



# ENERGY SECURITY IN EUROPE: CURRENT AND FUTURE CHALLENGES

THE 2023 EUCOS  
SYMPOSIUM –  
EUROPEAN COMMON  
SECURITY



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## How To Use This Guide



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Lesson Plans

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# Outlining Standards

## A Note on Learning Standards Presented in this Guide

Three sets of standards have been linked to each of the learning objectives in this packet. The **Washington State K-12 Social Studies Learning Standards** and the accompanying Grade Level Requirements are the social studies standards for WA State.

The **College, Career, & Civic Life C3 Framework for Social Studies State Standards** are the standards published by the National Council for the Social Studies. Guiding the packet as a whole is the Framework for Global Learning created by the Asia Society and the Council of Chief State School Officers titled *Educating for Global Competence: Preparing Our Youth to Engage the World* (2011).

Cross-objective standards are listed at the beginning of the packet, and content-specific standards can be found after each learning objective.

The standards provided have been selected for relevance, but are not exclusive: many other standards, such as Common Core, may be applicable to the resources and learning objectives identified in this packet. The intention for this packet's organization is to provide educators with an idea of resources available and possible uses for resources. Users should feel free to create their own learning objectives and to select resources according to the specific needs of their classrooms.

## WASHINGTON STATE K-12 SOCIAL STUDIES LEARNING STANDARDS

There are five EALRs in Social Studies, one for each of the discipline areas: civics, economics, geography, and history, and a fifth for social studies skills.

### (1) Social Studies EALR 1: CIVICS

The student understands and applies knowledge of government, law, politics, and the nation's fundamental documents to make decisions about local, national, and international issues and to demonstrate thoughtful, participatory citizenship.

### (2) Social Studies EALR 2: ECONOMICS

The student applies understanding of economic concepts and systems to analyze decision-making and the interactions between individuals, households, businesses, governments, and societies.

### (3) Social Studies EALR 3: GEOGRAPHY

The student uses a spatial perspective to make reasoned decisions by applying the concepts of location, region, and movement and demonstrating knowledge of how geographic features and human cultures impact environments.

### (4) Social Studies EALR 4: HISTORY

The student understands and applies knowledge of historical thinking, chronology, eras, turning points, major ideas, individuals, and themes on local, Washington State, tribal, United States, and world history in order to evaluate how history shapes the present and future.

### (5) Social Studies EALR 5: SOCIAL STUDIES SKILLS

The student understands and applies reasoning skills to conduct research, deliberate, and form and evaluate positions through the processes of reading, writing, and communicating.

# Outlining Standards

## COLLEGE, CAREER, & CIVIC LIFE C<sub>3</sub> FRAMEWORK FOR SOCIAL STUDIES STATE STANDARDS

The C<sub>3</sub> Framework is organized into the four Dimensions, which support a robust social studies program rooted in inquiry.

The four Dimensions are as follows:

- (1) Developing questions and planning inquiries;
- (2) Applying disciplinary concepts and tools;
- (3) Evaluating sources and using evidence;
- (4) Communicating conclusions and taking informed action

DIMENSION 1: DEVELOPING QUESTIONS AND PLANNING INQUIRIES	DIMENSION 2: APPLYING DISCIPLINARY TOOLS AND CONCEPTS	DIMENSION 3: EVALUATING SOURCES AND USING EVIDENCE	DIMENSION 4: COMMUNICATING CONCLUSIONS AND TAKING INFORMED ACTS
Developing Questions and Planning Inquiries	<ul style="list-style-type: none"> <li>• Civics</li> <li>• Economics</li> <li>• Geography</li> <li>• History</li> </ul>	<ul style="list-style-type: none"> <li>• Gathering and Evaluating Sources</li> <li>• Developing Claims and Using Evidence</li> </ul>	<ul style="list-style-type: none"> <li>• Communicating and Critiquing Conclusions</li> <li>• Taking Informed Action</li> </ul>

Dimension 2 has four disciplinary subsections: (1) **Civics**; (2) **Economics**; (3) **Geography**; (4) **History**. Each disciplinary subsection has three to four additional categories, which provide an organizing mechanism for the foundational content and skills within each discipline.

### C<sub>3</sub> Framework Organization

CIVICS	ECONOMICS	GEOGRAPHY	HISTORY
Civic and Political Institutions	Economic Decision Making	Geographic Representations: Special Views of the World	Change, Continuity, and Context
Participation and Deliberation: Applying Civic Virtues and Democratic Principles	Exchange and Markets	Human-Environment Interaction: Place, Religions, and Culture	Perspective
Processes, Rules, and Laws	The National Economy	Human Populations: Spatial Patterns and Movements	Historical Sources and Evidence
	The Global Economy	Global Interconnections: Changing Spatial Patterns	Causation and Argumentation

