Coal-phase out and justice



Do government policies have to be just?



Do government policies have to be just?

- Ethical imperative: Governance should prioritize fairness and dignity.
- Social stability: Just systems foster cohesion; injustice can incite unrest.
- Promotes trust: Just decisions enhance trust in institutions.
- Equal representation: Fair governance gives voice to all societal segments.
- Economic benefits: Justice promotes economic stability and growth.
- Protection of rights: Justice upholds individuals' and groups' rights.
- Enhances accountability: Fair governance emphasizes leader accountability.
- Human flourishing: Justice enables fulfilling lives for citizens.
- Future generations: Just decisions consider long-term societal impacts.
- Global reputation: Countries emphasizing justice gain international respect.



Coal and our society

- It has a long history of usage.
- Fueled the industrial revolution and modern economy.
- Played a significant role in shaping modern social policies and left/socialist/communist movements.
- Enormous environmental impacts.



Coal's sociopolitical influence

- Industrial rise: Cities like Manchester, Pittsburgh, and Essen emerged as coal-fueled industrial hubs.
- Working class: Rapid urban migration led to a new urbanindustrial working class.
- Mining realities mine collapses; "black lung" disease; child labor; long working hours.
- Labor movements: unions like NUM (UK) and UMWA (USA).
- Significant labor actions, e.g., UK's 1984-85 miners' strike.
- Political shifts: Coal's influence on governance; leftist movements in coal regions.



WAR IN COLORADO! WOMEN AND BABIES

VOLLEYS FIRED IN STREETS

Miletanes, With Machine Gree, Attack Stellars in Mine They Captered.

S KILLED IN BATTLE

Accord Engagements on Traday at Seemal Poors in Coal Fields.

Threshold Core, April 20-Test benefied withdraw, with a marking gar mouthed on a ridge until of Watershord to face prompting the facility of mine, company the facility of mine, company the facility of mine, company the facility waste, and a facility from

of that beliefly from after

Local efficient of the Dated Man Statement Asserts Assert 25 millioners when to change the Bullette Miles had been modeled

Newholston is embedden by T. R. Singer. Lett of the delivment in Varienting jumps of the trings and their gainsts test werk to a banklar gar to Varienting and and new sending some allment and her sending some alltions and he was a large and the seaf he hand likes place

Street Street

The star on 18th of the contract of the contract of the second of the contract of the contract

The section of Taxable to the later angle select to the section of the section of

The state of the late of the l

PROPOSES GOVERNMENT OWNERSHIP OF ROCKEFELLER'S COLORADO MINES

WASHINGTON, April 28.—Government ownership and operation of Juhn D. Rockefeller's Colorado mines was proposed in a hill introduced in the house today by Congressman Bryan of Washington.



PRODUCT OF PROPERTY

AS U.S. TROOPS Enter Harbor

or delicably specially yells (See April 18-6). April 18-6 April 18

SLAUGHTEREL

By Edward A. Evans

TRINIDAD, Colo., April 28.—The serikers started all this trouble in Colorado, the militiariten say. Strikers declare they were peaceable until the militia, recruited from the guarteen of the cities, and paid by the more operators, began to shoot and kill.

But it is conceded by all that it wasn't until the bodies of 11 limle children and two womens were tak

scized w Elec GUNM

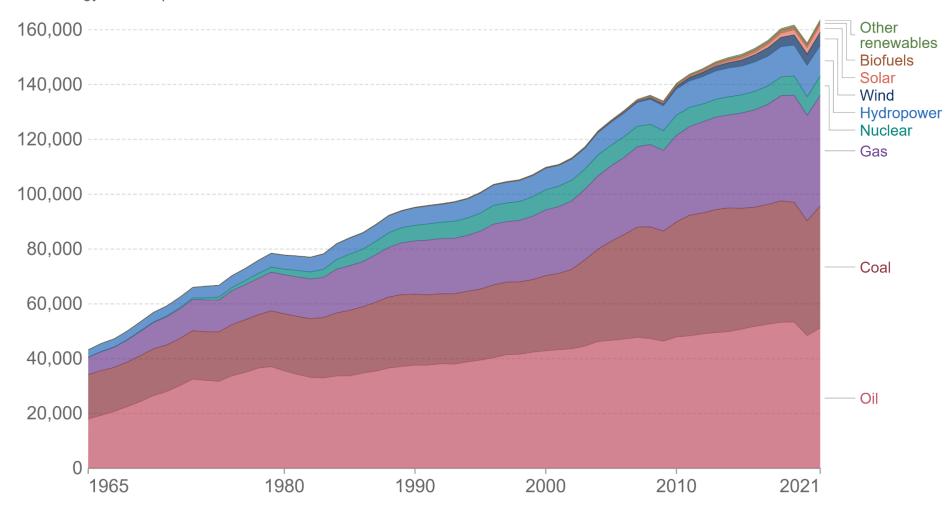
MITCHES.



