**United Nations Energy Association**

## Committee Overview

The UN's Environment Programme was started in 1972 and its central body assembly (the UNEA) started in 2012.[1] For decades, UNEA delegates have been a key voice regarding the human harm that results from environmental degradation and the importance of multilateral efforts to combat the grave issues facing our planet. This 2023 Environmental Assembly must consider the ongoing climate crisis affecting countries worldwide, along with recent energy and food shortages impacted by the conflict in Ukraine. These shortages have reverberated through the supply chain, making plans for sustainable development even less certain and putting a brighter spotlight on the push towards advancing greener energy sources. Smaller nations with less resources have called out for more equity in climate funding and pushed for collective action to mitigate the worst effects of climate change and the subsequent natural disasters that come with that change. In particular, this committee must confront the key issue areas relating to the way countries are endeavoring to transform their energy sector, strengthening climate resilience in the face of natural and man-made crises, and protecting biodiversity in the ocean.

## State of the World

The current state of the world is one of turmoil and constant upheaval. The crisis in Ukraine has spiraled into a full-scale energy crisis that affects countries around the globe. China and the US continue their soft-power escalation of tensions and climate change continues to bring unprecedented challenges to the international community. Delegates of the UNEA interested in fulfilling their due diligence on broader topics facing the United Nations should refer to their State of the World brief for material related to the **overarching themes and conflicts.**

[1] What you need to know about the UN Environment Assembly

## Topic A: Powering the Energy Transformation

### Executive Summary

Unsustainable levels of greenhouse gas emissions (and their contribution to climate change) is a long-recognized problem, and the concept of sustainability has become much more popular over time and recognized among policymakers and experts alike. Regarding the running out of fossil fuels, the MET Group predicted (based on 2015 data) only 51 years left of oil, 114 years of coal, and 53 years of natural gas.[2] Whether it be to reduce carbon emissions, boost sustainability in the face of limited fossil fuels, avoid economic dependency, or any other number of reasons—countries must pay well-deserved attention to considering transitioning the ways we rely on fossil fuels as well as initiatives and efforts toward creating resilient, climate-sensitive technology which respects biodiversity.

### Historical Background

'Green' policies and reforms may look very different in execution across countries and regions (as well as the underlying motives and capacity for such change); in other words, "energy transformation" might mean different things for different countries. Take, for instance, the case of France where nuclear energy has increasingly taken center stage in the energy sector since the 1970s, now making up around 70% of electricity generation in the country (compared to around 10% worldwide), and has been arguably key in the country's ability to cut emissions. For other countries, however, nuclear energy is less popular as a political policy and less attractive for investment; stigma from the Chernobyl Disaster and persisting health & environmental concerns (especially in using uranium) further motivate other nations away from nuclear energy. On the other hand, consider the policy strategies utilized in Jamaica to address increasing water demand due to tourism and agriculture in part by investing in catchment facilities and wastewater recycling.[3] For developing countries, policy might be more about developing sustainable-conscious infrastructure during growth whereas it might mean better regulation or transitioning already developing industries in other nations.

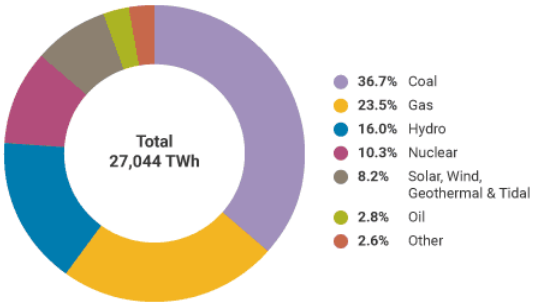



**Figure 1.** World electricity production by source 2019[4]

Some countries have seen significant progress and huge strides toward energy transformation and sustainability, while others have seen very little progress. Some countries like Denmark, Spain,

[2] When will fossil fuels run out?
[3] Energy Transformation Is Jamaica's Key to Inclusive Green Economy, UNEP Says
[4] Nuclear Power in the World Today

France, and Germany have a specific goal to reach net zero emissions by 2050.[5] Groups like Climate Action Tracker, however, have shown how nations have failed to keep pace with commitments made back in 2015 during the Paris Agreement to stay below 1.5 °C or 2.7°F in global warming.[6] Regulation is the most popular reform measure with ~70% of developing states creating quasi-independent entities for regulation and monitoring. Since the 1990s, many of these states have implemented legal frameworks to create a judicial backing for meaningful change but attempts at regulation can vary dramatically. The highest annual change in renewable energy generation in recent years has been led by upper-middle-income countries. Regionally, the highest annual change has taken place in Asia and the Asia-Pacific, followed by North America and Europe.[7]