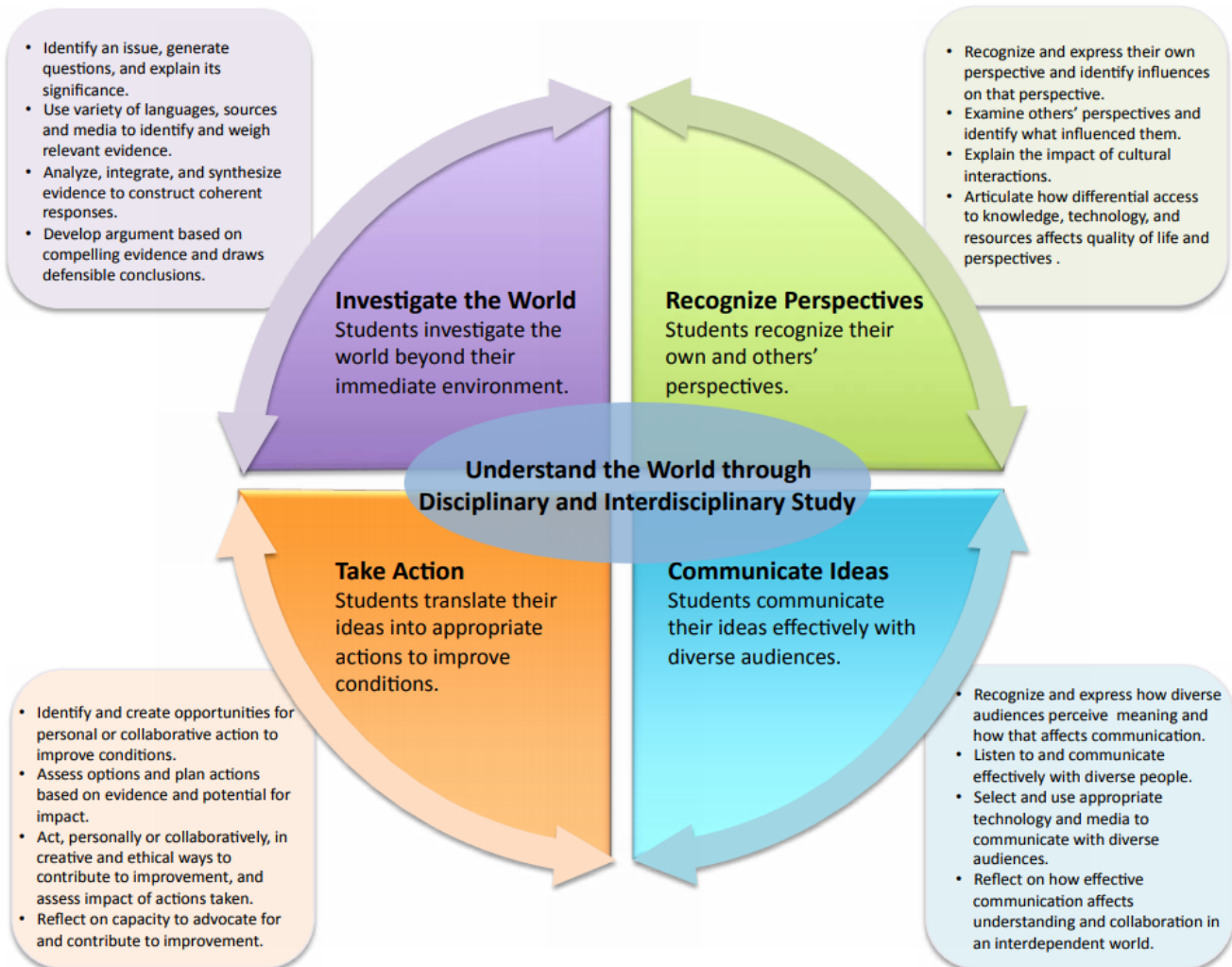
# Educating For Global Competence

Frameworks taken from *Educating for Global Competence: Preparing Our Youth to Engage the World* (Asia Society and the Council of Chief State School Officers 2011).

“Global competence is the capacity and disposition to understand and act on issues of global significance” (Chapter 2).

Globally competent students are able to perform the following four competences:

1. **Investigate the world** beyond their immediate environment, framing significant problems and conducting well-crafted and age-appropriate research.
2. **Recognize perspectives** others’ and their own, articulating and explaining such perspectives thoughtfully and respectfully.
3. **Communicate ideas** effectively with diverse audiences, bridging geographic, linguistic, ideological, and cultural barriers.
4. **Take action** to improve conditions, viewing themselves as players in the world and participating reflectively.





# Learning Objectives

- 1). Students will be to evaluate the political and economic consequences of EU energy policy challenges on citizens and individual member states.
- 2). Students will be able to define the European Commission's REPowerEU Plan and analyze progress made in accelerating a clean energy transition and diversifying energy resources.
- 3). Students will be able to describe and evaluate the issue of energy and as a security issue.
- 4) Students will be able to identify and analyze the EU's economic and energy responses, including revised actions, in the context of the Russia-Ukraine conflict.
- 5). Students will think critically and creatively to develop potential policy options to address the potential consequences of reduced access to Russian energy.
- 6). Students will be able to assess how current EU climate goals/policies will be affected by the decision to reduce energy dependence on Russia.
- 7). Students will be able to interpret maps and graphs to evaluate the impact of Russian energy exports to the European Union.



# Introduction to Panelists

## PANEL 1: NATO, Hybrid Warfare, and Europe's Energy Challenge



**Dr. Sarah Lohmann** is an Acting Assistant Professor in the Henry M. Jackson School for International Studies and a Visiting Professor at the U.S. Army War College. Her current teaching and research focus is on cyber and energy security and NATO policy, and she is currently a co-lead for a NATO project on “Energy Security in an Era of Hybrid Warfare”. She joins the Jackson School from UW’s Communications Leadership faculty, where she teaches on emerging technology, big data and disinformation. Previously, she served as the Senior Cyber Fellow with the American Institute for Contemporary German Studies at Johns Hopkins University, where she managed projects which aimed to increase agreement between Germany and the United States on improving cybersecurity and creating cyber norms.



