**Briefing for journalists:** 

Climate change and environment: knowledge map





# Climate change and environment: knowledge map



The Climate Change Knowledge Map document lists sources of global, regional, and country data related to climate change. The document provides a list of the leading organizations and institutions that produce reports and assessments on climate change, including assessments of the state of the climate, policy analysis, and projections of future impacts. These reports provide valuable information and guidance for policymakers, researchers, media, and the public to understand and respond to the challenges posed by climate change.



### Intergovernmental Panel on Climate Change (IPCC)

The Intergovernmental Panel on Climate Change is an intergovernmental body of the United Nations. The IPCC produces comprehensive assessments of the latest scientific, technical, and socio-economic information on climate change and provides policymakers with regular scientific assessments of climate change, its implications, and potential future risks.

Website: https://www.ipcc.ch/

Latest Report

### United Nations Framework Convention on Climate Change (UNFCCC)

The UN organization responsible for the UN climate convention and its associated agreements, e.g. Kyoto Protocol, and Paris Agreement. With a Secretariat based in Bonn, Germany, and with virtually every country as a member, the UNFCCC organizes the annual climate summits (Conferences of the Parties, or COPs) and many other less visible sets of negotiations. The website includes records of decisions made at each COP, ongoing processes, upcoming meetings, and much more. Like all UN entities, the UNFCCC is ultimately governed by its member states, not the Secretariat.

### **United Nations Environment Programme (UNEP)**

The United Nations Environment Programme is responsible for coordinating responses to environmental issues within the United Nations system. It focuses on climate, nature, pollution, sustainable development, and more.

Website: https://www.unep.org/

Some of UNEP's regular key reports and other products are:

### THE EMISSIONS GAP REPORT

The UNEP Emissions Gap Report (EGR) series tracks our progress in limiting global warming well below 2°C and pursuing 1.5°C in line with the Paris Agreement.

#### Latest Report

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### **ADAPTATION GAP REPORT**

The report looks at progress in planning, financing, and implementing adaptation actions.

Latest Report: https://www.unep.org/resources/adaptation-gap-report-2022

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#### **PRODUCTION GAP REPORT**

The report focuses on the huge mismatch between the amount of fossil fuels that countries are intending to produce, and the amount that can be burned if global warming is to stay within the Paris Agreement limits.

Latest Report

### REAL-TIME AIR POLLUTION EXPOSURE

Real-time measurement of air quality.

Website: https://www.iqair.com/unep

### THE GLOBAL ENVIRONMENT OUTLOOK (GEO)

The Global Environment Outlook (GEO) is often referred to as UNEP's flagship environmental assessment. GEO is a consultative and participatory process to prepare an independent assessment of the environment's state, the policy response's effectiveness to address these environmental challenges, and possible pathways to achieve various internationally agreed environmental goals.

Website: https://www.unep.org/global-environment-outlook

Latest report

### **United Nations Convention on Biological Diversity (CBD)**

Like the UN climate convention, the biodiversity convention was agreed at the 1992 Earth Summit in Rio de Janeiro. Virtually every country is a member, though the United States is not, and COPs are held every two years and coordinated by the Secretariat based in Montreal, Canada. The convention's key aim is "the conservation of biological diversity. The sustainable use of its components and the fair and equitable sharing of the benefits arising from using genetic resources." Like the climate convention, there are important attached agreements, such as the Cartagena Protocol on Biosafety, the Nagoya Protocol on Access and, Benefit-sharing and the main agreement from the 2022 COP, the Kunming-Montreal Global Biodiversity Framework

https://www.unep.org/news-and-stories/story/cop15-ends-landmark-biodiversity-agreement

Website: https://www.cbd.int/

### Global Climate Risk Index (CRI)

The Global Climate Risk Index analyses quantified impacts of extreme weather events, in terms of fatalities and impact of extreme weather events. The index is based on the data from the Munich Re NatCatSERVICE, which is considered worldwide as one of the most reliable and complete databases on this matter.

Website: https://www.germanwatch.org/

Latest Report

### The World Meteorological Organization (WMO)

The World Meteorological Organization is a specialized agency of the United Nations responsible for promoting international cooperation on atmospheric science, climatology, hydrology, and geophysics.

Website: https://worldweather.wmo.int/en/home.html

### Climate and Development Knowledge Network (CDKN)

The Climate and Development Knowledge Network works to enhance the quality of life for the poorest and most vulnerable to climate change.

Website: https://cdkn.org/

### Climate Action Tracker (CAT)

This research collaboration summarizes climate targets and action of the biggest countries, and analyzes them to produce projections of how much global warming we will see. The headline figure for temperature rise is periodically re-calculated if governments make major new commitments. Global updates are usually presented at UN climate summits, and country updates following new targets.

Website: https://climateactiontracker.org/

#### Net Zero Tracker

Research collaboration collating and analyzing net zero targets set by countries, states & regions, cities and major companies. The tracker looks at targets for markers of credibility, such as a reporting mechanism and independent verification. Produces an annual update and other reports.

