

Covering Climate Change: A Best Practice Guide for Journalists



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MEDIA FOR
FUTURE



Co-funded by
the European Union



This guide forms part of the **Media For Future** project, an EU-funded Erasmus + programme aimed at fostering greater understanding between journalists and climate scientists.

Climate change is a difficult topic for most journalists to cover, especially when newsroom resources are constrained and time and money for training may not be available.

It is complex, slow-moving, technical, and often lacks the personalities and drama that the media are attracted to. Yet its importance to almost every aspect of society means that covering climate change is a core responsibility of the journalism profession.

So how can journalists improve, strengthen and deepen their climate coverage? This guide provides many suggestions and resources, but essentially, journalists need to:

1. Make sure they understand the basics of climate science;
2. Understand the climate landscape in their own countries (emissions targets, obligations, regulatory frameworks, key players);
3. Know where the emissions in their country come from (e.g. sectors such as energy, transport, agriculture);
4. Be aware of the tactics of climate denial and delay in their own contexts and country-specific policy debates.

Once this groundwork is done, journalists can begin to think about better ways to tell the climate story in their own communities. They can:

- Be aware of their own automatic go-to framings, such as jobs and the economy, and ask if other frames (opportunity, moral) would suit a story better;
- When writing about the cost of climate policies, include the cost of inaction as well;
- Take a solutions journalism approach by leading off with the solution rather than restating the problem;
- Foreground human stories and people, and leave scientific data to further down the story;
- Write stories that speak to the values, identities and culture of their audiences rather than simply imparting information;
- Try to root stories where possible in specific communities and landscapes.

This guide can help reporters, editors, commissioning editors, broadcasters and media management to think more deeply about their climate coverage. The insights and recommendations are based on research into climate change in the news media.

It is organised as follows:

Section 1: What journalists need to know about climate science

Section 2: How to write about climate change

Section 3: Challenges journalists face when covering climate

Section 4: Resources for journalists

Section 5: A-Z of key concepts

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March 2026 Media for Future meeting in Dublin

What journalists need to know about climate change

Key takeaways from this section:

- To be a successful climate journalist, you must be well-versed in the language of climate science and have at least a basic understanding of important terms (see the glossary for more help).
- Not all extreme weather events can be attributed directly to climate change.
- Symptoms of climate change include temperature, rising sea levels, ocean acidification, extreme weather, droughts, flooding, wild fires and biodiversity loss.

Climate reporting requires considerable upskilling. Luckily, there are many free resources available for journalists at every level of expertise and experience.

You can familiarize yourself with **important terms** and increase your own information literacy with resources like the **UNESCO toolkit** for media professionals. You might also find it helpful to watch lectures on how to effectively report on climate change (like those from the **Oxford Climate Journalism Network** and its co-founder **Wolfgang Blau**).

Journalists need to distinguish real news from misinformation or disinformation. If you are highly **climate literate**, then it will be easier for you to tell what is real and what is not.

Attribution science

Attribution science measures human impact on Earth's climate. Computer-programmed climate models quantify current climate conditions and compare them to climate conditions that would exist in a world without human influence. This allows scientists to determine if (and to what extent) an extreme weather event was influenced by human-caused climate change.

We know that many types of extreme weather events are becoming more frequent and intense in many places around the world.

However, this is not true of all types of weather events in all parts of the planet. All weather events have multiple causes, and this should be reflected in reporting. Attribution science can help journalists to report more accurately on individual weather events, rather than making blanket statements.

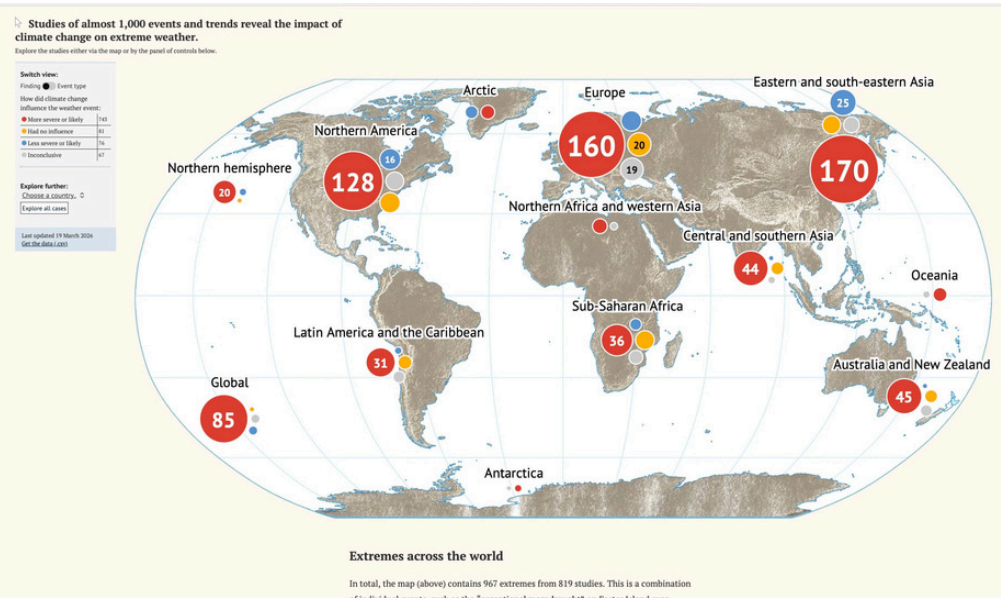
In its guide on **attribution science**, World Weather Attribution identifies three main mistakes in extreme weather event reporting: neglecting to include climate change's role in causing the event, attributing the event to climate change without evidence and attributing an event's cause only to climate change.



Photo by Markus Spiske on Unsplash

ADDITIONAL RESOURCES:

- *Essential Concepts of Environmental Communication: An A to Z Guide* by Pat Brereton
- UNESCO, Media and Information Literacy Toolkit
- Oxford Climate Journalism Network
- “What is Attribution Science?” by the Union of Concerned Scientists
- “Reporting Extreme Weather and Climate Change: A Guide for Journalists” by World Weather Attribution



Carbon Brief has a **database** on extreme weather attribution studies with hundreds of examples. If you cannot find the specific weather event that you're reporting on in the database, then search for a similar one that has occurred previously. You can also use **theoretical findings** on climate to inform your reporting.

Attribution science does give us some general findings on how human-caused climate change is impacting weather. For example:

- Average and extreme heat is increasing on every continent, causing more intense heatwaves everywhere.
- Extreme rainfall is more likely and intense in most parts of the world. This can impact the likelihood of flooding— but flooding is influenced by human factors, too, like ineffective drainage systems and water management.
- In general, tropical cyclones are more likely to be severe, even though they are not increasing in frequency. It is not yet possible to determine if an individual cyclone was more intense because of climate change.
- Storm surges are higher because of changes in the sea level.
- Extreme cold is less likely and less intense in all parts of the world. It is unclear how this has impacted heavy snowfall.
- In some places, droughts are becoming more frequent and severe. Human factors like water management also contribute to droughts.
- Fire weather is more likely in some parts of each continent. Human factors like forest management and fire safety can impact the amount and intensity of fires.

Impacts of climate change

Temperature

Climate change is causing the average global temperature to increase. Since the Industrial Revolution, the widespread use of fossil fuels has resulted in high levels of greenhouse gases that trap extra heat in the atmosphere.

Rising sea levels

Sea levels have risen an estimated 20-23 centimeters (or 8-9 inches) since 1880. This is because the ocean is warming. As water gets warmer, it increases in volume in a process called thermal expansion. Thermal expansion, coupled with the melting of glaciers and ice sheets, is causing intense coastal flooding that damages both environmental habitats and human infrastructure.

Ocean acidification

The ocean is a carbon sink, meaning that it absorbs large amounts of CO₂ released into the atmosphere through the burning of fossil fuels. However, this is causing the ocean's pH levels to decrease. As the ocean becomes more **acidic**, its ecosystems and its food web are disrupted. Species may experience difficulty breeding, building and maintaining shells, finding food and maintaining internal processes.

Extreme Weather

Though climate change **has not** been proven to cause extreme weather events on an individual basis, studies have shown that it increases the frequency of these events and their level of destruction.

Climate change impacts precipitation as well as global temperatures. A warmer ocean and a warmer atmosphere lead to heavier precipitation, which can cause flooding and other disasters. Climate change also alters atmospheric circulation, so ecosystems that already tend to be wet or dry are pushed to extremes (like flooding or droughts).

ADDITIONAL RESOURCES:

- Carbon Brief
- IPCC Sixth Assessment Report
- Institute for Environmental Research and Education

- "What is sea level rise and why does it matter to our future?" by UN Geneva
- Institute for Environmental Research and Education

Droughts

Higher temperatures mean increased evaporation and drier weather conditions. There is already a **high global demand for water**— not only for individuals, but for industries as well (especially the agricultural and fashion industries). Though droughts occur all over the world, extreme drought impacts Africa more than other continents, and low-income countries have the most difficulty in coping.

Flooding

The atmosphere’s ability to hold moisture increases with air temperature, which leads to heavier rainfall. This leads to more frequent and more severe **floods**. Current drainage infrastructure is often unable to cope with the severity of floods. Roads and buildings can even block rainwater from being absorbed into the ground, especially in urban areas. Deforestation further exacerbates flooding, as the plant life that would usually absorb rainwater and prevent erosion has been eliminated.

Wildfires

Fire can be beneficial in the cases of prescribed burns and **Indigenous fire practices**, as it allows new vegetation to grow and renews the land. However, increased temperatures, less precipitation and dry vegetation are all factors that contribute to longer, more extreme **wildfire seasons**. Wildfires release carbon into the atmosphere, worsening air quality and climate change.