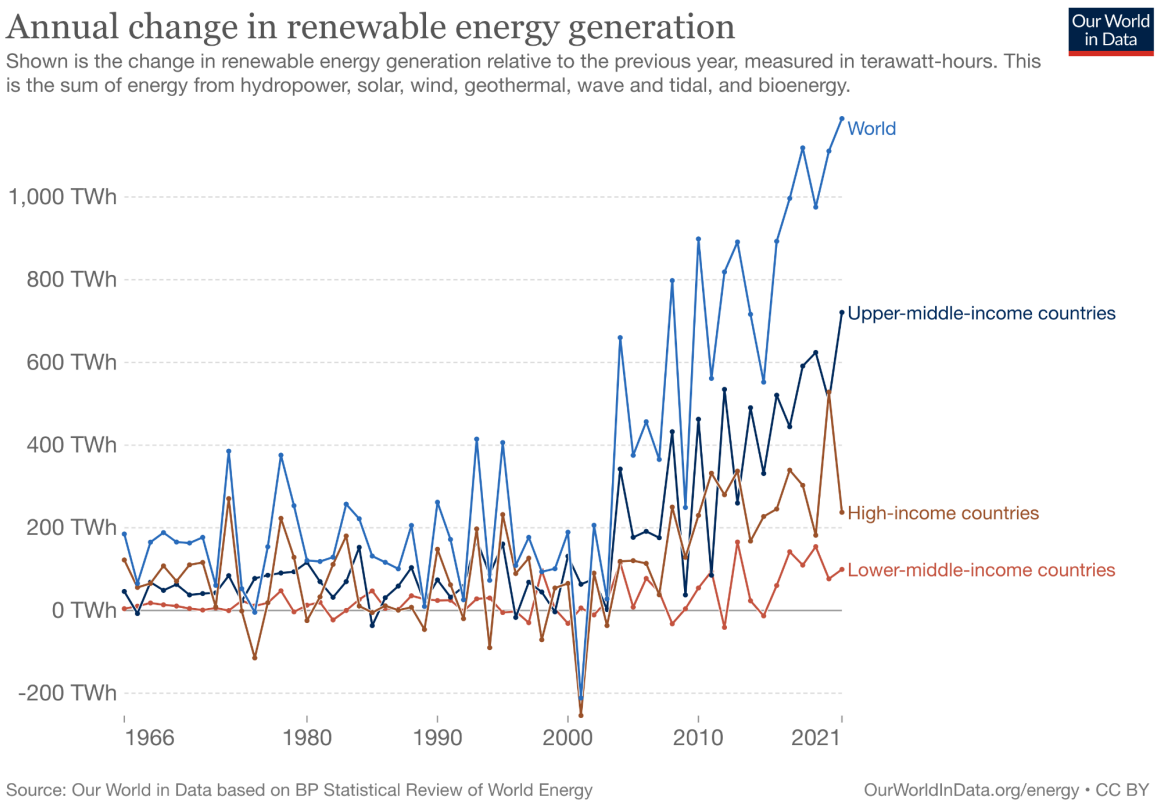



**Figure 2.**[8]

## Current Situation

Since the invasion of Ukraine, the flow of trade has been radically disrupted for Ukraine, Russia (impacted by conflict itself as well as numerous sanctions and the loss of private partnerships), and the countries trading with them. Oil and gas are key components of this conflict and its

[5] Infographic: Capturing the Renewable Energy Shift
[6] Countries | Climate Action Tracker
[7] Annual change in renewable energy generation - Our World in Data
[8] Renewable Energy - Our World in Data

impact globally since Russia is a top crude producer. On the other hand, there is also a unique sense of opportunity: dependence on fossil fuel exports is seen as both a political and economic threat (which has been demonstrated by rising gas prices) and this is a political climate that could hypothetically better mobilize actors around transitioning to greener economies.

At the same time, this effect is not inevitable since adjusting and potentially subsidizing domestic production of nonrenewable energy may be seen as more immediate than green technological advancements and actually transformative change (especially since countries are usually very interested in or urgent about meeting energy needs of citizenry in face of the conflict and external shocks). Nonetheless, there has been clear advancement towards greater reliance on renewable energies and more investment in greener technology in recent years.

Renewable energy can be a cheaper alternative for electricity— according to IEA, per MWh cost of energy would be $20-40 for Solar PV (Photovoltaics) in China and India, $30-60 for Solar PV in the US and Europe, $50-90 for gas, and $50-120 for coal.[9] Action towards an energy transformation may look like the encouragement of state governments to create stricter emission laws, subsidies, and other incentives for carbon-neutral or negative corporate performers. It might also entail the implementation of sanctions and other negative reinforcement measures against states or actors who refuse to take meaningful action.

