petrol	4	$\mathbf{\Sigma}$	IE; PT
Alternatives to work travel flights	4	$\mathbf{\Sigma}$	PT
Promote electric freight mobility	4	$\mathbf{\Sigma}$	PT
Long term savings - home retrofits			
Online platform w/ energy efficiency information, tools (incl. advice based on individual household)	47		UK; NL; SE; PT
Technical support for heating systems transition in homes and bldgs	4	$\Sigma \Sigma \Sigma$	NL; CH
Retrofitting buildings for energy efficiency recommendation	4	<u>X X X</u>	HR; PT
Generic communication			
Energy saving information campaigns	4	$\Sigma \Sigma$	FI; NL; IT; CH; PT; SE
Energy situation monitoring and reporting for the government and general public			SE; PT
Specific guidelines issued with recommendations for citizens, public sector, companies and energy related entities	47	XX	HR; CH; PT
Energy companies invited to disseminate best practices on energy savings & consumption flexibility	4	XX	HR; CH; PT



3.9 Other	Savings	Impact	Countries	
National plans				
Contingency/Emergency Plan for early warning, alarm and emergency regarding gas supply disruptions	47	XX	NL	
Updating National or Local Energy and Climate Action Plans	4 → & 👌	$\mathbf{\overline{X}} \mathbf{\overline{X}}$	ES; NL	
National Energy Saving Plans	存 & 💧	🛛 - 🔀 🗖 🗹	PT; GR	
Businesses				
Protection of energy intensive companies		Σ	DE; IT; PT; SE	
Mandatory savings for companies over 10 GWh/pa	4	$\mathbf{\Sigma}$	DE	
Co-financing (R&R + RePowerEU) of optimization of consumption & cost reduction measures for companies (prioritizing replacement of natural gas by electricity, and PV installation for self sufficiency)		XXX	HR; PT	
Incentives to increase gas storage reserves (sparing companies who do from future rationings)		Σ	AT	
Subsidies for the tertiary sector (bldgs, appliances, climatization, refrigeration, lighting, etc)	4		ES; PT	
Families				
Subsidies on fuel for the short term price surges		Σ	FR; IT; PT	
Cost of living support package		Σ	UK; IT; PT	
Extra child allowances to protect vulnerable households due to price increases		X	SE; PT	
Tax reduction on household services (cleaning, refurbishing, etc) which is recommended to go towards energy efficiency		X	SE	
Extra tax on gas&electricity over average consumption rates	47	X	HU	
Compensatory payment for fuel costs for private individuals, increased in sparsely populated areas		X	SE	
All sectors				
0% VAT on energy efficiency measures	4	$\Sigma \Sigma$	UK	
Financial incentive package for energy efficiency & economy electrification	47	XX	ES; PT	

4. EnR agencies role in energy saving plans

National Energy Agencies have been active, at different levels, in the proposal, implementation, dissemination and monitoring of emergency and long-term energy saving plans and initiatives to reduce dependency on natural gas as an energy source. Below are some examples of the role EnR member agencies are playing in their countries.

ADENE, the **Portuguese Energy Agency** and current President of EnR, has assisted in the drafting of the National Energy Saving Plan 2022-2023 and is also tasked with the monitoring of its implementation, coordinating a National Monitoring Committee which will include a number of other stakeholders and will report to the government with monthly progress reports.

SwissEnergy has coordinated the conception and implementation of the WESPI campaign (Winter Energy Saving Initiative), which involves an advisory board and a support group with over 40 organisations from the public sector, cities and municipalities, business and civil society. The evaluation of the campaign, namely on the behavioural outcomes, will be done externally to identify optimisation potential and adjust further development for next winter.

The **Swedish Energy Agency (SEA)** has launched two national information campaigns, designed for home owners and for all consumers, but has also been assigned the responsibility to gather data from government agencies, which were mandated to reduce energy consumption through technical measures and behavioural changes. The government agencies will report to SEA, on the energy consumption and measures carried out from November 2022 to March 2023, and SEA will also be providing support through county boards. On top of this, SEA will be handling applications and payments for a subsidy scheme for SMEs that consume large amounts of electricity, mainly to mitigate effects of the price volatilities for electricity, provided the companies show improvements in their production's energy efficiency. For the past 6 months, SEA has already been performing an extended assignment regarding safe energy supply, with monitoring, assessment and reporting of energy figures, reporting to the government on a weekly basis.

In **Hungary**, **MEKH** has help draft proposals for possible energy consumption reduction measures in public organisations and is assisting its Ministry in monitoring of the Industry Rescue Guarantee and Loan Programm, targeted at large and medium sized companies, providing state supported, fixed, low interest rates, for energy efficiency and renewable energy production investments.