Biodiversity loss

Climate change drives changes in the behavior of living organisms, the distribution of species, the spread of invasive species, habitat loss and other factors that all contribute to the **loss of biodiversity**. Extinction rates are accelerating because of human activity, occurring **1,000 times faster** than in pre-human times.

Common knowledge gaps

Key takeaways from this section:

- Agriculture requires a large amount of resources, particularly for livestock farming.
- Individual lifestyle changes are far less effective than policy or technological changes.
- Evolving reporting standards are increasing accountability for companies by requiring more transparency.



Photo by Antonio Groß on Unsplash

Diet and climate

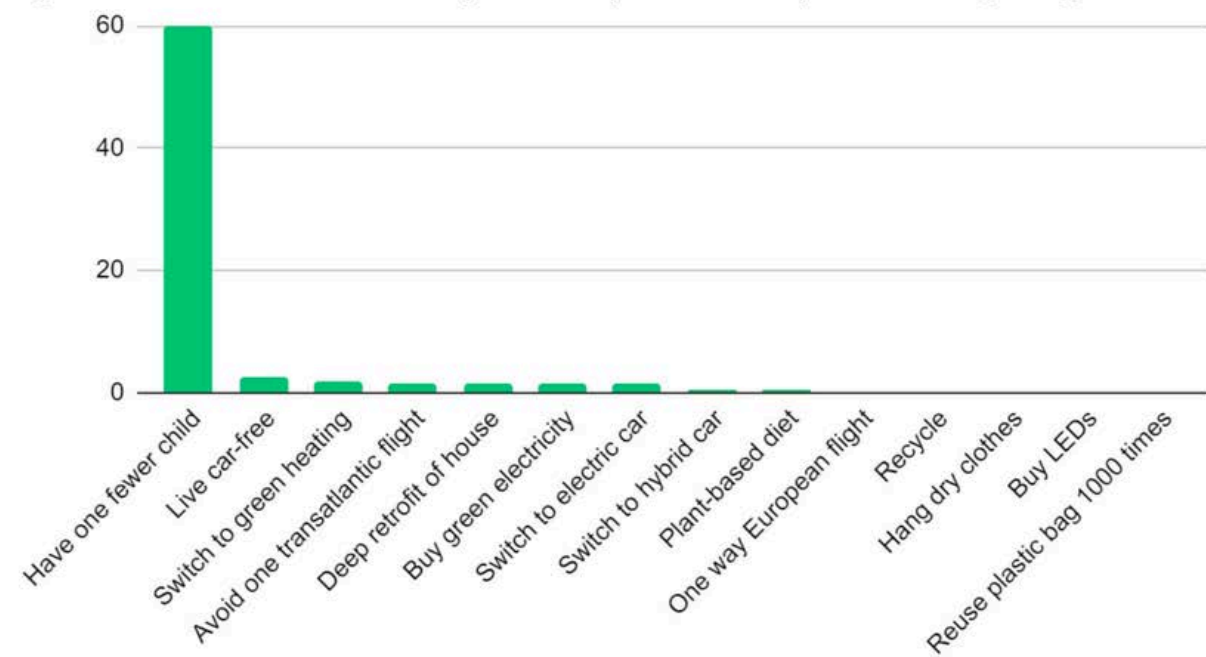
Agriculture is responsible for about ¼ of greenhouse gas emissions, 70% of freshwater withdrawals and half of the world’s habitable land use. **Agricultural greenhouse gas emissions** come from methane gas released from cattle, CO₂ from deforestation to create farmland, food transport and food waste, among other things.

Livestock vastly outnumber wild animals. Because animal-based foods usually have a bigger **carbon footprint** than plant-based foods, **what we eat** has a considerable impact on our emissions. Plant-based diets contribute less greenhouse gas emissions to the atmosphere.

ADDITIONAL RESOURCES:

- “Facts about droughts: The causes and impacts” by Oxfam
- “How is flooding caused by global climate change?” by IERE
- “Fire stewardship: Upholding Indigenous sovereignty” by International Association of Wildland Fire
- “Yes, climate change is raising the risks—and stakes—of extreme wildfires” by The Nature Conservancy
- “Study: Species go extinct far faster than before” by Seth Borenstein
- “Environmental Impacts of Food Production” by Our World in Data
- “Food and climate change: Healthier diets for a healthier planet” by United Nations
- “Focus on what you eat, not whether your food is local” by Our World in Data

Figure 2. Tonnes of CO₂ avoided by different personal lifestyle decisions ignoring the effect of government policy



Graph from Founders Pledge

Lifestyle emissions

The term “carbon footprint” was **invented by fossil fuel companies** to make consumers feel guilty about their own emissions, rather than shifting the blame to the biggest polluters. Reducing individual emissions will never have as significant an impact as changing policies or technologies, but personal changes can make a significant difference if they gain traction across society. The most **effective changes** include flying less, eating a plant-based diet, investing in green energy and living car-less (instead opting for cycling, walking or public transport).

Greenwashing

Greenwashing is when a company or product promotes itself as environmentally friendly without taking meaningful action to reduce its environmental impact. It can sometimes be difficult to tell what is and isn’t greenwashing. Look out for specific claims and evidence (ex. How a product can be recycled, how its parts are sourced, etc.).

Corporate Sustainability Reporting Directive

The **Corporate Sustainability Reporting Directive** (CSRD) is part of the European Green Deal. Companies of a certain size are required by law to disclose risks and opportunities from social and environmental issues, as well as how their business impacts people and the environment. This directive aims to increase transparency with more accurate and consistent reporting from corporations.

Science-based targets

The **science-based target initiative** provides standards and tools to help companies reduce their greenhouse gas emissions for climate mitigation. These **targets** can be sector-specific or cross-sector as well as near-term or net-zero. A near-term target is set to reduce emissions over five to 10 years. Net-zero targets plan to reduce emissions by at least 90% by 2050.

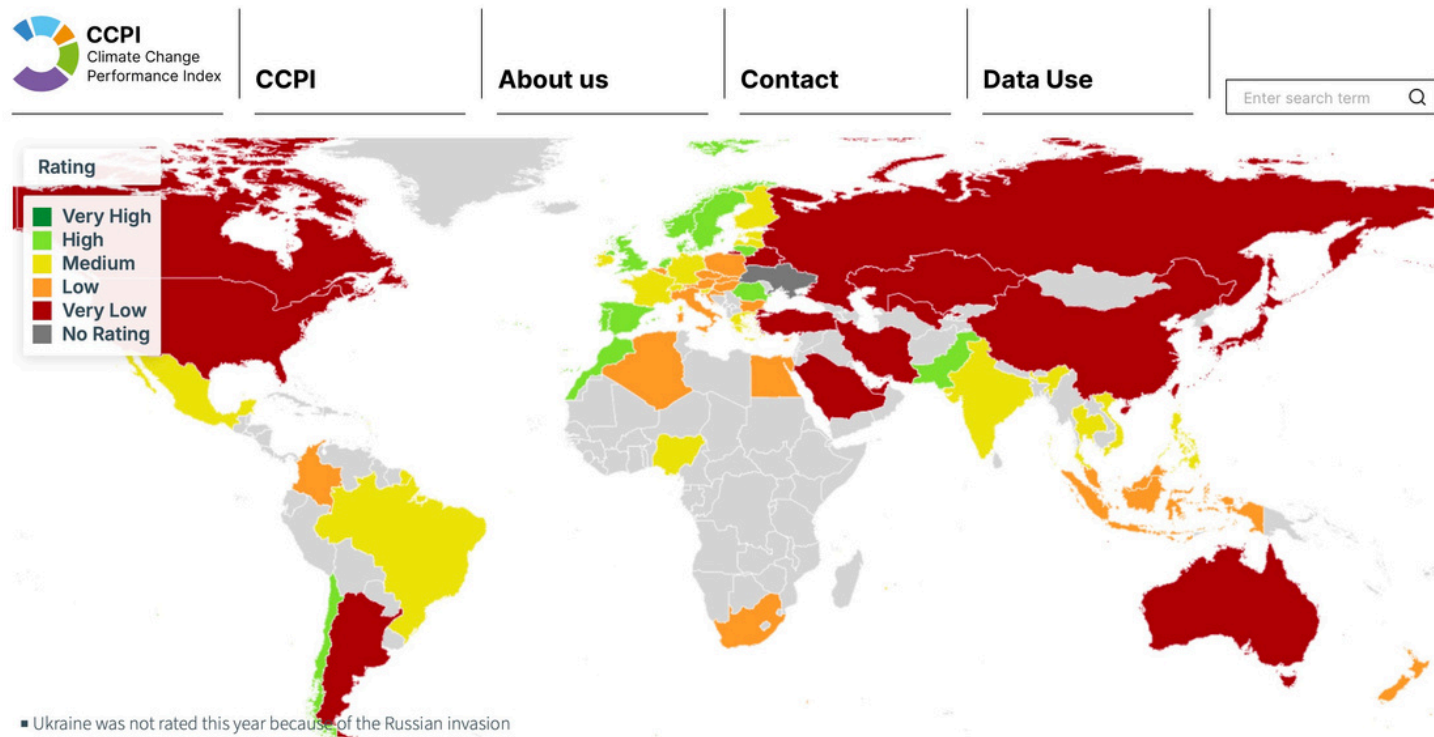
ADDITIONAL RESOURCES:

- “Big oil coined ‘carbon footprints’ to blame us for their greed. Keep them on the hook” by Rebecca Solnit
- “The most important lifestyle changes to tackle climate change” by Soemano Zeijlmans and Ruben Dieleman
- “Greenwash: What is it and how not to fall for it” by Leah Das
- “Corporate sustainability reporting” by the European Commission
- Science Based Targets

Understanding climate governance

Key takeaways from this section:

- There are several regulating bodies that track and enforce accountability for climate mitigation performance by country, including the United Nations and the EU Commission.
- Greenhouse gas emissions are linked to specific sectors of the economy (such as agriculture, energy, industry, buildings and transportation). This is known as sectoral emissions.