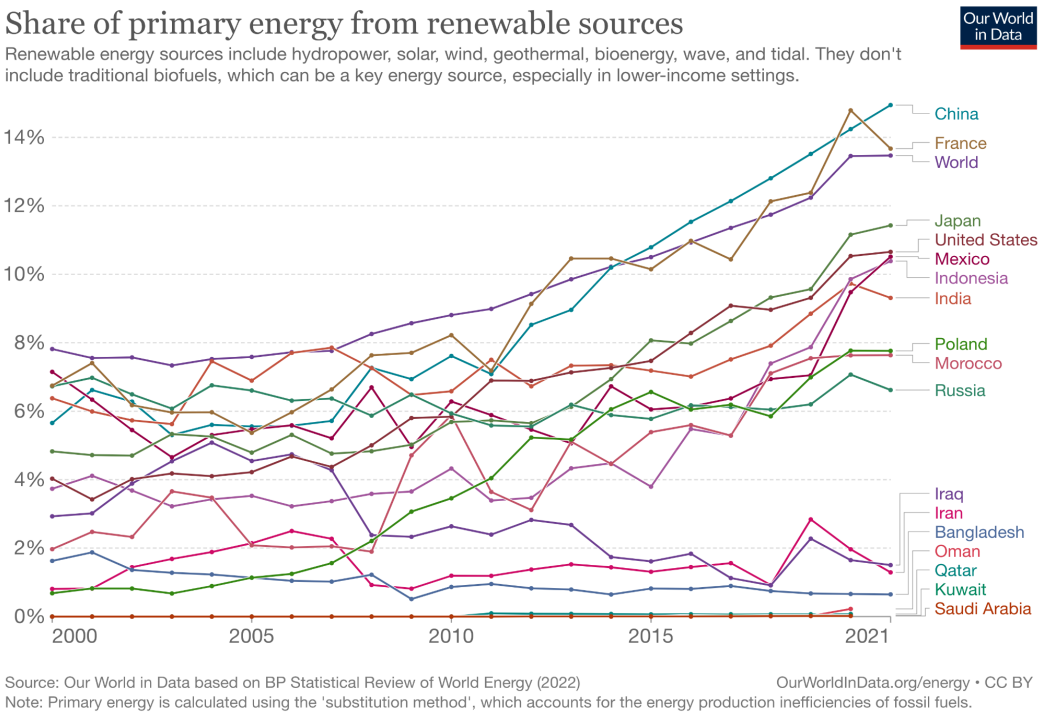



**Figure 3**

[9] Infographic: Capturing the Renewable Energy Shift

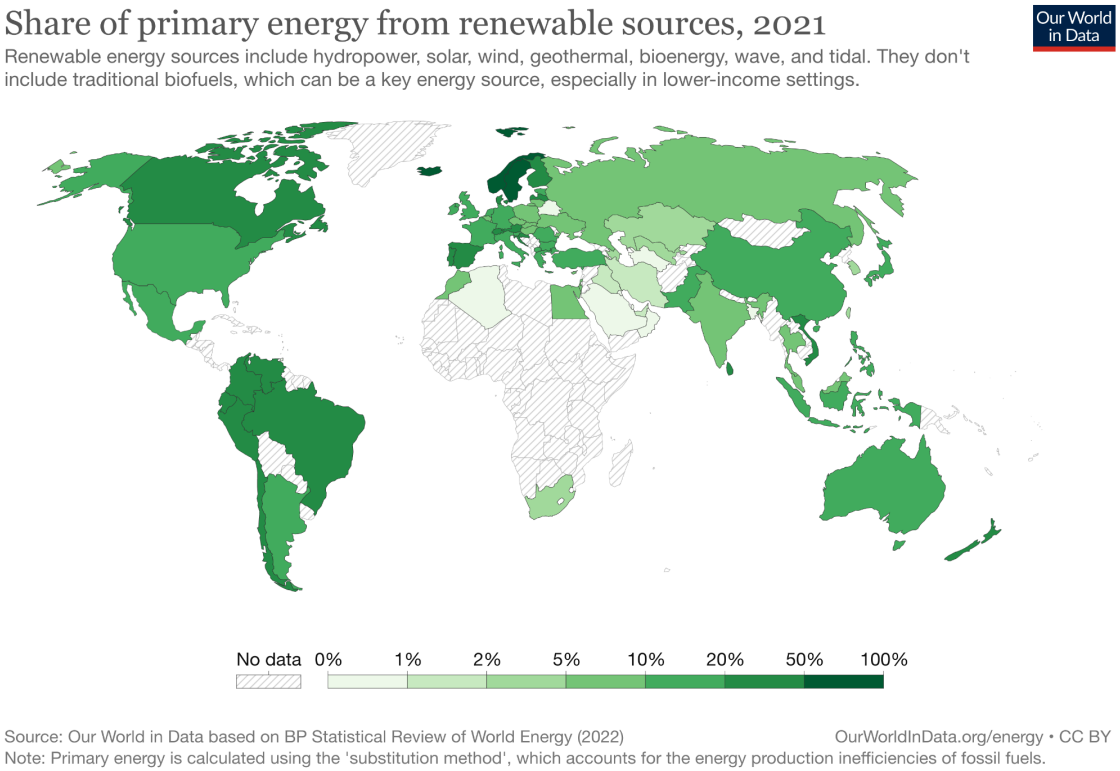



**Figure 4**[10]

## Bloc Positions

There are potential and historical divisions between developing, undeveloped, and developed countries in conversations around transitioning towards a greener economy and energy use (largely stemming from differing dynamics of stake, interest, and risk). On one hand, there is an argument that there are indeed only a handful of countries that contribute the overwhelming majority of greenhouse gas emissions and have done so for several decades. Whereas they have benefited from arguably irresponsible consumption and production practices, it is often other countries that face the greatest burden from climate change (known as the collective action problem). It may also be argued by some countries that fossil fuel consumption is a fundamental part of the industrial process and important for economic growth, thus redirecting a sense of responsibility for lowering emissions to specifically wealthy/developed nations. The ability of areas to implement technological leapfrogging (e.g. smartphones versus landlines in China), that is to skip to more cost-effective and sustainable approaches due to pre-existing advancements in technology, is dependent on factors such as existing infrastructure, governance capacity, and existing technology and its technical barriers.

[10] Share of primary energy from renewable sources, 2021


**Figure 5**[11]

## Key Terms

- **Paris Agreement,** an international treaty on climate change took place in 2015 and was attended by 196 countries
- **Carbon offsets,** reducing net carbon footprint in emissions (e.g. planting trees)
- **Net Zero Future,** policy outcome of reaching a net output of zero emissions in purposes of combating climate change and pursuing sustainability
- **Renewable Energy**, a source of energy production that does not rely on limited fossil fuels such as coal or natural gas

## Discussion Questions

- How have past efforts in transforming energy usage in certain countries been successful or unsuccessful? How should we label the essential components of an energy transformation or a green economy?
- What are the ways/methods the UNEA can lead the conversation around energy transformation; what are the limitations faced?
- What are the differences in motivation and capacity in transitioning towards a greener economy for different states and how might this contribute towards divisions in the committee?
- If the majority of greenhouse gas emissions are from a few countries, does moving forward look like a universal or directed energy transformation?

[11] World Integrated Trade Solution (WITS)

**Additional Sources**

Energy Fact Sheet: Why does Russian oil and gas matter? - https://www.iea.org/articles/energy-fact-sheet-why-does-russian-oil-and-gas-matter

UNEP Medium Term Strategy 2018-2021: https://wedocs.unep.org/bitstream/handle/20.500.11822/7621/-UNEP_medium-term_strategy_2018-2021-2016MTS_2018-2021.pdf.pdf?sequence=3&isAllowed=y

Creating a New Energy Strategy for a Post-Ukraine War World: https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/220822_Cordesman_New_Energy_0.pdf?TcOhgxfcHLkg4EIqO1s8V.EOQybP0p2X

## Topic B: Improving Climate Resiliency for Regions Affected by Natural Disasters

### Executive Summary

Climate change has brought on a plethora of new and exacerbated challenges onto the world stage: melting glaciers contributing to rising sea levels, changing weather patterns leading to flooding in some areas and droughts in others, and the resulting threat to industries ranging from agriculture to tourism, among other concerns. Climate hazards can cause loss of life, injury, or other health impacts, as well as damage to, and loss of, property, infrastructure, livelihoods, service provision, and environmental resources. It can impact all kinds of sectors and, consequently, impact and stifle the everyday living of people across the globe. As a result, it is critical for nations to protect themselves against some of the repercussions of climate change, including both preventing and mitigating the effects of natural disasters. According to a UNEP strategy report, nations and groups must "systematically use best-practice environmental management" to fulfill their 2030 goal of greater climate resilience and natural disaster crisis prevention (p. 26).[12]

### Historical Background

Natural disasters have been part of human history, shaping many societies as they exist now. The development of a more robust and multilateral capacity in global governance has better allowed nations to address the often-transnational nature of disaster, as has been necessary with developments such as climate change which has increased the prevalence and severity of different types of natural disasters. As more research and international collaboration take place surrounding climate change, likewise, has attention taken a new focus on climate resilience, that is the ability of states to prepare for climate-related complications including natural disasters like cyclones, floods, wildfires, droughts, hurricanes, and so on. For instance, in 2015 the UN adopted Sendai Framework for Disaster Risk Reduction encompassing seven central targets for 2030, shown below.

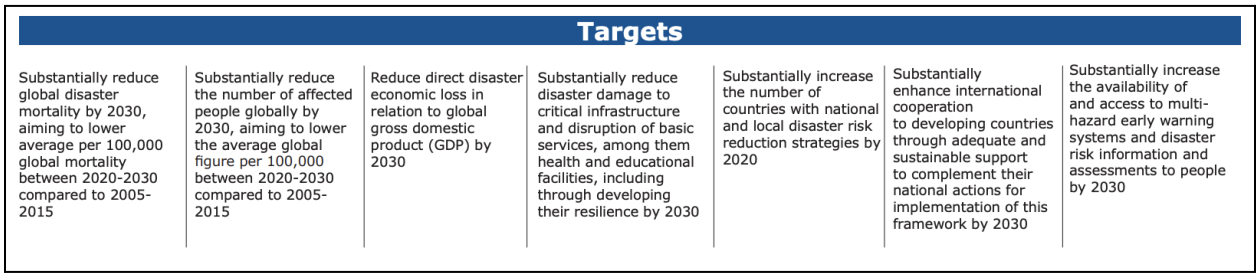



**Figure 1.** Sendai Framework Targets[13]

[12] UNEP: Medium-term strategy 2018-2021
[13] Sendai Framework for Disaster Risk Reduction 2015-2030

While at the Climate Action Summit of 2019, 130 countries agreed that "adaptation action is not keeping pace with the scale of impacts" and that "business as usual is no longer an option for any country, community, business or financial institution" (para. 1-2).[14] Consequently, the summit launched the Coalition for Climate Resilient Investment (CCRI) with a focus on private sector involvement through investment now includes over 115 countries, 120 members, and $20 trillion in assets.[15] Also forged at the 2019 summit but instead focusing on collaborations in the public sector with global governance institutions, the Coalition for Disaster Resilient Infrastructure (CDRI) was created.[16]