Energy consumption by source, World



Primary energy consumption is measured in terawatt-hours (TWh). Here an inefficiency factor (the 'substitution' method) has been applied for fossil fuels, meaning the shares by each energy source give a better approximation of final energy consumption.



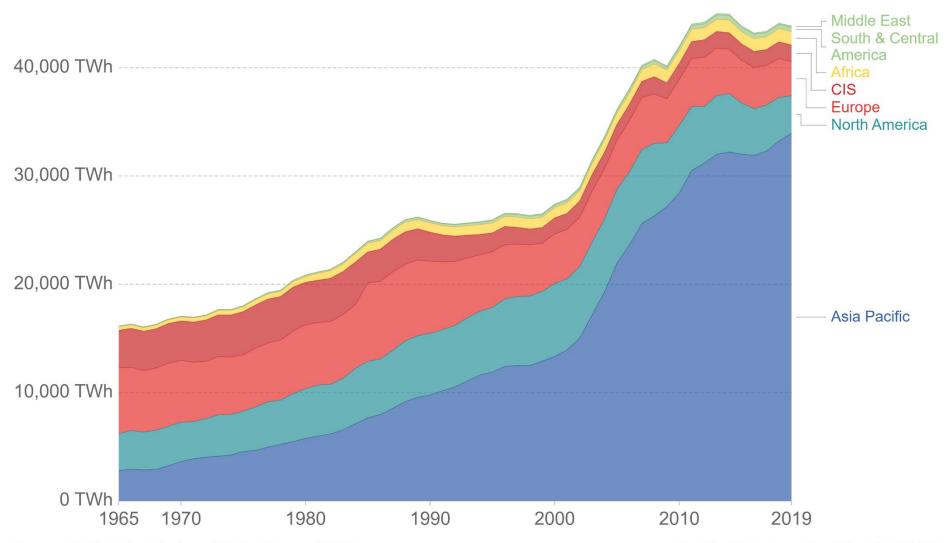
Source: BP Statistical Review of World Energy

Note: 'Other renewables' includes geothermal, biomass and waste energy.

Coal consumption by region



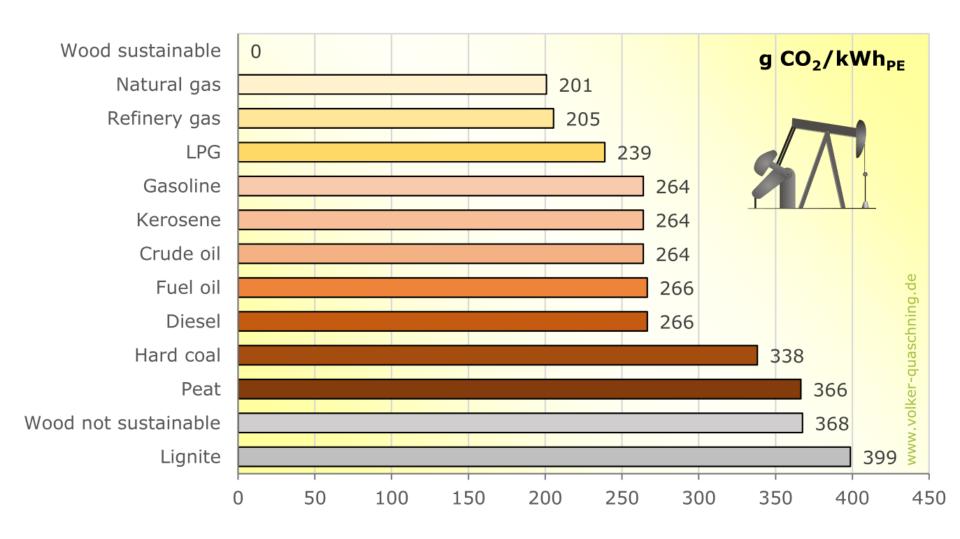
Annual coal consumption, measured in equivalents of terawatt-hours (TWh) per year.