Climate Change Performance Index

The **Climate Change Performance Index** uses four categories to determine climate performance: Greenhouse Gas Emissions, Renewable Energy, Energy Use and Climate Policy. It ranks the climate mitigation performance of 63 countries and the EU. Together, these nations account for 90% of global greenhouse gas emissions. By using the CCPI's climate policy section, we can track the progress that countries have made toward achieving goals set in the 2015 **Paris Agreement**.

UN agreements

In 1992, 197 countries joined the UN Framework Convention on Climate Change (UNFCCC), a treaty that aims to stabilize global greenhouse gas emissions. The Conference of the Parties (COP) is the United Nations climate summit. The COP meets every year, unless the involved parties decide otherwise. During these meetings, representatives from each government give progress reports, set goals and negotiate policy.

The **Kyoto Protocol** was then adopted by 192 countries in 1997, but didn't come into effect until 2005. It operationalizes the UNFCCC and commits developed, industrialized nations to limit and reduce greenhouse gas emissions. The **Doha Amendment** contained updates to the Kyoto Protocol and was a secondary commitment period that lasted from 2013-2020.

ADDITIONAL RESOURCES:

- Climate Change Performance Index 2026 report
- your own government's environmental, climate and weather agencies
- "The Paris Agreement" by the UNFCCC
- "The Kyoto Protocol" by the UNFCCC
- "The Doha Agreement" by the UNFCCC

The **Paris Agreement** was adopted at COP21, which was held in Paris, France in 2015. Its primary goal is to limit the global average temperature increase to 1.5°C above pre-industrial levels. There are 194 parties to the Paris Agreement. The parties submit mandatory nationally determined contributions, which specify how they plan to reduce greenhouse gas emissions and adapt to the effects of climate change.

Sectoral emissions

This term refers to greenhouse gas emissions that are linked to **specific sectors** of the economy (such as agriculture, energy, industry, buildings and transportation). Each sector has different primary sources responsible for its emissions. For example, forms of transportation (cars, trains, planes, etc.) release CO₂ by burning fossil fuels.

When we break down sectoral emissions, we can design and implement more impactful solutions. This can look like increased investment in public transport, moving toward green building designs or transitioning to renewable energy rather than fossil fuels.

You can use the **Climate Action Tracker** to track benchmarks for four of the major sectors (transport, building, power and industry) and how emissions compare to the targets set in the Paris Agreement. Our World in Data collects research on **greenhouse gas emissions** by country and **CO₂ emissions** by sector and country.

Ranking

1st	
2nd	
3rd	
4. Denmark —	80.52
5. United Kingdom △	70.80
6. Morocco △	70.75
7. Chile △	70.63
8. Luxembourg △	70.45
9. Lithuania △	70.30
10. Netherlands ▽	67.27
11. Norway ▽*	66.83
12. Portugal △	66.05
13. Sweden ▽	64.91
14. Spain △	64.62
15. Pakistan △	64.43
16. Romania △	64.33
17. Nigeria △*	63.33
18. Estonia ▽	63.08
19. Philippines ▽	62.78

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ADDITIONAL RESOURCES:

- “Sectoral Emissions” by Energy Sustainability Directory
- Climate Action Tracker
- “Annual Greenhouse Gas Emissions” by Our World in Data
- “Governance of the Energy Union and Climate Action” by the European Commission

EU governance

The **Regulation on the Governance of the Energy Union and Climate Action** requires EU member states to develop 10 year National Energy and Climate Plans to achieve their target energy and climate objectives. The EU Commission reviews each nation’s draft and then makes recommendations, after which the countries have to revise their plans. Each country also has to submit national long-term strategies that are consistent with their draft plans.

The EU also has obligations to uphold the standards set in the Paris Agreement and the United Nations Framework Convention on Climate Change.

Climate Vulnerability Index

The **Climate Vulnerability Index** assesses the exposure and sensitivity of various World Heritage locations around the world to climate change. A place is declared to have World Heritage based on Outstanding Universal Value. The **index** measures the potential impact of climate and adaptive capacity. It also includes a component of Community Vulnerability, which is based on economy, social and cultural dependencies for the location.

Local climate impacts

Your own government will probably have resources on local and regional climate offices, like **this one** published by Ireland. Governments may require local authorities to implement climate action plans that are consistent with national and international directives.

End of Section 1

Section 1: Learning Outcomes Checklist

- Accurately apply the principles of attribution science to extreme weather events
- Understand and identify the symptoms of climate change
- Determine which initiatives, policies and goals belong to which regulatory climate bodies
- Recognize the signs of greenwashing
- Compare requirements and progress on climate directives for corporations or countries

ADDITIONAL RESOURCES:

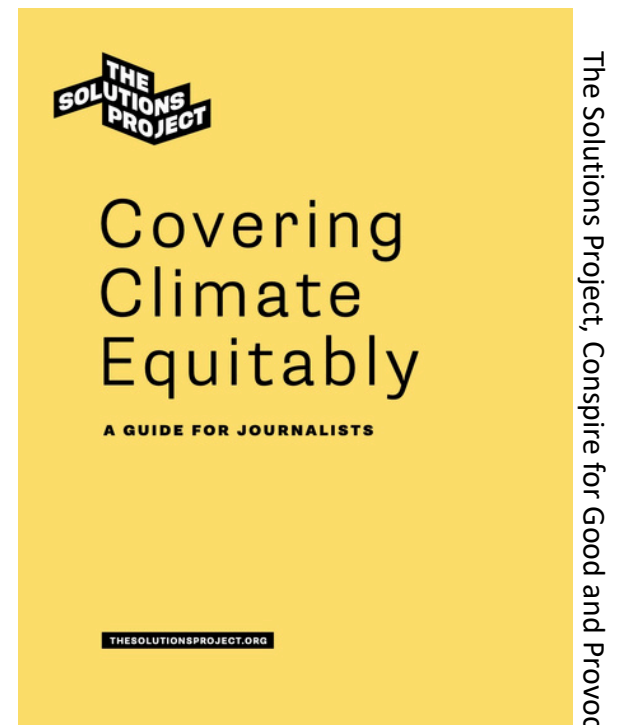
- “Sectoral Emissions” by Energy Sustainability Directory
- Climate Action Tracker
- “Annual Greenhouse Gas Emissions” by Our World in Data
- “Governance of the Energy Union and Climate Action” by the European Commission

Section 2: Writing About Climate Change

Understanding intersectionality and climate change

Key takeaways for this section:

- People who already experience institutionalised disadvantages are more severely impacted by climate change.
- Fair and equitable climate coverage will demonstrate how climate is impacting all groups of people, including people with disabilities, people living in the Global South and people of color. People respond to climate journalism in different ways, depending on their political beliefs, level of education, socio-economic background and other factors.



Everyone is impacted by climate change, but some groups face more severe and immediate consequences than others.

Climate change multiplies oppression. Some people are already at institutionalized disadvantages because of their socio-economic status, race, geographic location, gender, sexuality, age or other factors. Climate change makes their daily lives even more difficult.

For example, people living in poverty are less able to adapt to global warming. They may face a higher rate of heat-related health issues during a summer of record high temperatures, because they do not have access to air conditioning or proper ventilation.

In the U.S., people of color are exposed to much **higher levels of air pollution** on average than white people, regardless of their household income or the regions in which they live. Because of institutionalized racism and discriminatory practices like **redlining**, climate change impacts them more than their white peers.

Climate change also has a **disproportionate impact** on people with disabilities through increased exposure and sensitivity to climate hazards and decreased adaptive capacities.

For example, people with spinal cord injuries may have difficulty regulating their body temperature, which leaves them at a high risk of heat-related illness during a heat wave.

Indigenous peoples around the world are **climate action leaders**— but their work is often under-recognized. Indigenous stewardship is essential to climate mitigation and maintaining ecological integrity— yet governments, corporations and wealthy individuals have **seized ancestral lands** from Indigenous groups throughout history. The global **Land Back** campaign aims to return these lands to Indigenous peoples.

Intersectionality is the framework used to understand how systems of oppression (like racism, sexism and homophobia) interact to reinforce power dynamics. Learning about intersectionality can strengthen your reporting and make it more accessible to a wider audience. Many style guides (including the **AP Stylebook**) generally suggest using **people-first language**, which means emphasizing a person’s individuality rather than their personal attributes (such as race, age or disability). To learn more about equitable climate coverage, visit **The Solution Project’s guide** on the topic.