**Aleksander Olech, PhD.** Visiting lecturer at the Baltic Defence College. Graduate of the European Academy of Diplomacy and War Studies University. He has undertaken research at several international institutions, among others, the Université Jean Moulin III in Lyon, the Institute of International Relations in Prague, the Institute for Peace Support and Conflict Management in Vienna, the NATO Energy Security Centre of Excellence in Vilnius, and the NATO Centre of Excellence Defence Against Terrorism in Ankara. Scholarship holder of the OSCE & UNODA Peace and Security Programme, the NATO 2030 Global Fellowship, and the Casimir Pulaski Foundation. His main research interests include terrorism, international cooperation for security in Eastern Europe and the role of NATO and the EU with regard to hybrid threats.



# Introduction to Panelists



**Lieutenant-Colonel Frank J. Kuzminski** is an active-duty Army officer and strategist. His research will focus on European space activity, collective security and strategy.

A native of Poland, Frank emigrated to the United States in 1990. He attended the U.S. Military Academy at West Point, NY, and graduated in 2004 with a Bachelor of Science in electrical engineering. He commissioned as an infantry officer and served in multiple operational assignments around the world. In 2014, Frank earned his Master in Public Administration from Harvard University and served on the Army Staff at the Pentagon. Prior to attending the Jackson School, Frank was assigned as a strategic plans officer with I Corps at Joint Base Lewis-McChord, WA. He is married with two children and speaks Polish and French.

## Panel 2: Europe's Energy Crisis: Causes and Global Impact



**Muhammad Qayumov** is a recipient of the Summer 2022 Foreign Language and Area Studies (FLAS) Fellowship. The award provides undergraduate, graduate, and professional school students with financial support to develop fluency in less commonly taught languages (LCTLs) and expertise in the regions in which these languages are spoken.

Muhammad Abdulqayumov completed his undergraduate degree in Political Science at Washington State University, shortly after migrating into United States from Tajikistan. Currently he is a graduate student at the Jackson School of International Studies REECAS program. His MA thesis focuses on Russia's role as a security provider in Central Asia and how that role has been shifting since the fall of the Soviet Union. Cultural and linguistic knowledge gained during summer Arabic course, which was made possible by FLAS, helped unlock new sources and new avenues of research.

In the future, Muhammad hopes to use his cultural and linguistic knowledge to work as a Foreign Service Officer.



# Introduction to Panelists



**JACKSON  
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STUDIES**



**Scott L. Montgomery** is an author, geoscientist, and affiliate faculty member in the Jackson School of International Studies, University of Washington. He writes and lectures on a wide variety of topics related to energy (geopolitics, technology, resources, climate change), American politics, intellectual history, language and communication, and the history of science. He is a frequent contributor to online journals such as *The Conversation*, *Forbes*, and *Fortune*, and his articles and op-eds are regularly featured in many outlets, including *Newsweek*, *Marketwatch*, *The Huffington Post*, and *UPI*. He also gives public talks and serves on panels related to issues in global energy and their relation to political and economic trends and ideas of sustainability. For more than two decades, Montgomery worked as a geoscientist in the energy industry, writing over 100 scientific papers and 70 monographs on topics related to oil and gas, energy technology, and industry trends.

Montgomery is the author of 12 books, including, *The Shape of the New: Four Big Ideas and How They Built the Modern World* (Princeton, 2015), co-authored with Dan Chirot, which *The New York Times* selected as one of the 100 Most Notable Books of 2015. *Shape of the New* has been widely praised for its themes regarding the power of ideas in the shaping of modern history, using such thinkers as Adam Smith, Charles Darwin, Karl Marx, and the founders of American democracy, particularly Thomas Jefferson and Alexander Hamilton, as examples of how influential Enlightenment thought has been. The book also examines how such thought has been opposed by forms of often-violent reaction and extremism, such as fascism, totalitarianism, and religious fundamentalism.

# Key Terms

**Sustainability**: based on a simple principle: everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. To pursue sustainability is to create and maintain the conditions under which humans and nature can exist in productive harmony to support present and future generations.

**Climate Change**: refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, such as through variations in the solar cycle. But since the 1800s, human activities have been the main driver of climate change, primarily due to burning fossil fuels like coal, oil and gas.

**Renewable Energy**: energy derived from natural sources that are replenished at a higher rate than they are consumed. Sunlight and wind, for example, are such sources that are constantly being replenished.

**Non-Renewable Energy**: comes from sources that will run out or will not be replenished in our lifetimes—or even in many, many lifetimes. Most non-renewable energy sources are fossil fuels: coal, petroleum, and natural gas.

**NATO**: founded in 1949 as a bulwark against Soviet aggression, the North Atlantic Treaty Organization (NATO) remains the pillar of U.S.-Europe military cooperation. An expanding bloc of NATO allies has taken on a broad range of missions since the close of the Cold War, many well beyond the Euro-Atlantic region, in countries such as Afghanistan and Libya.

**Energy Security**: uninterrupted availability of energy sources at an affordable price

**Nuclear Energy**: a form of energy released from the nucleus, the core of atoms, made up of protons and neutrons. It can be produced in two ways: fission – when nuclei of atoms split into several parts – or fusion – when nuclei fuse together. The nuclear energy harnessed around the world today to produce electricity is through nuclear fission, while technology to generate electricity from fusion is at the R&D phase.

**Climate Neutrality**: refers to the idea of achieving net zero greenhouse gas emissions by balancing those emissions so they are equal (or less than) the emissions that get removed through the planet's natural absorption; in basic terms it means we reduce our emissions through climate action.

# Energy & Sustainability

## *DID YOU KNOW?*

Globally, the average carbon footprint, or total amount of greenhouse gases (including carbon dioxide and methane) that are generated by our actions, is close to 4 tons. To have the best chance of avoiding a 2 degree rise in global temperatures, the average global carbon footprint per year needs to drop to under 2 tons by 2050.