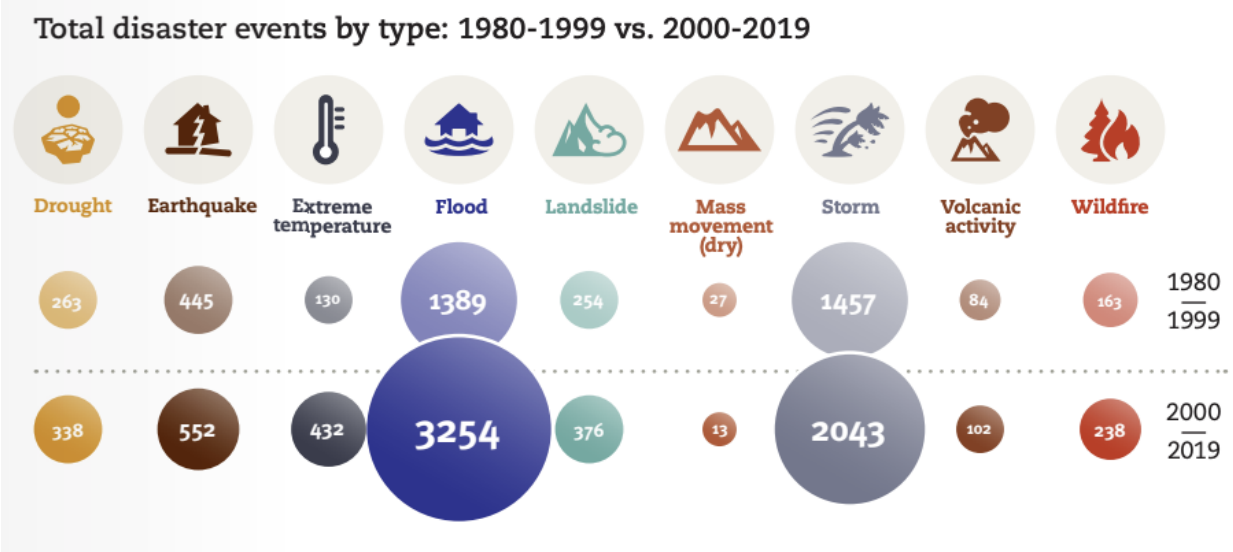
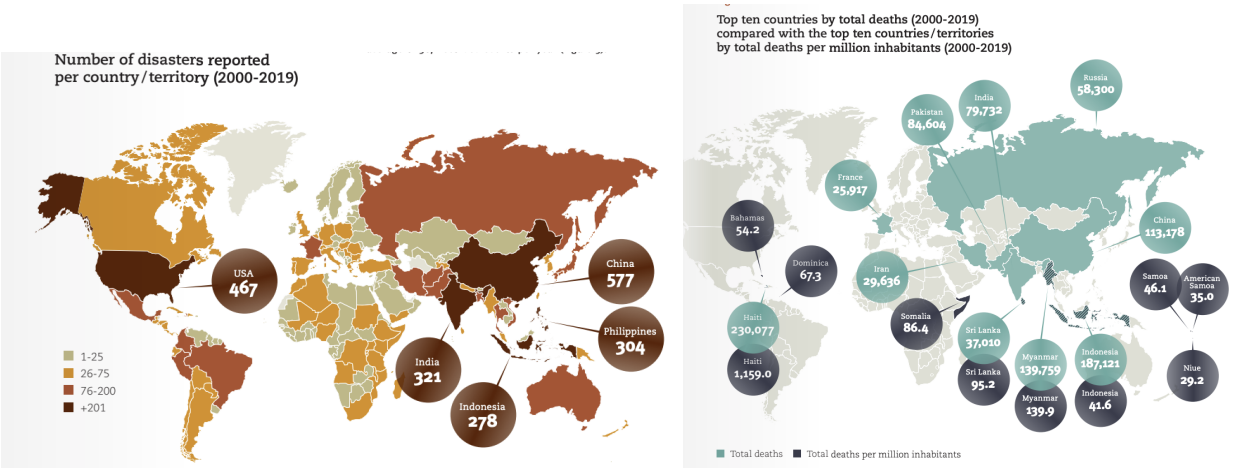



**Figure 2.** Disaster Events Overtime[17]

## Current Situation

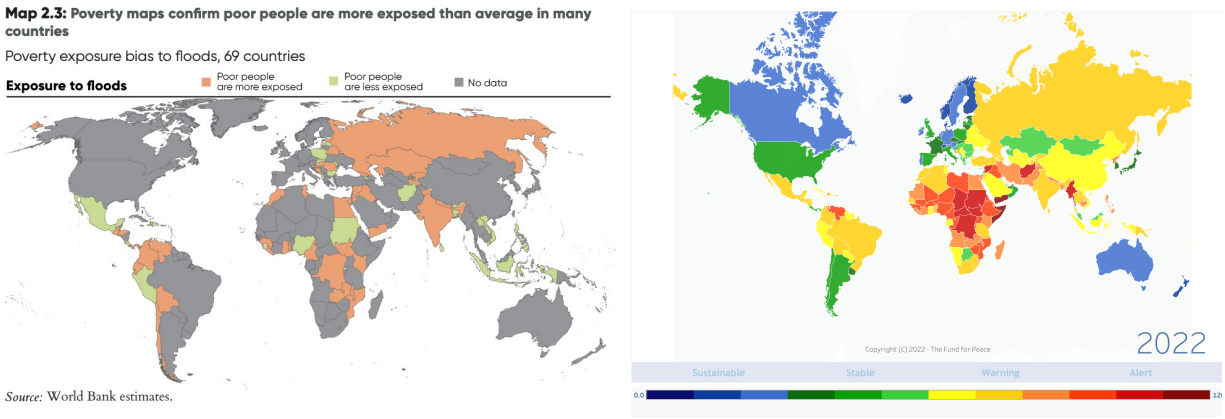
Countries that already exhibit a propensity towards natural disasters are likely expected to experience more and more severe incidences, and more areas that did not initially have that propensity may soon find themselves in a more uncertain and precarious position. Indeed, there were 1.7 times the reported disasters in 2000-2019 compared to 1980-1999 (an increase of 3,136). In that same decade, there were 1.23 million deaths and 2.97 trillion USD in economic losses attributed to natural disasters. By 2050, it is estimated that there will be a 55% increase in demand for water and 60% for food production.[18]

[14] A Call for Action: Raising Ambition for Climate Adaptation and Resilience
[15] Who We Are - Coalition for Climate Resilient Investment
[16] CDRI - Frequently Asked Questions
[17] Human cost of Disasters
[18] UNEP Medium-term Strategy 2018-2021




**Figures 3 & 4.** [19]

The effects of climate change related natural disasters are not evenly distributed across countries, nor is the capacity to confront them. Although lower-income nations experience only a quarter of weather disasters, they experience much higher mortality, accounting for around 90% of related deaths.[20] Climate Scenarios project that damage from natural disasters will get even worse over the next century and will disproportionately affect countries in Africa and Southern Asia. The reason why poorer regions may be more susceptible, more damaged, and less easily healed stems from geography, personal resources, infrastructure, political instability, vulnerability, and access, among other factors.[21]




**Figures 5 & 6.** Poverty and Floods Map[22] and Fragile States Index Map[23]

[19] Human cost of Disasters
[20] A Practical Guide to Climate-resilient Buildings & Communities
[21] Natural disasters disproportionately affect the world's low-income countries
[22] Climate Change and Development Series
[23] Fragile States Index

Improving climate resilience in communities involves identifying the type of vulnerabilities they are subjected to, which often vary by region and country. There are also multiple forms of vulnerability among populations.