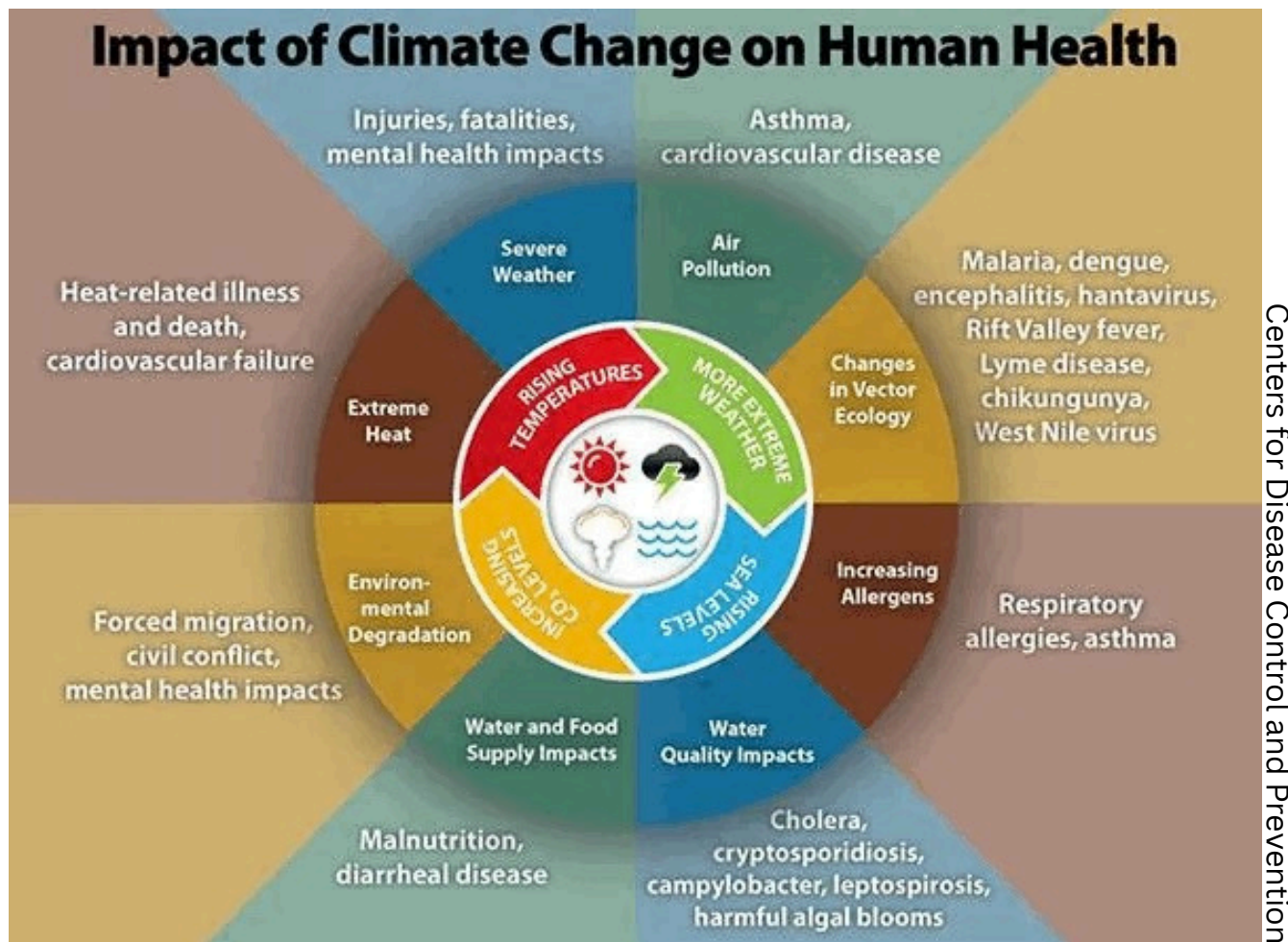
ADDITIONAL RESOURCES:

- “People of color breathe more unhealthy air from nearly all polluting sources” by Robin Lloyd
- “Yale experts explain intersectionality and climate change” by Yale Sustainability
- “What is people-first language and why is it important?” by the Bureau of Internet Accessibility
- “The Land Back Movement” by Dana Greywolf
- “Leave no one behind: a call to include people with disabilities in climate change and health research”

How climate change impacts human health

Key takeaways for this section:

- Climate change impacts both physical and mental health with issues ranging from malnutrition to depression.



Climate has **direct and indirect impacts** on our health. Extreme weather events intensified by climate change have direct and immediate impacts, like mass destruction, injuries and even death. But climate change also affects our mental health, the availability of food and clean water, air quality and the spread of diseases.

The rates of water-borne diseases are expected to increase due to water scarcity and pollution. As the population continues to grow, the demand for freshwater will grow with it, even as climate change makes clean water (and nutritious food) **less available**.

A warming climate will facilitate the spread of some species that carry infectious diseases, including mosquitos. Regions that have previously been uninhabitable or unfavorable for these species will now have to find a way to deal with them.

Climate change has been linked to additional health problems, including heart disease (caused by extreme heat or poor air quality), respiratory diseases (caused by air pollution), food insecurity (exacerbated by changes in precipitation) and mental health risks (worsened by climate's impact on housing, jobs, conflict and migration).

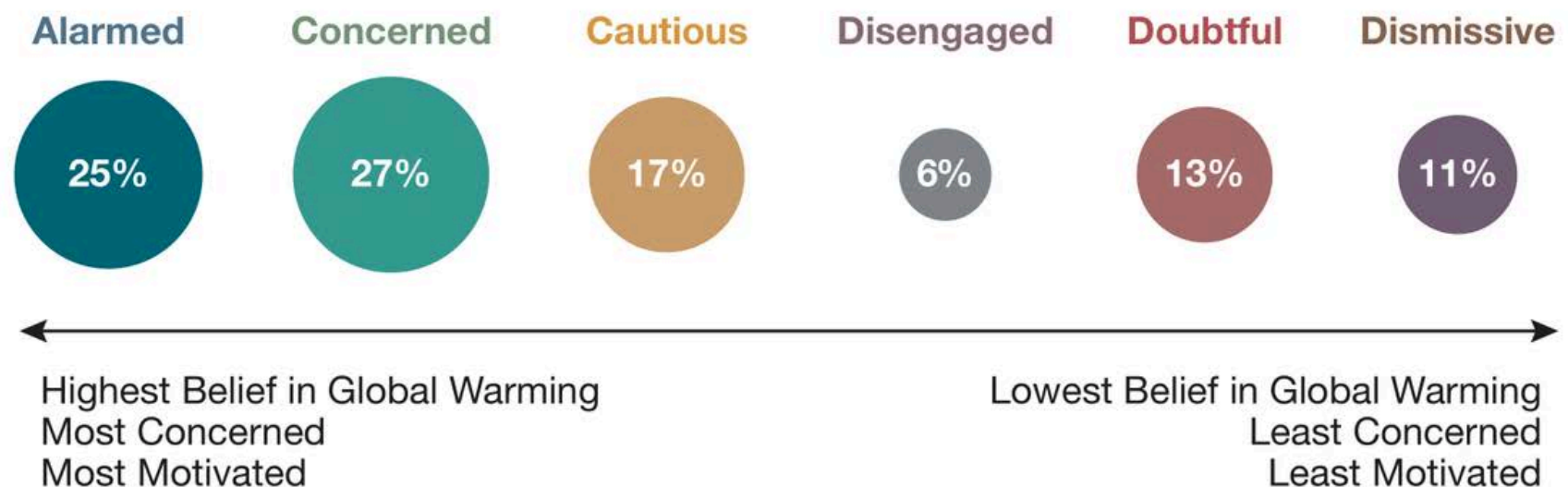
ADDITIONAL RESOURCES:

- "Climate change" by the World Health Organization
- "Changing climate, changing water availability and human health" by the UCAR Center for Science Education

Consider your audience

Key takeaway for this section:

- Once you have identified your audience, it will be easier to determine an angle, narrative and frame that will engage them.



Global Warming's Six Americas, November 6–14, 2025

Base: 1,146 U.S. adults

Source: Yale Program on Climate Change Communication;

George Mason University Center for Climate Change Communication

Think about who you are trying to reach, if they are climate literate and how your target demographics have responded to climate journalism or research in the past.

The study [“Global Warming’s Six Americas”](#) by the [Yale Program on Climate Change Communication](#) identified six audiences to climate storytelling within the wider, general audience of the American public. These are:

- The Alarmed are people who already believe that climate change is real and caused by humans. They support climate policies, but they are often unsure what other action to take for climate mitigation.
- The Concerned are similar to the Alarmed, but they generally do not prioritize climate issues as highly, because they see it as a more distant problem.
- The Cautious have not yet decided what to believe.
- The Disengaged do not know much about climate change and do not consume media that is relevant to it.
- The Doubtful either do not believe in climate change, or they do not believe it is human-caused.
- The Dismissive do not believe climate change is real, and they often engage in conspiracy theories, treating it like a hoax.

Identifying your audience will help you decide on your story’s angle, narrative, frame and additional sources.

ADDITIONAL RESOURCES:

- “How do I talk to a climate change denier?” by the Question of the Week podcast from Boston University
- “Climate change: How to talk to a denier” by Merlyn Thomas and Marco Silva

Generally, we suggest emphasizing personal narratives, people involved with or impacted by climate change and how climate change ties into other topics (like health and housing). Audiences are often interested in how an issue will impact themselves, their loved ones and their communities.

However, your story will sometimes be more policy- or politics-heavy. These stories can seem dry at times— but even if they don't appeal to a larger audience, these articles are important in establishing a continuous record. For example, someone might need to know how a policy was enacted or when a corporation bought a tract of land. That information should be accessible to everyone.

Climate change impacts us all, so be sure to collaborate with a diverse set of voices on the topic. Talk with scientists, farmers, activists, local business owners, policymakers, neighbors and anyone else who has a personal connection to the specific issue you're covering.

You can further empower your audience by giving practical tips for how people can take action. Highlight local organizations and people who are hosting climate-related events, like garbage clean-ups, clothing swaps, environmental lectures and more.

If you need first-person sources on a specific issue, then connect with climate scientists to learn more about their areas of expertise. (You can use the Media for Future [expert database](#) for this.)

Seek out climate stories

Key takeaway for this section:

- When seeking out climate stories, use a variety of sources like social media, academic journals, first-person accounts and other news publishers.

Use a variety of sources for your research: social media, academic journals, first-person accounts and other news publishers can all lead you to worthwhile stories.

When looking for stories or sources on social media, keep in mind that the algorithm will promote some voices over others. Use more than one platform, and be wary of misinformation.

Pay attention to newly published scientific articles. Consider subscribing to academic journals, particularly the ones published by national organizations. For example, Ireland's [National Biodiversity Data Centre](#) has a [biannual publication](#), and its national meteorological service [Met Éireann](#) has a [collection of articles](#) that are peer-reviewed by its staff members.