Source: BP Statistical Review of Global Energy (2020)

OurWorldInData.org/fossil-fuels/ • CC BY Note: CIS (Commonwealth of Independent States) is an organization of ten post-Soviet republics in Eurasia following break-up of the Soviet Union.

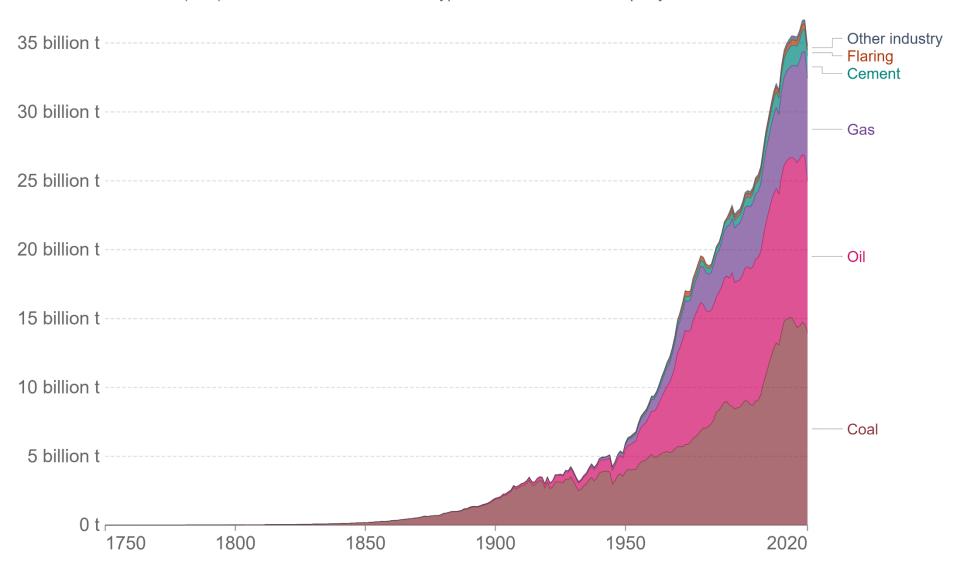
CO₂ emissions by fuel



CO2 emissions by fuel type, World



Annual carbon dioxide (CO₂) emissions from different fuel types, measured in tonnes per year.



Source: Global Carbon Project

OurWorldInData.org/co2-and-other-greenhouse-gas-emissions/ • CC BY

Coal phase-out (phase-down)

• COP26 in Glasgow – calls for parties to phase-down their use of unabated (*without CCS*) coal power and phase-out subsidies.

India Raises Last-Minute Objection (7:40 p.m.)

In a last-minute move, India proposed weakening fossil fuel language in the pact, shifting from a commitment toward "accelerating efforts towards the phase-out of unabated coal power" to instead supporting a "phase down unabated coal power."

Switzerland and the European Union expressed strong objections to India's proposal, but ultimately accepted it, paving the way for the adoption of what EU climate czar Frans Timmermans called a "historic" document.

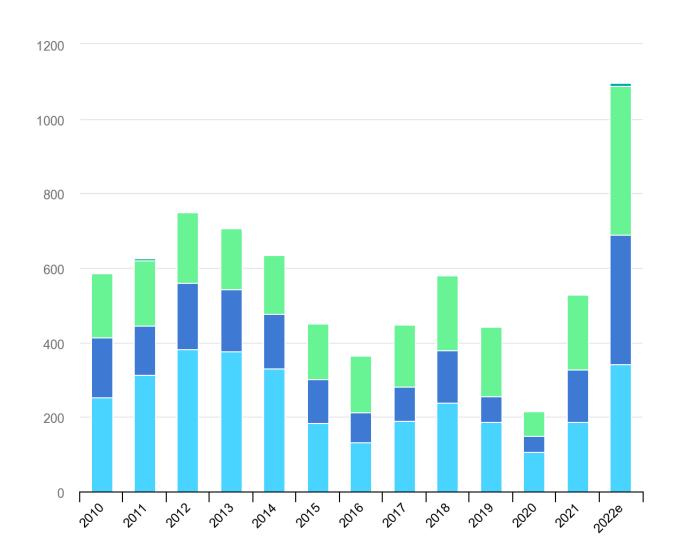


1) Economy of coal

- Cheap to produce, easy to use, and abundant.
- Subsidies to coal industry.
- Environmental damages not internalized to the price.