**Types of Vulnerability:**

- Physical Vulnerability - Any physical aspect of the community that makes buildings and people more susceptible to the damaging effects of natural disasters like flooding, hurricanes, etc. This includes older buildings, buildings that were not intended to protect against a specific natural disaster, or buildings that were built with substandard design or material components.
- Environmental Vulnerability - A physical aspect of the environment surrounding the community that makes the community vulnerable. This could include a beachfront town that has allowed the dunes to erode away or swamplands that have cut down protective mangrove forests.
- Economic Vulnerability - Lack of government support for preparing for or rebuilding after a natural disaster.
- Social Vulnerability - Inequities in the government or community decision-making process that could keep resources away from specific communities (e.g. if a community has a disaster recovery process that provides a disproportionately low amount of funds to an ethnic minority region).
- Political / Institutional Vulnerabilities - Lack of strong tools and instruments to prepare and recover from disasters including disaster detection technology and private-public partnerships.

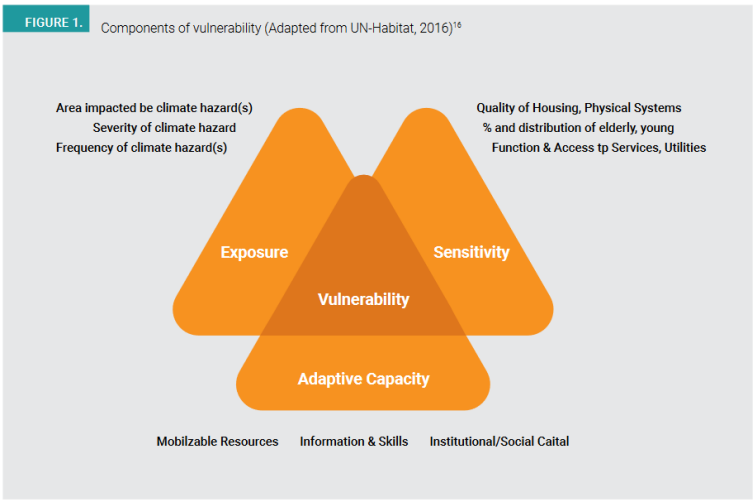



**Figure 7.** [24]

[24] A Practical Guide to Climate-resilient Buildings & Communities

To continue, there are important regional considerations to note in evaluating and planning forward toward greater climate resilience. For instance, Europe is most likely to adapt via technological/infrastructural mechanisms while Africa responds more through behavioral/cultural and nature-based ones. Continuing on, Africa is most constrained in dimensions of community well-being and coastal/ocean ecosystems. Europe ranked low in several listed sectors regarding the presence of constraints, while for those same sectors there were much more limitations applicable to Central and South America (especially for cities, poverty, and food).[25] See further regional differences and illustrative examples in the figures below.