As you become more embedded in the topic of climate, you'll gain access to sources who can point you toward stories that might otherwise go overlooked.



ADDITIONAL RESOURCES:

- Media for Future expert database
- *Nature Climate Change*
- Climate Analytics
- PLOS Climate
- Oxford Open Climate Change
- Climate Change Performance Index 2026 report

Framing and telling positive climate stories

Key takeaway for this section:

- Framing is how a story is presented to the audience. The most common climate narrative frames are emergency, responsibility, hope and solidarity.

Framing is how a story is presented to the audience. For example, the transition from fossil fuels to renewable energy can be presented in a “crisis” frame or an “opportunity” frame, depending on how the topic is described. Positive, solutions-oriented storytelling can change readers’ perception of an issue.

According to **research** from **Framing Climate Justice**, effective storytelling should emphasize solidarity with those most affected by climate change, not rely too much on emergency framing, appeal to self-direction while discussing affected groups’ involvement and introduce economic design into frames by using metaphors.

Their research has established that most people are aware of the severity of climate change. Most people also agree that the current system is not working, that corporations and governments are most responsible for climate change and that the people who are least responsible suffer the most.

Common climate narrative frames are emergency, responsibility, hope and solidarity.

Words like “crisis,” “disaster” and “urgent” often accompany stories that are framed as emergencies. These frames evoke a sense of doom. While they can be effective in getting people to hold corporations and governments accountable for climate issues, they can also promote defeatist attitudes. **Research** suggests that emergency framing can lead audiences to rely heavily on a top-down approach from experts and say that climate change does not impact existing injustices.

Solidarity frames inspired the most hope for solutions within the next 20 years and led to most people agreeing that people impacted by climate change should play a bigger role in developing solutions.

What the Research Tells Us

Avoid crisis framing.

Climate change is urgent, but research shows that leaning on crisis language actually leads people to feel overwhelmed and to disengage. Balance urgency with efficacy by highlighting real solutions.

Maximize your metaphors.

Translate the basic mechanism of climate change by explaining that burning fossil fuels releases excess carbon dioxide, which builds up like a heat-trapping blanket in our atmosphere, disrupting nature’s delicate balance.

Keep people in the picture.

Don’t rely solely on stories about harm to iconic animals or their ecosystems. Also talk about the ways that a disrupted climate system is harming human health and wellbeing.

FrameWorks Institute

ADDITIONAL RESOURCES:

- FrameWorks Institute, Climate Stories That Work
- Framing Climate Justice
- Pub.Admin Institute
- “What is media framing?” by Media Studies

People who are concerned about the climate crisis often value the universal collective, self-direction and national security.

The universal collective is all of us who live on Earth. All of us deserve to live healthy lives on a healthy planet.

Self-direction means that groups and individuals should have the opportunity to make decisions for themselves when it comes to environmental stewardship. This is especially relevant in the cases of Indigenous peoples and people living in the Global South. These groups often contribute the least to climate change, yet they are the most affected by it and have less sway over wealthy corporations and governments.

People want to live in a safe, stable country— that’s the value of national security.



Ekō.org

We can use framing to tell positive and solutions-oriented climate stories. Audiences may experience climate fatigue, or burnout from constantly hearing negative climate news on a large scale. This may cause them to tune out, rather than absorb news that seems frightening and hopeless. That’s why choosing the proper frame is so important.

Once you have established your frame, you should identify how your story ties into the big picture of climate change. If you’re writing an article on local flooding, then you might decide to link it to similar floods in Thailand or somewhere else around the globe.

If you’re writing about communities that you’re less familiar with, then you might find it helpful to use a resource like “[A Progressive’s Style Guide](#),” which identifies accessible, inclusive language.

It’s also important to use a straightforward approach, rather than relying too much on **scientific jargon** that could confuse your audience.

Finally, clarify how people can take action, whether that’s by donating, volunteering or contributing in some other way.

If you need more assistance, check out [350.org](#). It offers a **digital storytelling toolkit** with coverage in four areas: personal storytelling, campaign storytelling, digital reporting and community storytelling. **Solutions Journalism Network** also has a comprehensive training on solutions reporting, with a program developed specifically for **climate journalism**.

ADDITIONAL RESOURCES:

- The Solutions Project, Covering Climate Equitably
- Indigenous Climate Action
- United Nations, State of the World’s Indigenous Peoples

Solutions journalism

Key takeaway for this section:

- Solutions journalism examines a problem as well as how it might be solved. This type of storytelling is well-suited to the climate crisis because of its nuance.

This method of journalism is an investigation into a problem and a response as to how that problem might be solved. Solutions reporting should also include deeper insight on the response (like how it could benefit the audience), evidence on its effectiveness and its potential limitations.

Solutions journalism is also about rejecting biases, giving communities a platform, reducing polarization and conflict resolution. It's about nuance rather than sensationalism.

The **Solutions Journalism Network** (SJN) is a nonprofit organisation that supports high-quality reporting with an emphasis on problem solving. It offers online programs and **toolkits** based on several different topics, including **climate change**.

SJN also has a **story tracker** that logs examples of solutions journalism from news outlets around the world.

End of Section 2

Section 2: Learning Outcomes Checklist

- Give examples of how climate change multiplies oppression
- Define intersectionality and explain how it relates to climate
- Describe how climate change directly and indirectly impacts human health
- Identify your main audience and brainstorm engagement strategies
- Recognize the frames used in different climate articles and how framing impacts the presentation of information
- Assess articles published on the Solutions Journalism Network story tracker and their effectiveness

ADDITIONAL RESOURCES:

- “What is solutions journalism? A guide to evidence-based reporting” by Journalism University
- “Not just more bad news: What is solutions journalism?” by Teresa Nowakowski
- “What is solutions journalism and why should you care?” by Solutions Journalism Network

Section 3: Challenges that journalists face

Key takeaways for this section:

- When speaking to a climate denier, try to understand their individual point of view and the patterns in their argument.
- Collaborate with others in your newsroom to distribute both policy and community-based climate coverage. Keep track of performance metrics and compare your coverage to that of other news sources.
- Engage audiences with creative, comprehensive coverage of diverse events and sources.
- Work with scientists to produce the most accurate reporting.
- Be mindful of your mental health and the toll that this type of reporting can take.

Fact-checking

Especially as AI usage becomes more prevalent, it can be difficult to decipher what is real and what is not, even for journalists. [Reuters](#), [Poynter's International Fact-Checking Network](#), [Full Fact](#) and [Snopes](#) are all great resources.

You may also seek out peer-reviewed papers or other news articles that reference reputable environmental agencies. For example, [National Oceanic and Atmospheric Administration \(NOAA\)](#), [World Meteorological Organization \(WMO\)](#), [The Intergovernmental Panel on Climate Change \(IPCC\)](#), [World Weather Attribution](#) and your own national environmental agency will offer reliable information on climate.

Extreme weather attribution study tracker

● Heatwave ● Extreme rainfall ● Drought ● Storm ● Wildfire ● Cold spell

Region Event type



Climate deniers and negative backlash

There are many reasons why an individual might not believe in climate change. Maybe they're taking their cues from a political movement or leader, or they think that global warming has been exaggerated to benefit the opposition's agenda. Every person is different, so try to learn what motivates climate denial and where their perspective is rooted.

Boston University's "Question of the Week Podcast" has a [segment](#) on how to speak to climate deniers. [Rare.org](#) also has a useful [article](#) on the topic. Both sources suggest speaking to a climate denier's values and using personal, relatable storytelling to humanize the problem. It might be difficult for someone to accept that worsening droughts are caused by climate change, but they might more readily accept that droughts are increasingly impacting their local farmers.

If there is a specific piece of misinformation that you're addressing (ex. "[electric vehicles are worse for the environment than cars with internal combustion engines](#)"), then pick the argument apart piece by piece. Refer to a [fact checking website](#) if needed, or sources that your audience already trusts, like their local news team. Personalize the argument to them and what they care about. Maybe the environment isn't their top priority, but they're more motivated by the economy, their family or national pride.