CRES, **Greece's Center for Renewable Energy Sources**, is the monitoring agency for the ELEKTRA Programme, developed for the energy upgrade of public sector buildings. CRES receives and reviews applications, developed monitoring protocols for energy audits, recommends funding and also provides support for the applicants in the process. CRES is also involved as an expert in the "Support to REPowerEU" project in which it prepared the action plan for Greece, providing technical support for the design and implementation of policy measures concerning the promotion of LPG, biomethane, green hydrogen, photovoltaic systems, of heat pumps, energy saving interventions and RES projects through the simplification of the licensing process.

Motiva, in **Finland**, has organized the "Down a Degree" Campaign, together with the Ministry of Economic Affairs and Employment of Finland, the Ministry of the Environment, the Prime. Minister's Office and the Finnish Innovation Fund Sitra, aiming at getting 95% of Finnish households to save energy and cut down on their consumption by 5% during peak hours in order to permanently lower energy consumption and reduce electricity consumption peaks.

The **Energy Saving Trust**, in the **United Kingdom**, is amplifying the national energy saving campaigns, which refer consumers to EST for technical advice, which it has continued to provide under its ongoing programs.



5. References

Information from news outlets labelled numerically and information from agencies labelled alphabetically. The correspondence to specific measures is in the supplemental material spreadsheet.

Infe	ormation from news outlets
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<u>24</u>	denza_energetica_dellitalia-341407844/
<u>25</u>	https://www.greenmatch.co.uk/blog/gas-boiler-ban
	https://www.euractiv.com/section/politics/short_news/portuguese-government-approves-reinforcement-of-subsidy-
<u>26</u>	for-fuel-purchases/
27	https://www.reuters.com/article/portugal-gas-subsidies-idCNL5N2W92AU
28	https://www.reuters.com/business/energy/hungary-scrap-energy-price-caps-high-usage-households-2022-07-21/