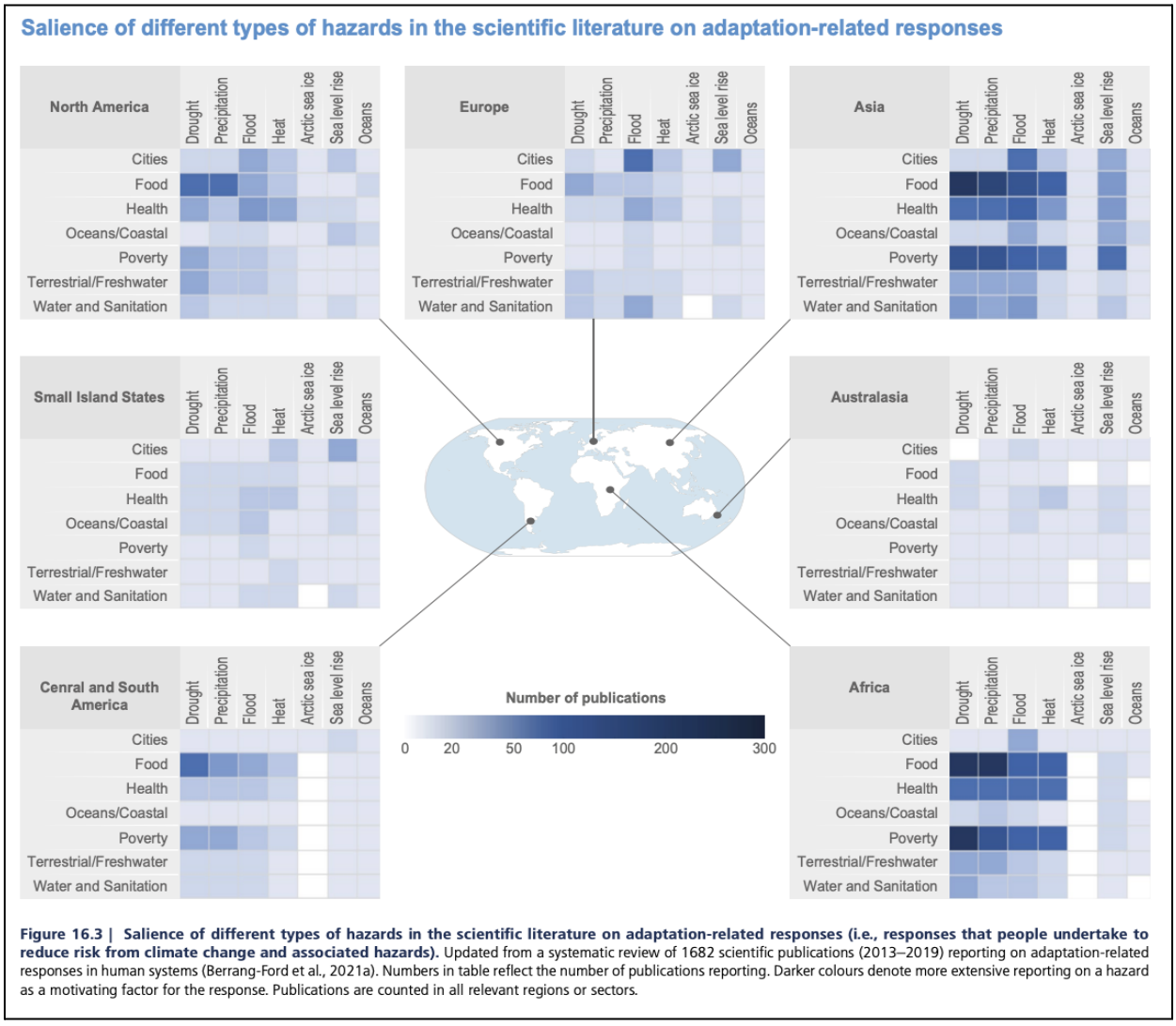



**Figure 16.3 | Salience of different types of hazards in the scientific literature on adaptation-related responses (i.e., responses that people undertake to reduce risk from climate change and associated hazards).** Updated from a systematic review of 1682 scientific publications (2013–2019) reporting on adaptation-related responses in human systems (Berrang-Ford et al., 2021a). Numbers in table reflect the number of publications reporting. Darker colours denote more extensive reporting on a hazard as a motivating factor for the response. Publications are counted in all relevant regions or sectors.

**Figure 8**[25]

[25] Climate Change 2022: Impacts, Adaptation and Vulnerability

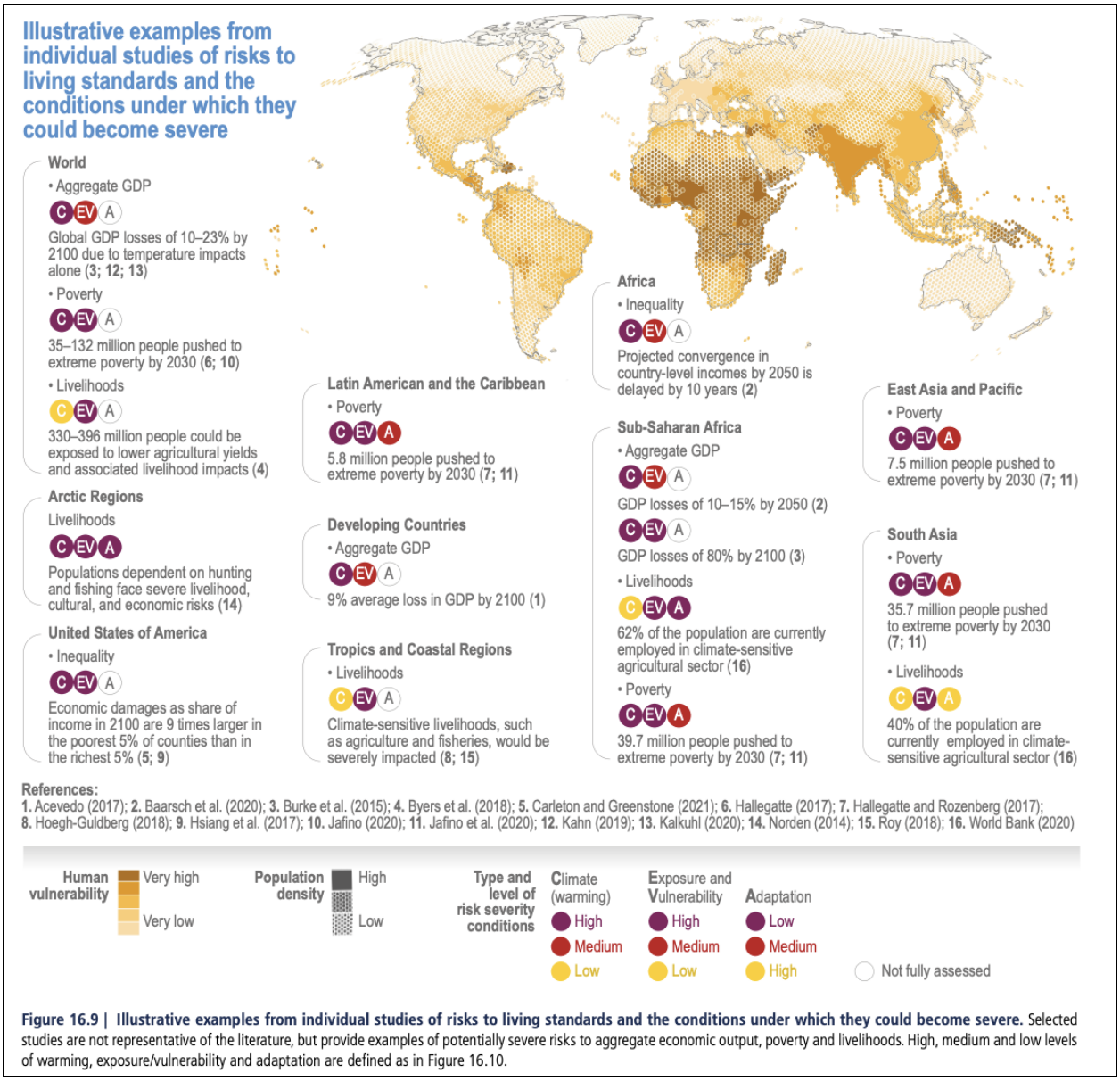



**Figure 16.9 | Illustrative examples from individual studies of risks to living standards and the conditions under which they could become severe.** Selected studies are not representative of the literature, but provide examples of potentially severe risks to aggregate economic output, poverty and livelihoods. High, medium and low levels of warming, exposure/vulnerability and adaptation are defined as in Figure 16.10.

**Figures 9**[26]

## Key Terms

- Climate Resiliency
- Future-Proofing
- Climate Change Risk Assessment (CCRA)
- Green Infrastructure
- Intergovernmental Panel on Climate Change (IPCC)
- Sustainable Drainage Systems (SDS)
- Urban Heat Island (UHI)

[26] Climate Change 2022: Impacts, Adaptation and Vulnerability

- UN Department of Economic and Social Affairs
- UN Office for Disaster Risk Reduction
- UN Environment Programme
- UN International Strategy for Risk Reduction

**Discussion Questions**

- What is the role of the international community in supporting and funding these vulnerable communities?
- What kind of discrepancies are there between different demographic or population groups within a nation (e.g. income level and urban/rural distribution) in how they are impacted and potentially vulnerable to climate-related natural disasters?
- What kind of discrepancies are there between different regions and nations in how they are impacted and potentially vulnerable to climate-related natural disasters?

**Additional Resources**

UNEA - A Practical Guide to Climate-resilient Buildings & Communities: https://wedocs.unep.org/xmlui/bitstream/handle/20.500.11822/36405/Adapbuild.pdf

Human cost of disasters: An Overview of the last 20 years 2000-2019 - https://www.preventionweb.net/files/74124_humancostofdisasters20002019reportu.pdf?_gl=1*wm0e9y*_ga*MTgzOTIzMjE0Ny4xNjcyMTUxMTEx*_ga_D8G5WXP6YM*MTY3MjE1MTExMC4xLjEuMTY3MjE1MjQ3NC4wLjAuMA..

Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters - https://www.gfdrr.org/sites/default/files/publication/Unbreakable_FullBook_Web-3.pdf

Climate Change Vulnerability and Risk: A Guide for Community Assessments, Action Planning and Implementation - https://unhabitat.org/sites/default/files/2020/05/climatechange_vulnerabilityandriskguide.pdf

Climate Change 2022: Impacts, Adaptation and Vulnerability - https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf

*especially see regional focuses (Ch. 9-14)

Sendai Framework for Disaster Risk Reduction 2015–2030 - https://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf?_gl=1*1bgzu2f*_ga*MTgzOTIzMjE0Ny4xNjcyMTUxMTEx*_ga_D8G5WXP6YM*MTY3MjE1MTExMC4xLjAuMTY3MjE1MTExMC4wLjAuMA..

A2R Initiative - UN Climate Resilience Initiative A2R

## Topic C: Protecting Biodiversity in the Ocean Ecosystem

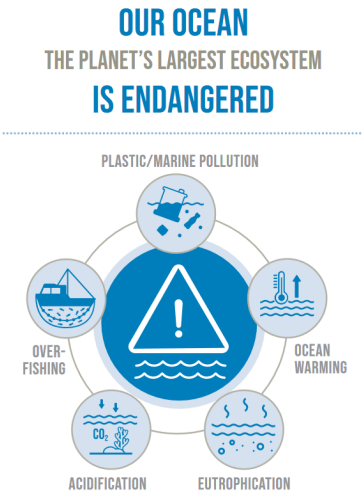
### Executive Summary

> *We are now in a situation in which we live a triple crisis: climate crisis, biodiversity crisis, pollution crisis. And the ocean is the reception point of all these crises.*
>
> *Because of climate change, we see the dramatic impacts in the oceans. Oceans are warmer. We see corals being destroyed. We see storms becoming more and more devastating everywhere. Overfishing is having a dramatic impact on biodiversity, but also, the destruction of corals has a dramatic impact on biodiversity. And biodiversity, obviously, is something that is essential for us to preserve. One day we will be alone on this planet without anything else. It would be a total disaster.*
>
> *UN Secretary General (2022)*

Oceans are an essential part of our planet and our future, covering 75% of the Earth's surface and representing 99% of the living space on the planet by volume. They contain a host of rich biodiversity for both flora and fauna, including nearly a million known species and countless unknown ones. . And even though we may not realize it, they play an important role in our communities and day-to-day lives. Over three billion people worldwide depend on marine and coastal biodiversity for their livelihoods and the oceans are the main transport mode for global trade around the world, clocking in at 90% of traded goods[27][28].

Oceans and marine biodiversity also play a key role in fighting climate change and its effects. Oceans "absorb about 30% of carbon dioxide produced by humans, buffering the impact of global warming," according to the United Nations. The ocean has also absorbed more than 90% of the excess heat in the climate system[29].

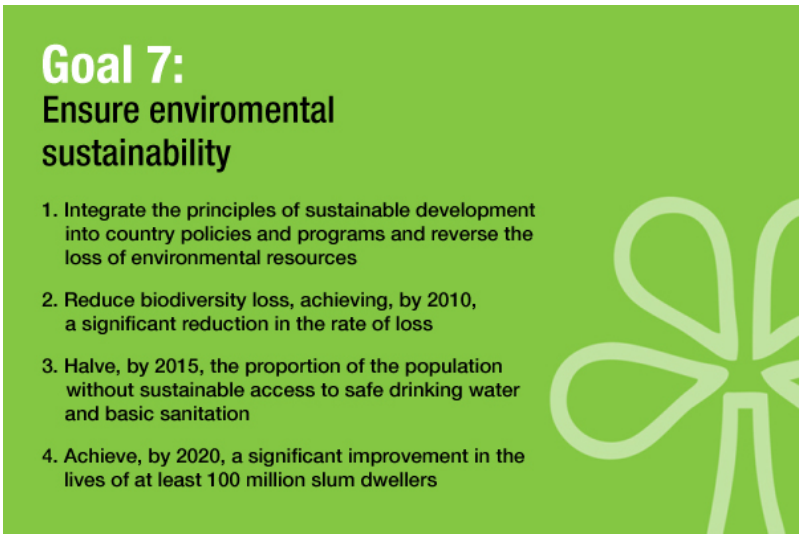
That biodiversity and those positive effects that the ocean has on our communities are being threatened by climate change and by human action. Ocean heat is at record levels and oceans are suffering from warming, acidification, and oxygen loss. Coastal waters are deteriorating with various kinds of human pollution as well as coastal eutrophication. 80% of marine and coastal pollution is coming from land, from our pesticides to our plastics. The loss of marine biodiversity is, "weakening the ocean ecosystem and its ability to withstand disturbances, to adapt to climate change, and to play its role as a global ecological and climate regulator.[30]"




[27] Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter
[28] Goal 14: Conserve and sustainably use the oceans, seas and marine resources
[29] LIFE BELOW WATER: WHY IT MATTERS
[30] The decline of marine biodiversity - Ocean & Climate Platform

**Historical Background**

MDG Goal #7: Ensure Environmental Sustainability




The United Nations Millennium Development Goals were 8 goals that UN Member states signed in 2000 to achieve 8 goals to combat "poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women."

MDG Goal #7 sought to ensure environmental sustainability. Progress to this goal included the elimination of ozone-depleting substances, an increase in marine protected areas, and a rebuilding of some overfished stocks in Europe, Oceania, and North America.