### [What is Sustainability? \(Apr 13, 2023\)](#)

This video produced by UCLA offers an easy-to-understand explanation of the broad topic of sustainability. It covers concepts such as replacement rate, climate change, and the three E's of sustainability (environment, economy, and equity).

### [En-ROADS Global Climate Simulator](#)

En-ROADS is a global climate simulator that allows users to explore hands-on the impact that dozens of policies—such as electrifying transport, pricing carbon, and improving agricultural practices—have on hundreds of factors like energy prices, temperature, air quality, and sea level rise.

### [U.S. Environmental Protection Agency Carbon Footprint Calculator](#)

Many of our daily activities - such as using electricity, driving a car, or disposing of waste - cause greenhouse gas emissions. Together these emissions make up a household's carbon footprint. The calculator estimates your footprint in three areas: home energy, transportation and waste. Everyone's carbon footprint is different depending on their location, habits, and personal choices.

### [Renewable VS Non-renewable Resources | Earth's Energy Sources \(Jan 24, 2022\)](#)

Renewable and nonrenewable resources are energy sources that human society uses to function on a daily basis. The difference between these two types of resources is that renewable resources can naturally replenish themselves while nonrenewable resources cannot. This means that nonrenewable resources are limited in supply and cannot be used sustainably. This video covers this concept while explaining the four major types of nonrenewable resources: oil, natural gas, coal, and nuclear energy.



### [EU Climate Change Policy](#)

This lesson looks at different countries within the EU: Germany, the UK, and Denmark. All three countries are members of the EU, yet all three have different climate goals which employ different strategies for dealing with energy and climate change.

# Energy & Sustainability

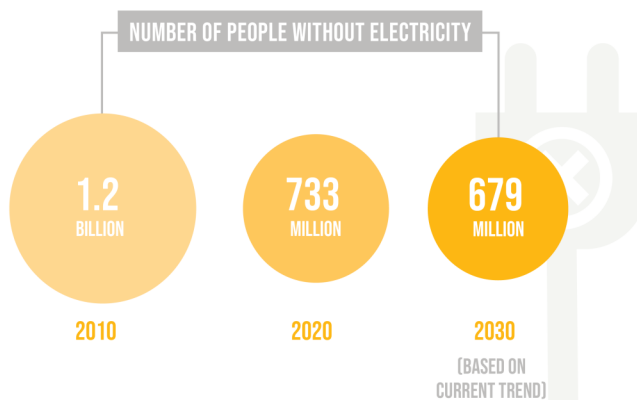
7 AFFORDABLE AND CLEAN ENERGY



ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL

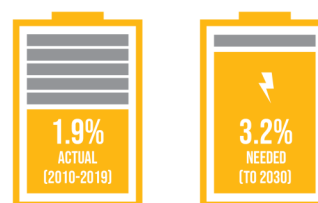
## IMPRESSIVE PROGRESS IN ELECTRIFICATION HAS SLOWED

DUE TO THE CHALLENGE OF REACHING THOSE HARDEST TO REACH



## PROGRESS IN ENERGY EFFICIENCY NEEDS TO SPEED UP TO ACHIEVE GLOBAL CLIMATE GOALS

ANNUAL ENERGY-INTENSITY IMPROVEMENT RATE

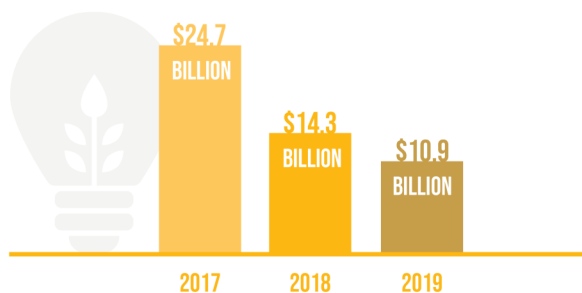


2.4 BILLION PEOPLE

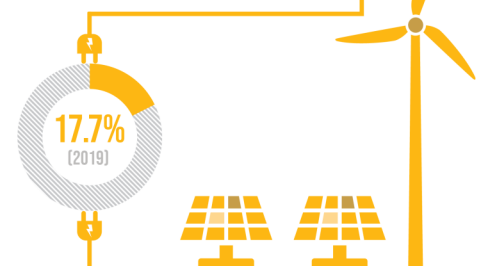


STILL USE INEFFICIENT AND POLLUTING COOKING SYSTEMS (2020)

## INTERNATIONAL FINANCIAL FLOWS TO DEVELOPING COUNTRIES FOR RENEWABLES DECLINED FOR A SECOND YEAR IN A ROW



TOTAL RENEWABLE ENERGY CONSUMPTION INCREASED BY A QUARTER BETWEEN 2010 AND 2019, BUT THE SHARE OF RENEWABLES IN TOTAL FINAL ENERGY CONSUMPTION IS ONLY





# Energy & Sustainability - Europe

## [Make Europe Sustainable For All | SDG Watch Europe](#)

Make Europe Sustainable For All is a 3-year cross-sectoral project run by 25 partners from across Europe. Its aim is to promote ambitious implementation of the world's crisis plan – the 17 UN Sustainable Development Goals (SDGs) – by and in the EU. The project aims to strengthen civil society networks working on SDG implementation across the EU and to highlight to the public and political leaders at the local, national, and European level that SDG implementation is crucial for an inclusive, sustainable and resilient future for all people and planet.