Global fossil fuel subsidies, billion USD (2021)





2) Demand patterns

In developing regions:

- Population is expanding.
- Per capita economic output is on the rise.
- Consumption levels are increasing.
- All energy sources are deemed essential.

In developed regions:

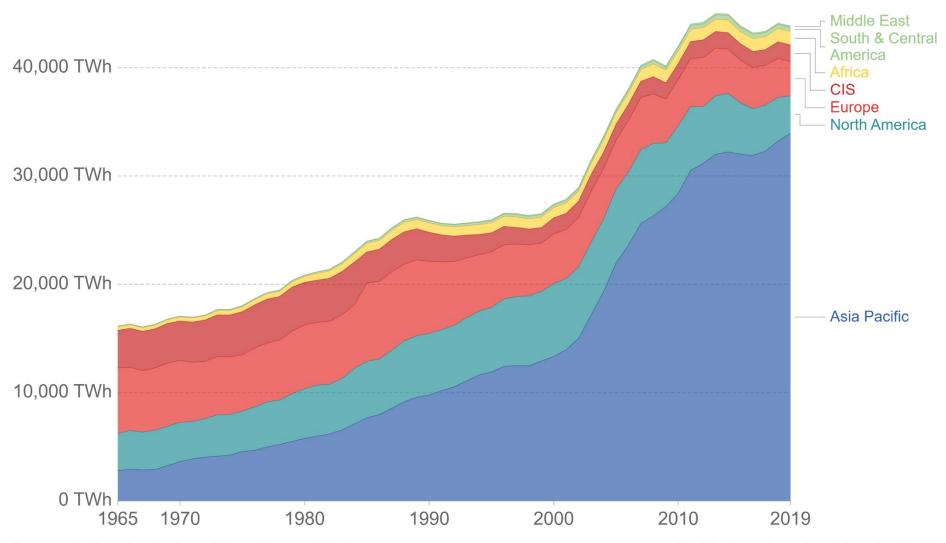
- Population remains stable.
- Economic growth is modest.
- There's a divergence between energy consumption and GDP growth.
- Traditional fuels are gradually being substituted by low-carbon alternatives.



Coal consumption by region



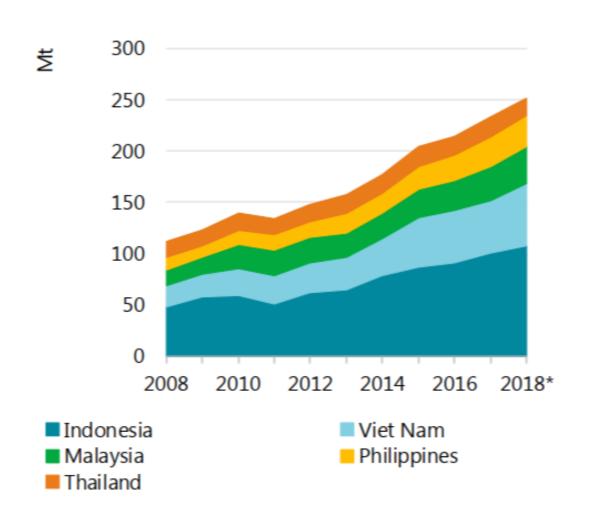
Annual coal consumption, measured in equivalents of terawatt-hours (TWh) per year.



Source: BP Statistical Review of Global Energy (2020)

OurWorldInData.org/fossil-fuels/ • CC BY Note: CIS (Commonwealth of Independent States) is an organization of ten post-Soviet republics in Eurasia following break-up of the Soviet Union.