Website: https://zerotracker.net/

### **Red List of Threatened Species**

Maintained by the International Union for the Conservation of Nature (IUCN, see Stakeholder List) the Red List is the definitive database of plant and animal species at risk of extinction. It releases a new headline analysis every couple of years, but the database can be searched at any time for information on any species in it.

Website: https://www.iucnredlist.org/

### **National Snow and Ice Data Center**

Despite its name, this is a globally relevant project providing near real-time measurements of ice across the polar regions. It is for example the major source of data showing the huge shrinkage in Arctic sea ice over the last 40 years.

Website: <u>https://nsidc.org/home</u>

### **World Glacier Monitoring Service**

A global science collaboration, coordinated from Switzerland, measuring and analysing changes to mountain glaciers across the world. It maintains data on a set of 'reference glaciers' in major mountain ranges, including the Caucasus, through which global and regional changes can be tracked.

Website: https://wgms.ch/

### **European Environment Agency**

Established to advise European Union institutions and member state governments on the full range of environmental issues. Also maintains key statistics and trends across the bloc.

Website: https://www.eea.europa.eu/

# **Georgia in the Paris Agreement**

The Paris Agreement is a legally binding international treaty on climate change. It was adopted by 196 Parties at COP 21 in Paris, on 12 December 2015, and entered into force on 4 November 2016. Its goal is to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels.

More: https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

### NDC GEORGIA'S UPDATED NATIONALLY DETERMINED CONTRIBUTION (NDC)

Georgia's updated Nationally Determined Contribution (NCD) is to support the sustainable and balanced development of the country, equally taking into consideration climate change and environmental and socio-economic challenges.

Link: https://mepa.gov.ge/GE/PUBLICINFORMATION/32027

### georgia's 2030 climate change strategy

Georgia's 2030 Climate Change Strategy and Action Plan (Climate Change Strategy and Action Plan – CSAP, Climate Action Plan – CAP) are planning and implementation mechanism for coordinated effort and planning toward meeting the nationally determined targets for climate change mitigation.

Link: https://mepa.gov.ge/Ge/PublicInformation/32027/

### 2021-2023 action plan of Georgia's 2030 climate strategy

The Action Plan is prepared in accordance with the Government of Georgia.

Link: https://mepa.gov.ge/Ge/PublicInformation/32027/

# 2022 Implementation Report of the 2030 climate change strategy and 2021-2023 action plan

The report reflects the progress and implementation status of the Climate 2030 Strategy and 2021-2023 Action Plan.

Link: https://mepa.gov.ge/Ge/Files/ViewFile/53738

Fourth National Communication of Georgia under the United Nations Framework Convention on Climate Change

Link: https://www.undp.org/sites/g/files/zskgke326/files/migration/ge/undp\_ge\_env\_fourth-national-communication-to-unfccc\_2021\_geo.pdf

### National Environmental Action Programme of Georgia (NEAP 4)

The National Environmental Action Program (NEAP) of Georgia is country's main strategic document in the field of environment and natural resources management.

Link: https://mepa.gov.ge/Ge/PublicInformation/34047/

Action Plan

### Agriculture and Rural Development Strategy of Georgia (2021-2027)

The Strategy envisages the priorities of the Government of Georgia, also the directions for sectorial and multisectoral development, which are linked to agriculture and rural development.

Link: https://eu4georgia.eu/wp-content/uploads/Agriculture-and-Rural-Development-Strategy-of-Georgia-2021%E2%80%932027.pdf



# **The Energy Transition**

This is a selection of global organizations, some of them governmental and some not, analyzing and reporting on the transition to clean energy. 'Clean energy' includes renewable (and potentially nuclear) generation, energy storage, zero-carbon transport (such as electric cars), heat pumps, and 'green' hydrogen (made by electrolysis of water). It also includes some organizations that look at both fossil and clean energy.

### The International Energy Agency

The International Energy Agency (IEA) is a global intergovernmental agency that analyzes and forecasts trends, primarily with a view to helping ensure energy security but also with a view to costs and decarbonization. It also provides technical assistance for developing countries. The IEA produces a series of annual flagship reports on, for example, the global oil market, the global electricity market, and energy investment. In 2021 it produced a landmark report on how the world can best reach net zero emissions by 2050.

Website: <u>https://www.iea.org/</u> | <u>Georgia country page</u> |

Net zero pathway

### International Renewable Energy Agency

The International Renewable Energy Agency (IRENA) is a global intergovernmental agency for energy transformation that serves as the principal platform for international cooperation, supports countries in their energy transitions, and provides state-of-the-art data and analyses on technology, innovation, policy, finance, and investment. 167 countries (including Georgia) are members.

Website: https://www.irena.org/

### International Atomic Energy Agency

A member of the UN system but with its own founding treaty, the IAEA has several functions with its member governments: promoting the peaceful use of nuclear technology, promoting knowledge sharing about safety, setting standards, and investigating accidents of international importance.