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Info	orma	ation from EnR energy agencies
<u>A1</u>	ES	https://www.boe.es/eli/es/rdl/2022/08/01/14
<u>A1</u>	ES	https://www.miteco.gob.es/es/prensa/ultimas-noticias/el-gobierno-aprueba-un-plan-de-ahorro-y-gesti%C3%B3n- energ%C3%A9tica-en-climatizaci%C3%B3n-para-reducir-el-consumo-en-el-contexto-de-la-guerra-en- ucrania/tcm:30-543621
В	DE	Personal communication from dena (Germany)
<u>C1</u>	UK	Personal communication from Energy Saving Trust (United Kingdom)
C2	UK	https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy
C3	UK	https://www.gov.uk/guidance/check-if-you-may-be-eligible-for-the-boiler-upgrade-scheme-from-april-2022
<u>C4</u>	UK	https://www.gov.uk/gdidance/check-in-you-may-be-eligible-for-the-bolier-upgrade-scheme-nonn-aphi-2022 https://www.fmb.org.uk/resource/0-vat-measures-on-energy-efficiency-installation-what-this-all-
		means.html#:~:text=Builders%20can%20now%20install%20certain.began%20on%201%20April%202022
<u>C5</u>	UK	https://www.gov.uk/government/publications/cost-of-living-support/cost-of-living-support-factsheet-26-may-2022 https://www.businessleader.co.uk/635m-committed-to-second-phase-of-1-425bn-public-sector-decarbonisation-
<u>C6</u>	UK	scheme/
D1 D2	HU HU	Personal communication from MEKH (Hungary) Further info https://abouthungary.hu/news-in-brief/hungary-s-government-declares-state-of-energy-emergency https://abouthungary.hu/news-in-brief/government-revamping-household-energy-bill-cap-rules https://abouthungary.hu/news-in-brief/agriculture-ministry-firewood-production-remains-sustainable-in-hungary Personal communication from MEKH. Further info https://abouthungary.hu/news-in-brief/government-begins-energy-
E1	FI	savings-at-state-institutions
<u>E2</u>	FI	Personal communication from MOTIVA Further information https://www.astettaalemmas.fi/en https://www.ely-keskus.fi/kaasulammityksen-vaihtajalle
E3	FI	Public property manager promoted energy saving campaign https://www.senaatti.fi/en/energy-saving-programme/
_0 F1	NL	Personal communication by RVO (Netherlands)
F2	NL	"Flip the switch" campaign for households https://zetookdeknopom.nl/
<u>F3</u>	NL	"Flip the switch" campaign for companies <u>https://zetookdeknopom.nl/bedrijven</u>
<u>F4</u>	NL	"Everyone can contribute" campaign https://www.iedereendoetwat.nl/energie
F5	NL	Investeringssubsidie duurzame energie en energiebesparing (ISDE) (rvo.nl)
<u></u> <u>F6</u>	NL	https://www.rijksoverheid.nl/actueel/nieuws/2022/05/17/hybride-warmtepomp-de-nieuwe-standaard-vanaf-2026#:~:text=Het%20kabinet%20kondigt%20vandaag%20aan,overstappen%20op%20een%20duurzamer%20alter natief.
F7		https://www.rijksoverheid.nl/actueel/nieuws/2022/05/17/hybride-warmtepomp-de-nieuwe-standaard-vanaf-2026#:~:text=Het%20kabinet%20kondigt%20vandaag%20aan,overstappen%20op%20een%20duurzamer%20alter natief.
<u>F8</u>	NL	https://aardgasvrijewijken.nl/default.aspx
<u>F9</u>	NL	https://expertisecentrumwarmte.nl/default.aspx
<u>F10</u>		Digital Platform "Improve your house" https://www.verbeterje Improve your house huis.nl/
<u>F11</u>		https://www.mijnaansluiting.nl/wet-voor-nieuwe-gasaansluitingen
<u>F12</u>		https://www.regionale-energiestrategie.nl/default.aspx
<u>F13</u>		Protection and Recovery Plan Gas "Bescherm- en Herstelplan Gas"
<u>F14</u>		https://competition-policy.ec.europa.eu/state-aid/legislation/modernisation/ipcei_en
G1	HR	Personal communication from EIHP (Croatia)
H1	SE	Personal communication from SEA (Sweden)
H2	SE	Husguiden – för dig som vill energieffektivisera ditt hus (energimyndigheten.se)
H3 H4	SE SE	March announcements https://www.government.se/press-releases/2022/03/government-presents-package-of- measures-to-address-rising-fuel-and-electricity-prices-as-a-result-of-the-invasion-of-ukraine/ June announcements https://www.regeringen.se/pressmeddelanden/2022/06/kraftpaket-for-mer-billig-el-i-hela-
H5	SE	landet/
<u>H6</u>		Recovery and resilience plan for Sweden European Commission (europa.eu)
<u>H7</u>	SE	Every kWh counts <u>https://www.energimyndigheten.se/varje-kilowattimme-raknas/</u> Every monitoring and reporting <u>https://www.energimyndigheten.se/trygg-energiforsorjning/fakta-om-energilaget/</u> <u>https://www.energimyndigheten.se/en/news/2022/how-the-invasion-of-ukraine-affects-the-swedish-energy-markets/</u>
I	СН	Personal communication from SFOE/BFE (Switzerland)



<u>|1</u> <u>|2</u>

<u>l2</u>	СН	Saving Energy In Everyday Life Brochure "Energiesparen im Alltag"
<u>I3</u>	СН	Smart heating tips brochure "Heizen mit Köpfchen"
<u> 4</u>	СН	Energy Efficient Use of Hot Water information (website) https://www.energieschweiz.ch/haushalt/warmwasser/
<u>15</u>	СН	Energy Handbook for Building Maintenance "Energiehandbuch für Hauswartinnen und Hauswarte"
<u>16</u>	СН	Basic saving restrictions for immediate savings (website) https://www.bwl.admin.ch/bwl/de/home/themen/energie/elektrizitaet/sparappelle.html
<u>17</u>	СН	Website w/ energy saving tips for individuals & companies and for all energy sources <u>www.nichtverschwenden.ch</u> <u>www.stop-gaspillage.ch/fr/page-daccueil/</u> <u>https://www.dont-waste.ch/en/homepage</u>
<u>18</u>	СН	Website - Energy Saving Alliance (organisations that support efforts to ensure security of supply in winter by voluntarily taking efficiency and savings measures) https://alliance2022-23.ch/en/
J1	IT	Personal communication from ENEA (Italy)
<u>J2</u>	IT	Law-Decree 30/06/2022, n.80
<u>J3</u>	IT	Law 20/05/2022, n.51
<u>J4</u>	IT	Law 27/04/2022, n.34
<u>J5</u>	IT	Law-Decree 09/08/2022, n.115
K1	BG	Personal communication from SEDA (Bulgaria)
L1	FR	Personal communication from ADEME (France)
M1	PT	Personal communication from ADENE (Portugal)
<u>M2</u>		2022-2023 Energy Saving Plan https://planopoupancaenergia.adene.pt/
N L A		

N1 GR Personal communication from CRES, Greece

CH Live Better Brochure: "Besser wohnen"