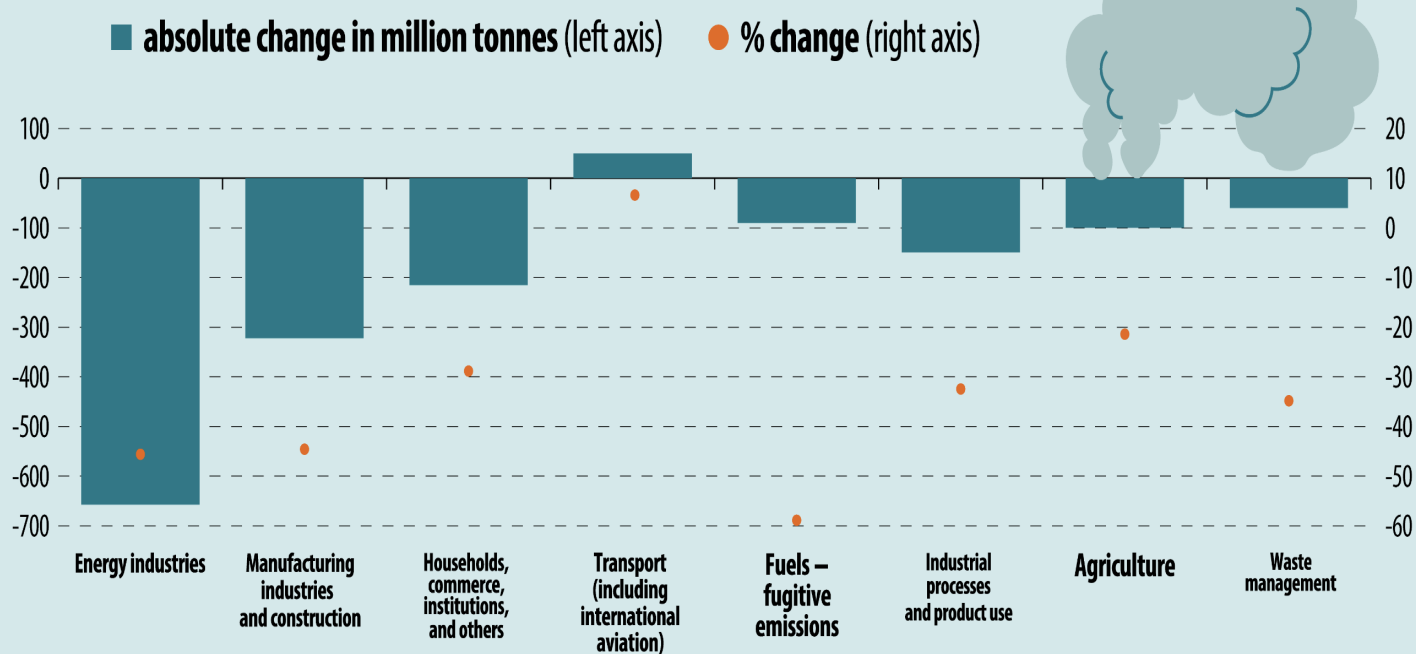
## [REPowerEU: affordable, secure and sustainable energy for Europe \(May 18, 2022\)](#)

In response to the hardships and global energy market disruption caused by Russia's invasion of Ukraine, the European Commission presented the REPowerEU Plan. REPowerEU is a plan for saving energy, producing clean energy, and diversifying energy supplies. It is backed by financial and legal measures to build the new energy infrastructure and system that Europe needs.

## [The European Union 's Greenhouse Gas Emissions, change from 1990-2020 \(Sep 29, 2022\)](#)



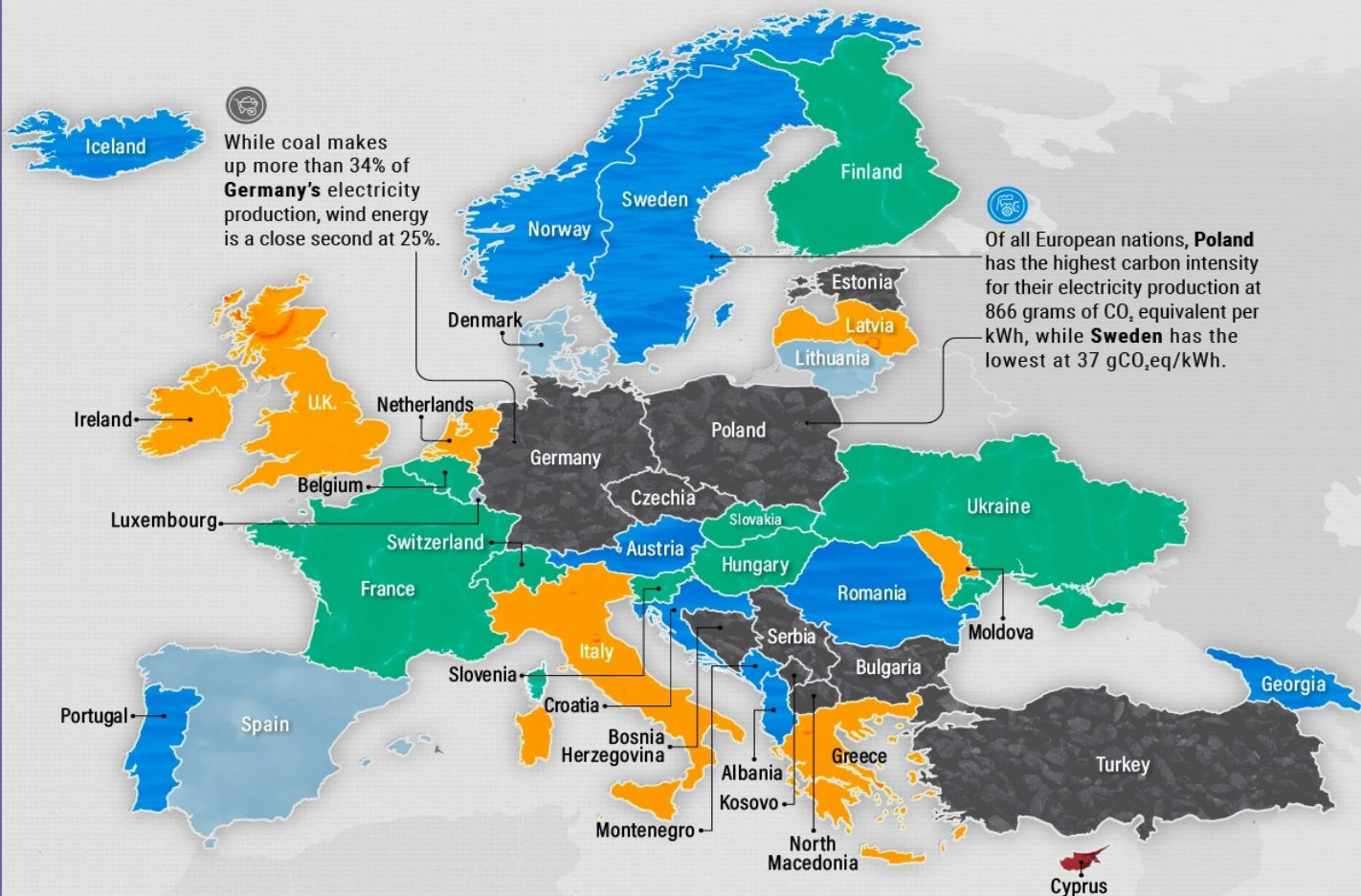
### Greenhouse gas emissions by source sector, EU, change from 1990 to 2020 (million tonnes of CO<sub>2</sub> equivalent and % change)