Website: https://www.iaea.org/

### **BP Statistical Review of Energy**

This annual report is widely used by policymakers, businesses and journalists - alongside those of the IEA - as a source of information and insights on all aspects of the energy globally. It is produced by the research arm of the oil and gas company, but nevertheless has a reputation for impartiality.

Website: https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html

### **Energy Transitions Commission**

The Energy Transitions Commission (ETC) is a global coalition of leaders from across the energy landscape committed to achieving net-zero emissions by mid-century, in line with the Paris climate objective of limiting global warming to well below 2°C and ideally to 1.5°C. Its reports include deep dives into sectors such as heavy industry, giving technical options for a zero-carbon transition and associated costings.

Website: https://www.energy-transitions.org/

**Publications** 

#### Ember

A non-profit research organization producing research and analysis at the cutting edge of the energy transition. Its Global Electricity Review is a flagship annual publication, while analysis and commentary looks in detail at specific regions, including Turkey. Data is usually available for free download.

Website: https://ember-climate.org/

### **Bloomberg New Energy Finance**

An offshoot of the global market information provider, BNEF is a leading analyst of various aspects of the energy transition worldwide. Some of its data is sold commercially to investors, while flagship publications are publicly released.

Website: https://about.bnef.com/

Electric Vehicle Outlook: https://about.bnef.com/electric-vehicle-outlook/

### **Global Wind Energy Council**

The global trade association for wind power producers and manufacturers. Maintains database of statistics on wind power across the world.

Website: https://gwec.net/

#### **Energy Community**

The Energy Community is an international organisation which brings together the European Union and its neighbours to create an integrated pan-European energy market. Georgia is member since 2017.

Website: https://www.energy-community.org/implementation/Georgia.html

# Specialist Media covering Environment, Climate, and the Energy Transition

This is a selection of specialist online media outlets covering these topics with an international perspective, all in English. Such media outlets can be useful for keeping informed about news developments, getting an international view of events in the local region, for explainers and other background material on complex topics in the news, and as sources of stories. Many of these outlets publish with Creative Commons licences, meaning that other websites can post their content (usually apart from pictures) under certain conditions. Most operate on a non-profit basis. Several offer daily or weekly newsletters.

#### **Climate Home News**

Climate Home is a specialist news website focussing on international politics, such as the UN climate negotiations, with news reports sitting alongside analysis and viewpoint articles.

Link: https://www.climatechangenews.com/

### **Clean Energy Wire (CLEW)**

Based in Berlin, CLEW was originally established to provide information about Germany's energy transition to an international audience. Now it focuses also on the energy transition in Europe, with some global content. In addition to news, the CLEW website provides factsheets, explainers and timelines on key topics, plus occasional investigative series. It also offers occasional webinars for journalists on topics in the news.

Link: https://www.cleanenergywire.org/

### **Carbon Brief**

London-based Carbon Brief specializes in thorough, in-depth coverage of important research and topics in the news. It is also a leader in using infographics to illustrate trends. The website carries backgrounders on issues such as climate attribution that are periodically updated, and carries guest articles by scientists. Some content is UK-focussed but most is globally relevant.

Link: https://www.carbonbrief.org/

### **Inside Climate News**

Based in the USA (and with many articles focused on it), Inside Climate News has a 15-year track record of breaking stories, particularly on corporate pollution, for which it has received several journalism awards.

### Mongabay

Also US-based, Mongabay covers news on all environmental issues, not just climate change. Content can be a bit US-focused but there is plenty of globally relevant material too, including on the developing world.

Link: https://www.mongabay.com/

#### **ReNew Economy**

A leading provider of news on the clean energy transition - renewable energy, electric vehicles, heat pumps, hydrogen electrolysers, smart grids. Technology, economics, social acceptance, uptake. Based in Australia, but much material is globally relevant.

Link: https://reneweconomy.com.au/

#### **China Dialogue**

Although the name might suggest a remit to cover all Chinese issues, the focus is on the country's clean energy transition and measures to tackle other environmental issues such as deforestation and pollution. It is globally important because of the crucial role China plays in the global economy.

Link: https://chinadialogue.net/en/

### **The Conversation**

The Conversation was conceived as a way for academics to publish their analyses and perspectives without the filter of a newsroom. It covers all topics, but energy and the environment is one key area of focus. Despite being written by academics, editors require that articles are clear and easily understandable. Can be a good source of ideas and explainers.

Link: https://theconversation.com/us/environment

#### Yale Environment 360

Produced at Yale University in the USA, this carries interesting and insightful articles on many environmental issues, usually with a global perspective.

Link: https://e360.yale.edu/

### DeSmog

The go-to news website for stories about climate denial, disinformation, corruption, and other forms of corporate misbehavior. Also maintains databases on (for example) climate deniers.

Link: https://www.desmog.com/