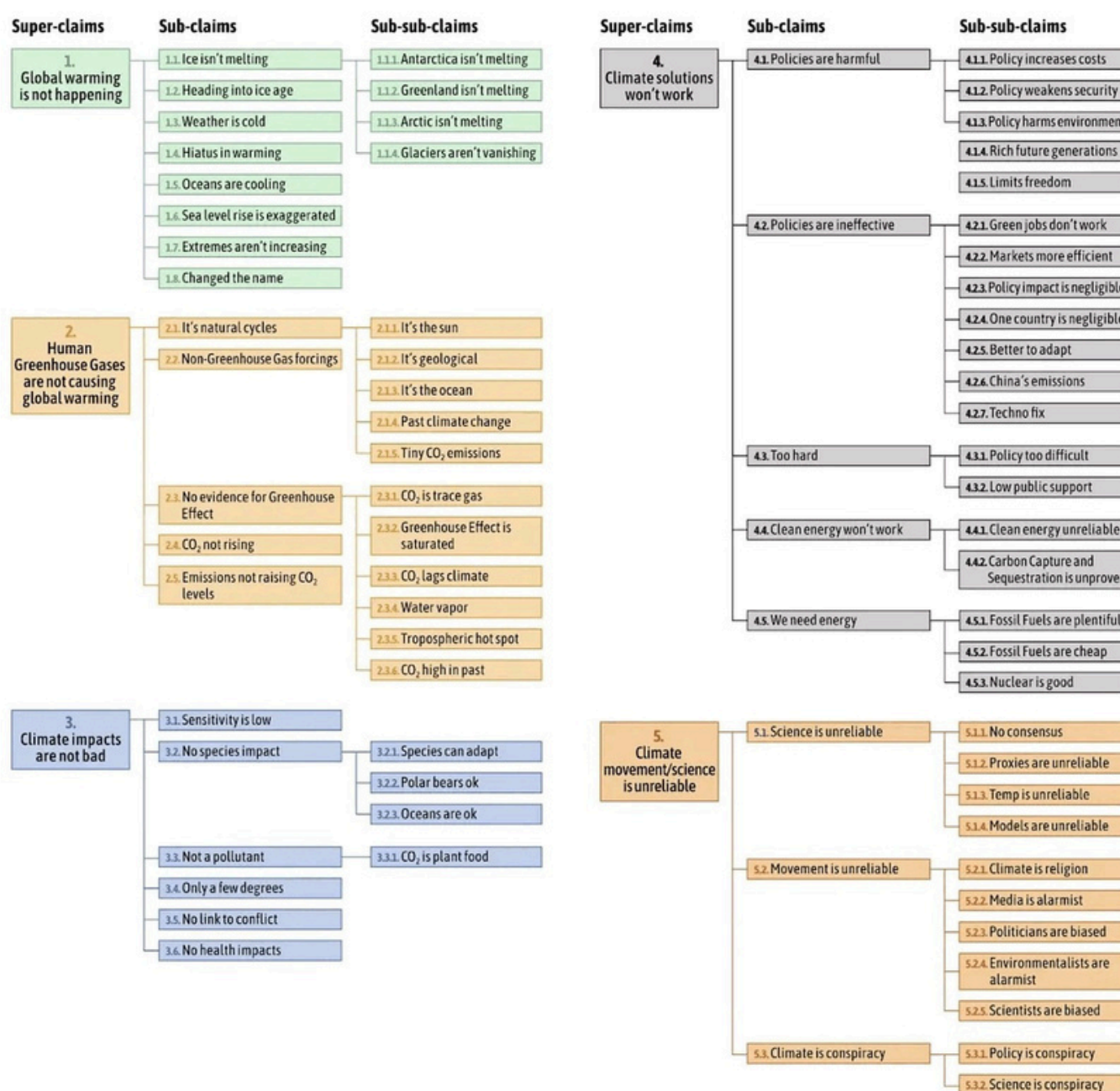


Figure 1. Taxonomy of claims made by contrarians. This figure displays the three layers of claim-making by climate change contrarian actors. The original version of this taxonomy with more detailed claim descriptions can be found in Supplementary Table S2.

If you can recognize patterns in climate denial arguments, then you can practice crafting an effective response based on an individual's specific claims. [This study](#) from Nature on climate contrarianism breaks down common arguments by climate change deniers.

"Computer-assisted classification of contrarian claims about climate change" by Travis G. Coan, Constantine Boussalis, John Cook and Mirjam O. Nanko

Newsroom engagement

Consistent climate reporting can be tricky, especially because newsrooms have limited resources. But by reporting on everyday legislative discussions and actions, you can provide context for major governmental decisions. The more mundane, technical coverage won't appeal to everyone. However, policy news is just as important as community storytelling.

Audience engagement

Climate stories are often accompanied by the same visuals of wildfires, polar bears, windmills and melting ice caps. Overly similar headlines and photos can cause audiences to tune out. Get creative and use photos and language that are specific to the subject, location and impact.

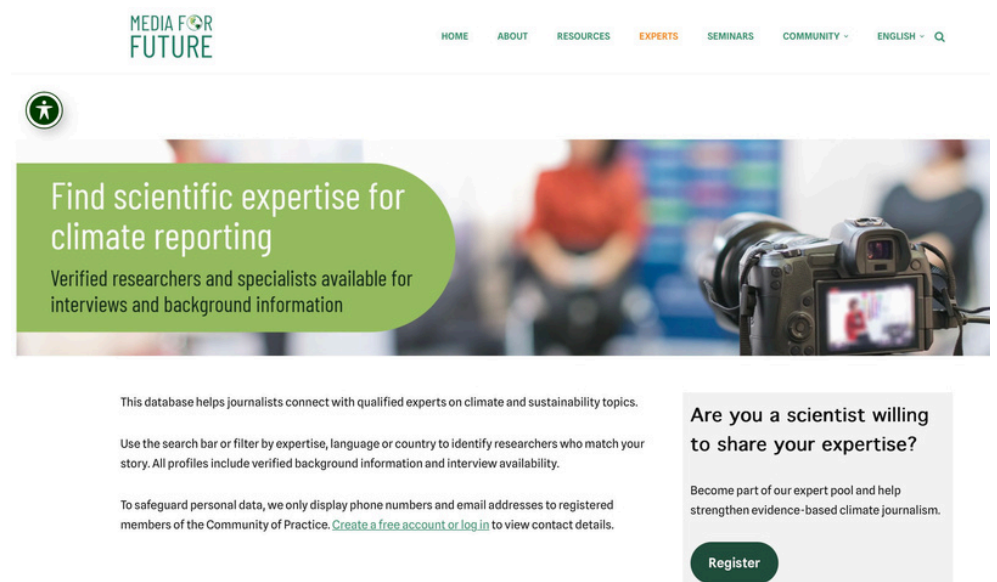
Use a variety of sources to keep the storytelling fresh. Don't rely on the same experts or activists. (Again, this is where the Media for Future **expert database** can be useful!)

Operations

If there is not already a separate climate desk in your newsroom, consider creating a virtual hub for interested staff members to discuss climate, learn from each other and add climate angles to their articles. Journalist **Wolfgang Blau** discusses this idea and other ways to reorganize newsrooms in his **lecture series**.

Track performance metrics. This will help you see what angles are most effective and how the audience responds.

The Local Storytelling Exchange collects stories from around Britain about the green transition, and its website has hundreds of examples of climate articles. Reference their **stories map** to see how climate topics have been previously reported.



Media for Future

Interacting with scientists

Climate change is an ongoing challenge, and research into all of the issue's different aspects are also ongoing. Don't demand definitive answers from scientists. Instead, listen to their reports and explanations. Work with them to distill their research into an accessible format for a wider audience.

Be wary of attributing events to climate change, as extreme weather events have multiple causes. Be sure that you understand the science before reporting it.



Wolfgang Blau

ADDITIONAL RESOURCES:

- "Improving the engagement of scientists with the media" by Philip Ball
- Communication Theory, "Science Communication Explained with Examples"

Mental health

Climate reporting can be mentally and emotionally taxing, but there are resources available. There is still relatively little data available on how climate reporting impacts journalists, but it may be similar to conflict reporting, according to **Reuters**.

The **Global Investigative Journalism Network** hosted a panel on the topic of climate journalism and mental health, which is accompanied by an **article**. The **Reuters Institute interviewed climate journalists** about how they protect their mental health in the field.

Forming a support network with other environmental reporters can validate your experiences. Be mindful of burnout– take breaks and learn when to say “no.” Therapy can help when building resilience and other emotional skills.



Global Investigative Journalism Network

Physical safety and potential dangers

A **2024 UNESCO report** found that 70% of environmental journalists had been physically, verbally, digitally or legally attacked for their work. These instances increased 42% between 2019-2023, compared to 2014-2018.

UNESCO maintains an **Observatory of Killed Journalists**, which provides statistics and data on the killings. At the time of their 2024 report, they recorded that at least 44 journalists investigating environmental issues over the past 15 years had been killed.

While 70% of surveyed environmental journalists said they had experienced some form of attacks, two in five reported experiencing physical violence.

End of Section 3

Section 3: Learning Outcomes Checklist

- Reference a fact-checking website for a climate article
- Develop a strategy for responding to climate deniers
- Create a plan for newsroom and audience engagement on the topic of climate
- Form relationships with scientists and other experts
- Organize check-in strategies and support networks for yourself when working on heavy topics
- Set safety standards and privacy boundaries to protect you at work

ADDITIONAL RESOURCES:

- Global Investigative Journalism Network, “Climate Change Reporting and Mental Health”
- Reuters, “From despair to purpose: Six climate reporters on how to protect their mental health”

Section 4: Additional Resources

Improving information literacy

UNESCO

- UNESCO developed **information literacy materials** and a **training toolkit** during the COVID-19 pandemic to address increasing online mis- and disinformation.
- The guide “**Media and Information Literacy in Journalism: A Handbook for Journalists and Journalism Educators**” offers strategies and policies to integrate media and information literacy into reporting practices. Some of the main principles of the guide are:
 - a. The truth is built on the work of journalists and the public.
 - b. Pushing back against lies also means fighting against prejudices, stereotypes and close-mindedness.
 - c. Journalistic credibility is reliant on ethics, honesty and accountability.
 - d. Quality journalism requires public participation.
 - e. Quality journalism has to resist outside pressure (political, economic, etc.) to strengthen people’s rights equitably.
- UNESCO also supports the **Green Media and Information Literacy concept**, which has three key goals:
 1. To raise awareness about the importance of fact-checking and sources.
 2. To provide people with the tools to learn how to fact-check, recognize disinformation and spread information about the climate emergency in a responsible manner.
 3. To encourage people to stay informed about the climate emergency and what can be done to mitigate it at different levels.

Storytelling and framing methods

Climate Outreach

- **Climateoutreach.org** has a **blog post** specific to framing articles about COP. It includes three suggested framings, followed by three framings that the author suggests avoiding.

The FrameWorks Institute

- This group has a slide deck on **climate storytelling**. Their six tips for framing climate stories are:
 - a. Show change is possible.
 - b. Focus on the big picture and how people can contribute to change.
 - c. Normalize action and change.
 - d. Connect the planet’s health with people’s health.
 - e. Emphasize our responsibility to young people and future generations.
 - f. Keep your message straightforward and down to earth.

Constructive

- Constructive is a brand strategy company, and they offer additional **resources** and tips on how to tell climate stories from a marketing perspective.