Note: Source sectors as defined in greenhouse gas emission inventories  
Source: European Environment Agency (EEA) republished by Eurostat



## EUROPE'S Biggest Sources of Electricity BY COUNTRY



A decade ago, more than a quarter of Europe's electricity was produced using coal. Since then, solar and wind generation have doubled to replace declining coal use.

### EU Electricity Generation by Source 2021



Source: Electricity Maps, IEA, BP Statistical Review of World Energy, Eurostat, Government of Iceland

This map shows the top source of electricity production averaged over the twelve months from November 2021 to November 2022 unless otherwise stated. Data for Georgia and Moldova is from a five year period (2017-2021).

# European Energy Security

## [Where Does Europe's Energy Come From?](#)

One year on from Russia's invasion of Ukraine, the global energy landscape has changed dramatically. Regions around the world have experienced soaring prices that have hit consumers hard, all against a geopolitical backdrop with energy security at its heart. What's more, the world's dependence on fossil fuel consumption, including the price and resource volatility that entails, has come into sharp focus.

## [What Does the Russia-Ukraine Conflict Mean for Renewable Energy? \(Mar 12, 2022\)](#)



Russia's invasion of Ukraine has caused a flux in global fossil fuel supply chains. In this episode of Tipping Point, ThePrint's Simrin Sirur explains what this means for the shift from fossil fuel to renewable energy. Featuring Kartik Ganesan, Fellow and Director, Research Coordination, Council on Energy, Environment and Water (CEEW), and Lydia Powell, Distinguished Fellow, Observer Research Foundation (ORF).

## [How Will the Energy Crisis, Triggered by the War in Ukraine, Unfold in 2023? \(Dec 12, 2022\)](#)



Europe faces a painful energy crunch this winter, as it tries to make do with less Russian gas. Will this crisis “accelerate the green-energy transition”—and what role can companies and consumers play in reducing consumption? Host Tom Standage asks The Economist's environment editor, Catherine Brahic and global energy and climate innovation editor, Vijay Vaitheeswaran. Also, hydrogen hype is rising again—will this time be different?

## [NATO's Response to Hybrid Threats \(Apr 4, 2023\)](#)

NATO Allies face threats and challenges from both state and non-state actors who use hybrid activities to target political institutions, influence public opinion and undermine the security of NATO citizens. Hybrid methods of warfare – such as propaganda, deception, sabotage and other non-military tactics – have long been used to destabilize adversaries. NATO faces increased speed, scale and intensity of these threats, facilitated by rapid technological change and global interconnectivity.





# Europe's Energy Challenge

## [Impact of the Energy Crisis on the European Economy](#)

The energy crisis has a knock-on effect on the economy, drives up prices for businesses and reduces the amount of money that consumers have to spend. The gas prices push up energy prices, which leads to extremely high inflation. For many the situation is fi-



nancially unsustainable and has even more drastic consequences than the COVID-19 pandemic. The EU and its Member States are adopting measures to help households and businesses face the energy crisis. There are possibilities for savings in terms of energy efficiency, renewables and electrification. This has also been outlined by REPowerEU.

## [Europeans Concerned by Cost of Living Crisis and Expect Additional EU Measures \(Jan 12, 2023\)](#)

In every EU Member State, more than seven in ten respondents are worried about the rising cost of living, with peak results in Greece (100%), Cyprus (99%), Italy and Portugal (both 98%). The rising prices, including for energy and food, are felt across all sociodemographic categories such as gender or age as well as all educational and socio-professional backgrounds. The second most mentioned worry with 82% is the threat of poverty and social exclusion, followed by climate change and the spread of the war in Ukraine to other countries equal in third place with 81%.

## [Gas and Electricity Bills 'Nearly Double in All EU Capitals', New Data Reveals \(Aug 11, 2022\)](#)

Energy costs for households across Europe nearly doubled compared to a year ago, new data has revealed. Gas bills have soared 111% and electricity ones 69%, according to the latest figures from the Household Energy Price Index. Averaged, these two figures mean an energy bill increase of 90% -- or nearly double -- compared to October 2021.