Thermal coal demand of the major coal consumers in Southeast Asia





3) Resistence of the system

- Coal is embedded in the energy and social systems of industrialized countries.
- On the physical level, there are mines, transport, and combustion, which represent huge sunk costs.
- At the level of actors, there are vested interests such as companies, governments, and mining communities.
- At the level of institutions, coal is an important part of national identity and security, and is embedded in regulation and law.



Coal "cultural identity"

Coal industry embraced as a cornerstone of the collective sense of self.

Importance of coal for livelihood of the community, independence, the very existence of the industrial sector.

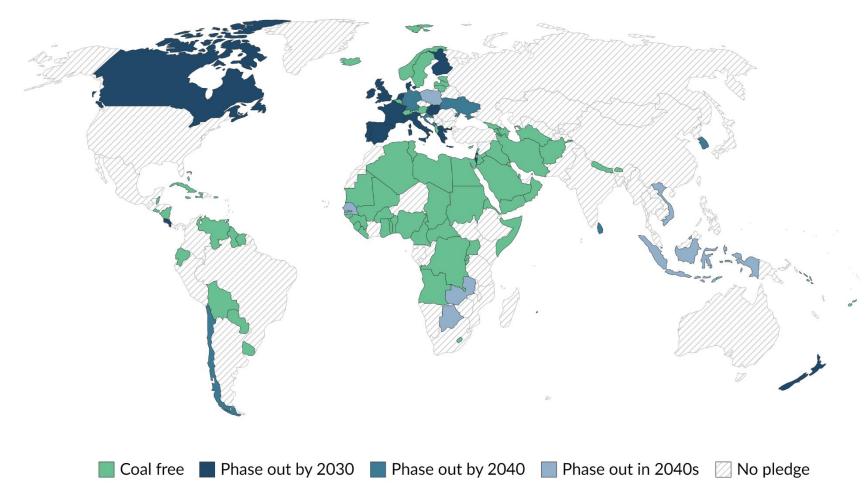




When will countries phase out coal power?



This measures pledges to phase out coal from the electricity mix.



Data source: Powering Past Coal Alliance; Ember Climate; Beyond Coal EU; Bloomberg Coal Countdown and other sources **Note:** Where a concrete phase out date is not defined, we have allocated the final year of the target decade. For example, "Phase out in the 2040s" is given a target date of 2049.

OurWorldInData.org/energy | CC BY

Coal phase-out and 'call for justice'

- Climate justice: focuses on the uneven climate change impacts on vulnerable groups across nations.
- Environmental justice: ensures fair environmental laws and policies for all, irrespective of race or income.
- Energy justice: prioritizes equal access to energy, its effects on communities, and inclusive decision-making.

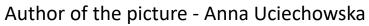


Turow coal mine

- Mine spans about 30km2 in Poland. Land subsidence and damaged houses in Germany, low groundwater in CZ and PL.
- PL extends mining till 2044 (citing energy security and jobs), despite environmental concers, failing to meet the legal obligations.
- In 2021, the Czech Republic filed a lawsuit against the mine at The Court of Justice of European Union - the court then ruled that mining must stop immediately
- February 2022 The Czech-Polish Agreement seemingly resolved the dispute, but the fairness of the outcome remains debatable









Turow coal mine – what justice for whom?

- Climate concerns vs. energy and economic needs.
- Local impacts vs. national benefits.
- Short term benefits vs. long-term (economic and environmental) sustainability.



Sources

- IEA: Medium Term Coal Market Report 2015
- EIA: International Energy Statistics, 2015.
- HEAL: The Unpaid Helth Bill: How Coal Power Plants Make Us Sick, 2013
- Sourcewatch.org External costs of coal
- Ecofys: Subsidies and costs of EU energy, 2014
- Ščastný, M.; Melichar, J.: External Cost of Fossil And Non-fossil Energy Systems: The Case of the Czech Republic, 2007
- Encyclopedia Britannica (n.d.): Asian Brown Cloud.
- EPA (n.d.): Particulate Matters (PM) Basics
- Guzder, D.(2009): Study Gets Inside the World's "Brown Coal".
- NASA (n.d.): Big Brown Cloud Storm over Asia
- Zdař Bůh: Důl ČSA na Mostecku musí těžař po konci dobývání zlikvidovat.
- Vlker-quasching.de (n.d.): Specific Carbon Dioxide Emissions of Various Fuels.