350.org

- This organization offers a **digital storytelling toolkit** for individuals looking to upskill. It covers four types of digital storytelling: personal storytelling, campaign storytelling, digital reporting and community storytelling.

Wolfgang Blau

- Journalist Wolfgang Blau has co-founded the **Oxford Climate Journalism Network** and given a series of **lectures** on how to effectively report on climate change.



Photo by Julio Lopez on Unsplash

Practicing solutions journalism

Solutions Journalism Network

- **SJN** offers comprehensive training on solutions reporting, with a program developed specifically for **climate journalism**. It has a climate peer network, a climate solutions cohort, a newsroom initiative, a fellowship and a business and sustainability program. It also offers an introductory webinar to the concept of solutions journalism, a toolkit and a **solutions story tracker** with a database featuring articles from 102 countries. It hosts networking and educational **events** each month.

350.org

- **The Hope Hub** is a collection of solutions journalism stories from around the world. This group also offers **online climate advocacy upskilling courses and book recommendations**.

The Local Storytelling Exchange

- This organization collects stories from around Britain about the green transition. It focuses on stories about individuals who are making differences in their communities and emphasizes **solutions journalism**. The website has hundreds of examples of climate articles.

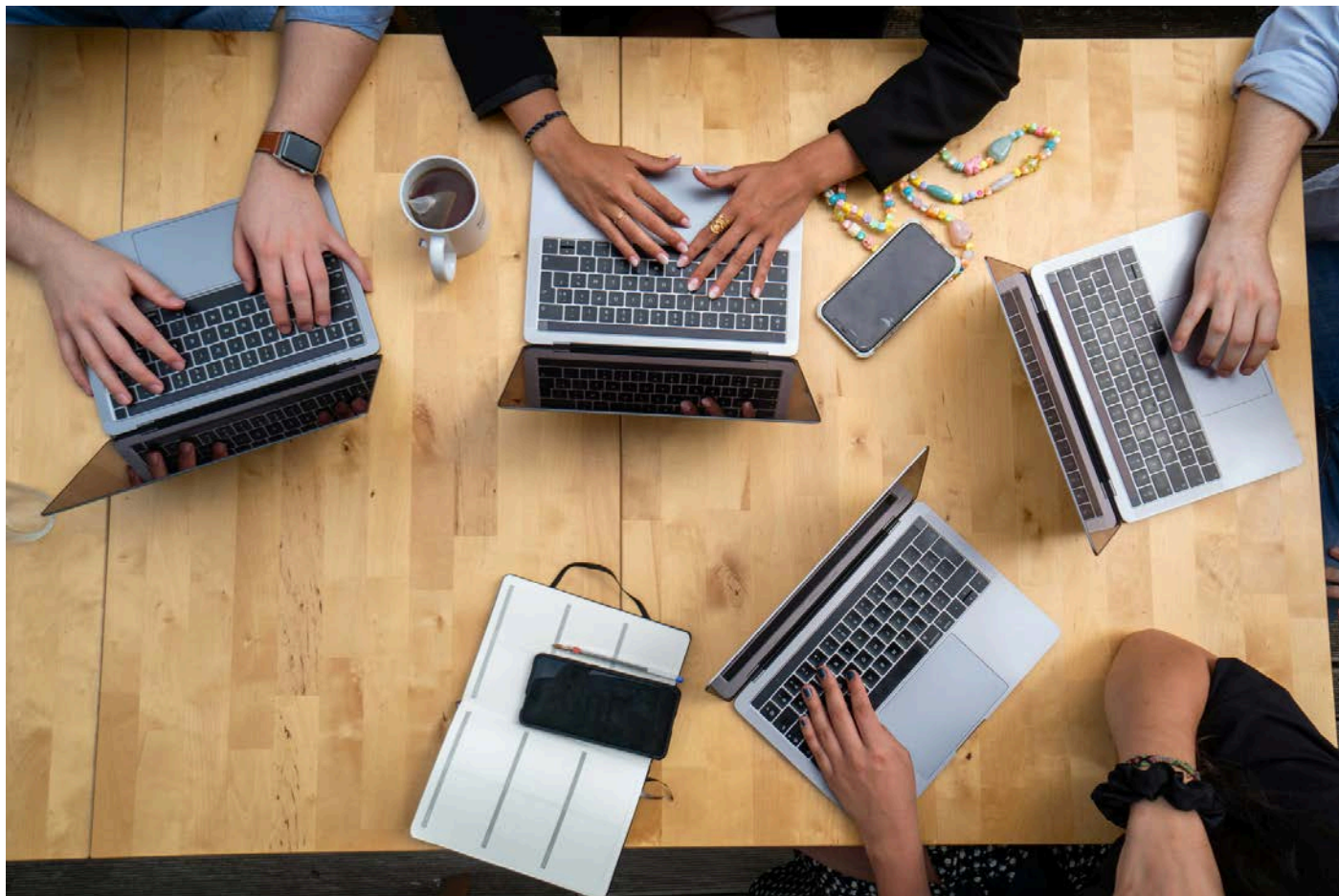


Photo by Louise Viallesoubranne on Unsplash

End of Section 4

Section 5: Glossary

- **Accessible language:** Communication that is understandable for people who speak different languages and/or have differing levels of language proficiency
- **Adaptive capacity:** A system's ability to adapt to climate change and continue to function
- **Aerosols:** Tiny liquid or solid particles made of dust, spores, pollen, salt, smoke, volcanic ash or human-made pollution
- **Alternative energy:** Energy that is obtained from nontraditional sources (solar, wind, etc.)

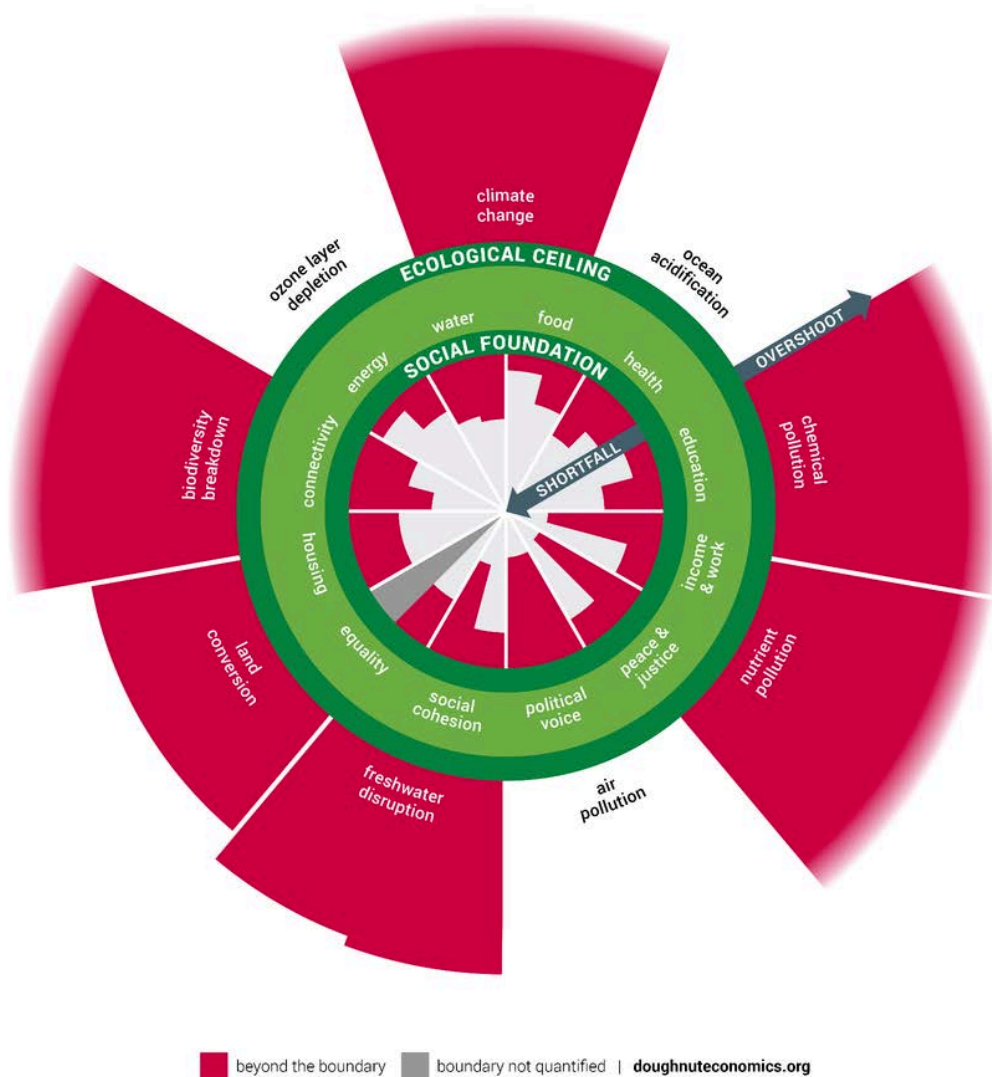
- **Anthropogenic:** Caused by humans or their activities
- **Atmosphere:** The gases surrounding the planet. Earth's atmosphere is a mixture of mostly nitrogen and oxygen, with smaller amounts of argon and carbon dioxide. It allows us to breathe, blocks ultraviolet radiation from the Sun, traps heat and stabilizes Earth's average temperature. The atmosphere's layers include the troposphere (closest to Earth, where weather occurs, where most clouds form), stratosphere (jet streams, the ozone layer), the mesosphere (few molecules, resulting in colder temperatures and black color) and the thermosphere (absorbs most UV radiation, hot). The exosphere marks the transition from our atmosphere to space