## [Why Europe is So Dependent on Russia for Natural Gas \(Feb 24, 2022\)](#)

The EU is the largest importer of natural gas in the world, according to the Directorate-General for Energy for the EU, with the largest share of its gas coming from Russia (41%). The region used to be independent for natural gas, but then the North Sea reserves dried up. Europe is also focusing on renewables, but the grid is not yet equipped for intermittent sources like wind and solar to fill the gap.



# Europe's Energy Challenge



## [Energy Crisis Sets Poland on Rocky Transition Out of Fossil Fuels \(Oct 23, 2022\)](#)

This article describes the high coal prices, scarce fossil gas supplies and barriers to renewable energy projects are complicating Poland's transition from fossil fuels amid the ongoing energy crisis. Despite efforts to decarbonize, Poland is still heavily reliant on coal, a fossil fuel which represented 70.8% of the country's electricity production in 2021. This is a huge improvement on 2010 figures, when 86.6% of Polish electricity came from coal but still insufficient to meet EU's 2050 climate neutrality goals and ensure affordable energy in the future. And now, experts warn that the 2022 energy crisis could throw the country's energy transition off course.

## [Poland to Delay Coal Phaseout and Open More Mines Amid Energy Crisis \(Nov 7, 2022\)](#)

The current energy crisis means that Poland will not only delay its plans to shut down existing coal mines but will also expand production and even open new facilities, two government ministers have revealed. Poland uses coal to generate 70% of electricity, by far the highest figure in the EU. The government's current energy plan foresees that falling to between 11% and 28% by 2040.

## [Russia to Cut Finland's Natural Gas in Latest Energy Clash \(May 20, 2022\)](#)

Russia will cut off natural gas to Finland after the Nordic country that applied for NATO membership this week refused President Vladimir Putin's demand to pay in rubles, the Finnish state-owned energy company said Friday, the latest escalation over European energy amid the war in Ukraine. Finland is the latest country to lose the energy supply, which is used to generate electricity and power industry, after rejecting Russia's decree.

## [China Energy Rethink Can Keep Europe Warm \(Feb 7, 2023\)](#)

Beijing's energy policy will indirectly support Europe. A post-Covid economic rebound will increase the country's appetite for liquefied natural gas, which Europeans covet after shunning supplies from Moscow following Russia's invasion of Ukraine. Yet, Beijing's push to hike pipeline imports, use more coal and boost domestic gas production should contain the rise in Chinese demand for the liquid fuel in 2023. That could ease the pain for gas-hungry Europe.

# Looking Toward Nuclear Energy

## [Nuclear Energy is a Solution to Climate Change \(Mar 30, 2023\)](#)

To limit the impacts of climate change, the world must rapidly reduce its dependency on fossil fuels to reduce greenhouse gas emissions. Nuclear energy is low-carbon and can be deployed on a large scale at the timescale required, supplying the world with clean, reliable, and affordable electricity.

## [Why Europe Is Looking to Nuclear Power to Fuel a Green Future \(Feb 18, 2022\)](#)

European regulators recently proposed to include nuclear power and natural gas in a select group of energy sources, alongside renewables such as wind and solar power, to help reduce greenhouse gas emissions. This initiative follows the EU's commitments to multilateral climate diplomacy and the 2019 announcement of the Green Deal to make the EU economy carbon-neutral by 2050. The European Commission (EC) says it aims to facilitate new gas and nuclear investments for a "difficult transition" between now and mid-century, a period during which coal-burning must be phased out and electricity demand may dramatically increase.

## [Europe is divided on nuclear power: Which countries are for and against it? \(Mar 14, 2023\)](#)

France, Europe's leading country for nuclear power, is considering a law to speed up the construction of new reactors. As the continent struggles with an energy crisis brought on by Russia's invasion of Ukraine, it is part of President Emmanuel Macron's bid for energy independence. But the push for a nuclear revival has caused friction with other European nations like Germany.

## [Could Nuclear Power Cut Europe's Dependence on Russian Energy? \(Mar 15, 2023\)](#)

Today, about half of EU countries generate nuclear power. France has the most operable nuclear reactors, followed by Belgium and Spain. These countries could boost the power generation of existing reactors relatively quickly because most reactors do not normally run at full capacity. This was one of the solutions proposed by the International Energy Agency to reduce European reliance on Russian natural gas.

Which EU Countries Have Nuclear Power Reactors?



# Global Investments

## [France Mounts 'Aggressive' Nuclear Push with Eye on EU Industrial Plan \(Feb 17, 2023\)](#)

With its atomic industry at a crossroads, France is mounting a lobbying blitz to put nuclear energy on par with renewables in EU climate legislation — and unlock benefits from the bloc's upcoming plans to boost green industries. Paris argues that if the ultimate goal of the EU's climate targets is to decarbonize the bloc, that should mean nuclear plants, with their negligible CO<sub>2</sub> emissions, have a key role to play alongside renewables.