Photo by Bill Mead on Unsplash

- **Biofuels:** Fuels created from biological material (plant or animal products), including ethanol and biodiesel
- **Biogeochemical cycle:** The process through which elements and compounds cycle between organisms, the atmosphere and the biosphere
- **Biomass:** Organic material from plants and animals (living or dead), including grasses, tree roots and animal waste
- **Biosphere:** Comprised of all life on Earth, including decomposing organisms, and all parts of Earth's system containing life (atmosphere, hydrosphere, geosphere)
- **Carbon budget:** The aggregate amount of CO₂ emissions that are allowed to maintain a specific temperature threshold. The European Commission uses green budgeting, meaning that its nations are assigned different carbon budgets with consequences if those carbon budgets are exceeded.
- **Carbon capture and storage:** Technology that captures carbon dioxide and injects it underground into rock formations
- **Carbon cycle:** How carbon moves through Earth's systems, with pathways through the atmosphere, the terrestrial biosphere, the oceans, fossil fuels, rocks and sediments and living organisms to maintain the planet's carbon balance
- **Carbon footprint:** A term invented by fossil fuel companies to describe a person, household or organization's amount of greenhouse gas emissions

- **Carbon sequestration:** The long-term storage of carbon, which occurs naturally with plants, soils, geologic formations and the ocean, or by human intervention through carbon capture and storage
- **Circular economy:** An economic system that reduces waste and extends product life by reusing, repairing, sharing and recycling items
- **Clean energy:** Energy that does not directly produce greenhouse gas emissions (ex. Wind, solar)
- **Climate mitigation:** Action taken to reduce, remove or prevent the release of greenhouse gases to limit global warming
- **Climate neutrality:** The achievement of net zero emissions by balancing the emissions removed from the atmosphere with the emissions put out into the atmosphere
- **Disinformation:** Incorrect information that is created and spread deliberately and with the knowledge that is false
- **Donut economics:** A conceptual framework developed by the economist Kate Raworth that outlines the 21st century goal of meeting the needs of all people within the means of the Earth.



- **Double materiality:** An assessment on sustainability required by the European Corporate Sustainability Directive. It requires companies to report on financial materiality (how a business is affected by sustainability) and impact materiality (how a business affects society and the environment)
- **Ecosystem:** The natural environment within a geographic area that is made up of living organisms (plants and animals) and non-living materials (soil, climate, water)
- **Environmental justice:** The equitable distribution of environmental benefits and burdens that ensures that all people have access to a healthy environment

Donuteconomics.org

- **Environmental racism:** “Any policy, practice, or directive that differentially affects or disadvantages (where intended or unintended) individuals, groups, or communities based on race,” according to sociologist Robert Bullard
- **Emission:** A substance that is released into the atmosphere that can be natural or human-caused
- **Equity:** Fairness and justice in all types of treatment, regardless of race, gender, sexuality, nationality or other forms of identity
- **Fossil fuels:** Non-renewable fuels (coal, natural gas and oil) that are formed from dead organic material that has been pressurized and superheated for hundreds of millions of years.

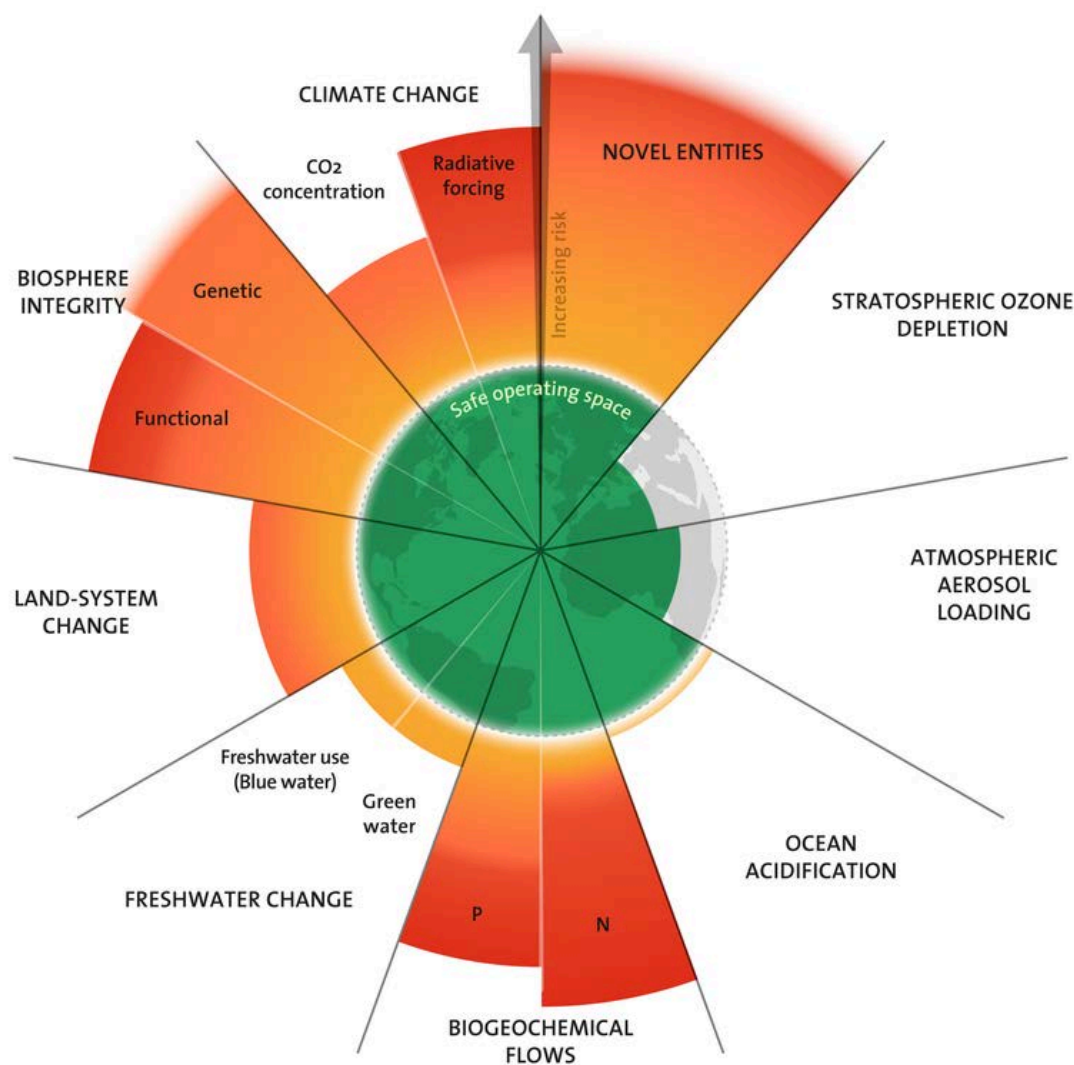
- **Framing:** How information is presented to an audience and organized into an article. This is commonly done by either highlighting or downplaying specific aspects of an interview or story
- **Greenhouse effect:** When gases like carbon dioxide and methane trap the sun's heat in our atmosphere. Human activity including the use of fossil fuels adds additional greenhouse gases to the atmosphere, causing global warming (or the increase in Earth's average temperature).
- **Greenhouse gas:** Atmospheric gas that absorbs and re-emits radiation as heat, such as carbon dioxide, methane or nitrous oxide. While these gases are naturally occurring, human intervention is releasing a problematic amount of them into the atmosphere
- **Green Jobs:** Jobs that contribute to the preservation or restoration of the environment by improving energy and raw materials efficiency, limiting greenhouse gas emissions, minimizing waste and pollution and supporting climate change adaptation



- **Humidity:** the amount of water vapor in the air at a specific time
- **Industrial Revolution:** A period of technological advances that shifted the production of goods from being primarily handcrafted to primarily machine manufactured. It began in Britain in the 18th century and spread throughout the world, resulting in higher concentrations of greenhouse gases and the increased usage of fossil fuels
- **Information literacy:** The ability to know when information is needed and how to locate, evaluate, and use that information effectively. The knowledge to understand the construction of authority and potential biases or commercial intent, how to use information ethically and how to cite and draw from information to create new materials
- **Intersectionality:** The ways in which forms of discrimination (racism, sexism, classism, etc.) intersect and impact the experiences of marginalized people

Photo by Tim Mossholder on Unsplash

- **Methane temperature neutrality:** An approach to climate target setting in which a country would contribute “no additional warming,” shifting the focus from global emissions to global temperature impact. This would allow countries such as Ireland with large amounts of beef and dairy exports to cut methane emissions while continuing to emit other greenhouse gases
- **Misinformation:** Incorrect information presented as facts/news that is created and spread by mistake
- **Ozone layer:** A sheet of ozone gas in Earth’s atmosphere that absorbs 97 to 99% of ultraviolet radiation from the Sun. Human emissions have caused holes to open in the ozone layer, but some recovery progress has been made due to regulations on ozone depleting substances (beginning with the Montreal Protocol)
- **Phenology:** The study of how plant and animal life cycles are impacted by climate and weather, especially with regards to timing
- **Planetary boundaries:** A framework of nine interdependent processes that contribute to Earth’s stability and habitability, which are impacted by human activity



“Planetary boundaries.”
Azote for Stockholm Resilience Centre,
based on analysis in Sakschewski and
Caesar et al. 2025.

- **Resilience:** The ability to adapt to and recover from the impacts of climate change, while preventing it from getting worse
- **Thermal expansion:** An increase in volume resulting from warming water
- **Sink:** A natural or artificial system that absorbs greenhouse gases or aerosols from the atmosphere
- **Urban heat island effect:** When cities experience higher temperatures than more rural areas due to concrete, buildings and other infrastructure absorbing more solar energy than a natural landscape with vegetation
- **Water vapor:** The gaseous state of water in the atmosphere
- **Weather:** Short-term atmospheric conditions measured through temperature, precipitation, wind, humidity and cloudiness

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