## [Biden-Harris Administration Announces Major Investment to Preserve America's Clean Nuclear Energy Infrastructure \(Nov 21, 2022\)](#)

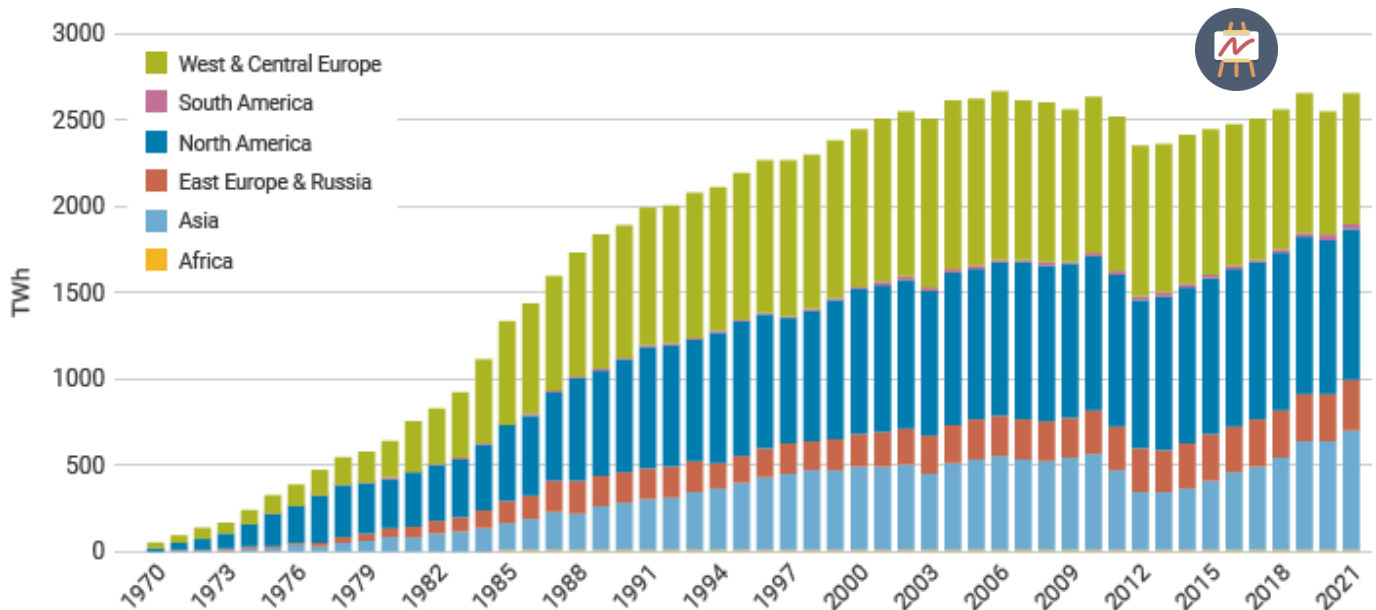
Funded by President Biden's Bipartisan Infrastructure Law, the \$6 billion CNC program supports the continued operations of safe and reliable nuclear energy facilities, preserving thousands of good-paying clean energy jobs while avoiding carbon emissions. As the nation's largest source of carbon-free power, America's current fleet of nuclear reactors is a vital resource for achieving the President's goal of 100% clean electricity by 2035 and a net-zero emissions economy by 2050.

## [EU Parliament Backs Labelling Gas and Nuclear Investments As Green \(Jul 6, 2022\)](#)

The rules outlined by the Complementary Delegated Act have split EU countries, lawmakers and investors. Brussels redrafted the rules multiple times, flip-flopping over whether to grant gas plants a green tag. Its final proposal fueled fierce debate about how to hit climate goals amid a crisis over dwindling Russian gas supplies.

## [Uranium Price Expected to Rise in 2023 on Nuclear Power Revival \(Jan 31, 2023\)](#)

There will likely be a further recovery of uranium prices in 2023 as nuclear energy regains popularity, was the sentiment among uranium specialists who spoke at the Vancouver Resource Investment Conference (VRIC).



# Photo Bibliography

## Cover

<https://www.vecteezy.com/free-png/european-union-flag>

## Learning Objectives

<https://www.e-ir.info/2015/12/03/energy-security-in-europe-how-is-the-eu-dealing-with-it/>

## Energy & Sustainability

[https://sdgs.un.org/sites/default/files/2022-07/SDG%20Report%202022\\_Goal%207%20infographic.png](https://sdgs.un.org/sites/default/files/2022-07/SDG%20Report%202022_Goal%207%20infographic.png)

[https://assets.weforum.org/editor/uUUVSsWSZdp8JKycWPrY\\_yqa6hmU3MblrVorOfkCck.png](https://assets.weforum.org/editor/uUUVSsWSZdp8JKycWPrY_yqa6hmU3MblrVorOfkCck.png)

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## European Energy Security

<https://www.visualcapitalist.com/wp-content/uploads/2023/02/Europes-Biggest-Source-of-Electricity-by-Country-2.jpg>

[https://www.nato.int/docu/review/images/cd54d4\\_1\\_granitsas\\_fossil-vs-renewable-energy\\_bester-energy\\_article.jpg](https://www.nato.int/docu/review/images/cd54d4_1_granitsas_fossil-vs-renewable-energy_bester-energy_article.jpg)

## Europe's Energy Challenge

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## Looking Toward Nuclear Energy

[https://cdn.cfr.org/sites/default/files/styles/large\\_xl\\_2x\\_680/public/image/2022/03/NuclearPower.jpg.webp](https://cdn.cfr.org/sites/default/files/styles/large_xl_2x_680/public/image/2022/03/NuclearPower.jpg.webp)

## Global Investments

[https://www.world-nuclear-news.org/BlankSiteASPX/media/WNNImported/mainimagelibrary/charts%20and%20graphs/Nuclear-electricity-generation-1970-2018-\(WNA-IAEA\).jpg?ext=.jpg](https://www.world-nuclear-news.org/BlankSiteASPX/media/WNNImported/mainimagelibrary/charts%20and%20graphs/Nuclear-electricity-generation-1970-2018-(WNA-IAEA).jpg?ext=.jpg)



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