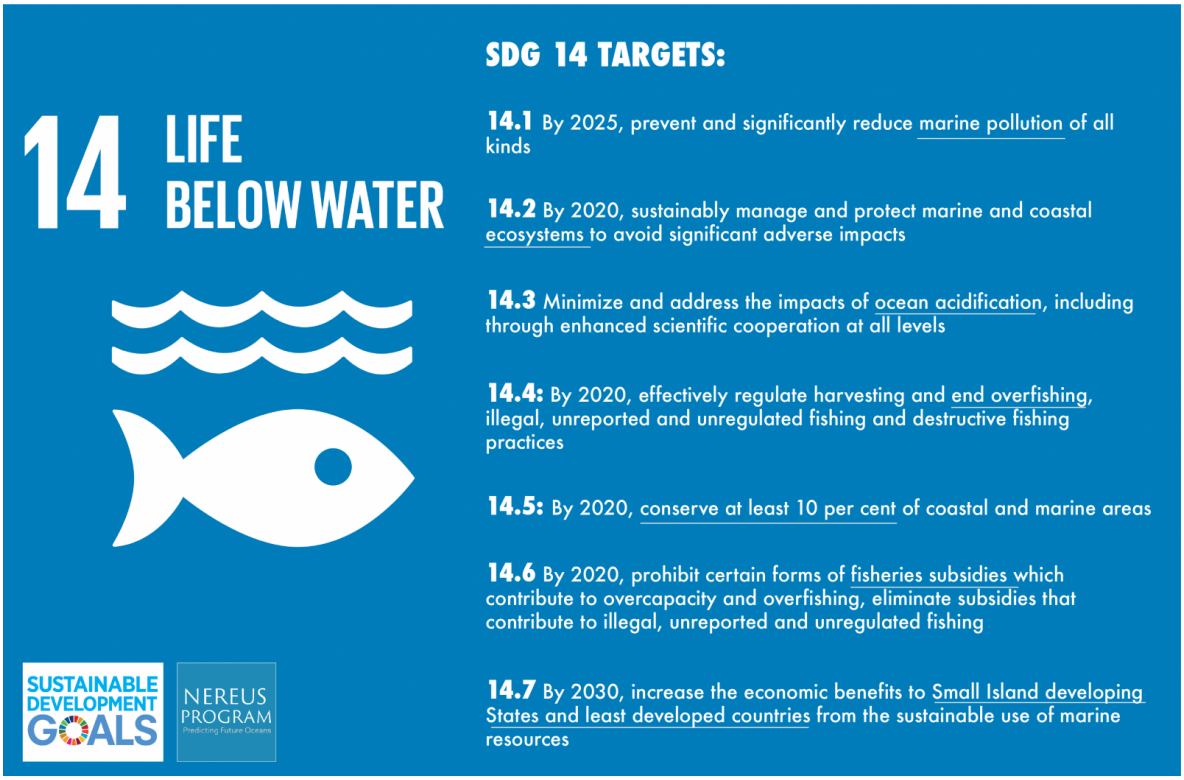
SDG Goal #14: Life Below Water

The Sustainable Development Goals (SDGs) were the successor to the MDGs and sought to build on the progress achieved so far and lay out new ambitious targets for 2030 and beyond.

Of interest to this committee is SDG 14 which involved Life Below Water. Progress to this goal so far includes increasing the extent of marine protected areas to 7.7% though still short of the 10% target.

The United Nations has also continued to gather ratifications and approvals of key international agreements including:

- United Nations Convention on the Law of the Sea (1982)
- Part XI Agreement (1994)
- United Nations Fish Stocks Agreement (1995)
- Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (2016)
- Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (2015)




**Current Situation**

The threats to Ocean Biodiversity are multi-faceted and this committee should consider a targeted approach to each of the factors below and build on previous work done by the United Nations and other parties.

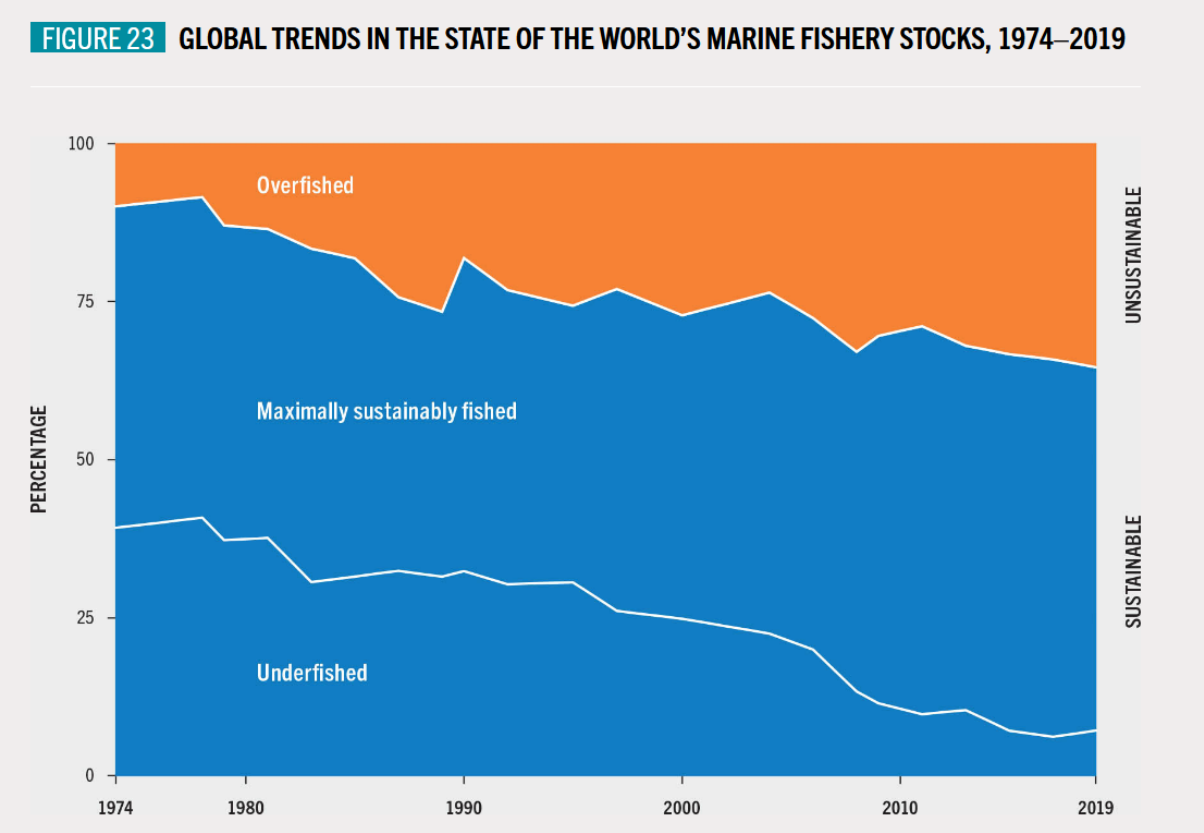
Overfishing

*"Marine species, as part of the ocean's carbon pump, have an indispensable role in mitigating climate change; an ocean teeming with life facilitates carbon sequestration, with scientists estimating that fish contribute 16 percent of the total ocean carbon flux," United Nations Our Fish Program Director.*

Overfishing occurs when more fish are caught than can be replenished naturally. According to the Food and Agriculture Organization of the United Nations (FAO), "the number of overfished stocks has tripled" in the past 50 years and "1/3d of fisheries are currently pushed beyond their biological capacity"[31]. According to experts, unless fishing practices change, existing fish stocks of cod and herring in Europe could completely collapse, devastating not just the marine wildlife in the region but also the human communities who rely on those fishing stocks.

This committee should look at how to share best-practices on fishery management, how to monitor and flag existing fish stock levels to anticipate stock collapse before they happen, and look at solutions that could replenish and protect vulnerable species.

[31] Plenty of Fish? | UNFCCC



[32]

Acidification:

Since the industrial revolution, the CO2 concentration in the air has increased due to human activity. At the same time, the oceans have become more acidic, absorbing about 30% of the CO2 released in the atmosphere. As the level of atmospheric CO2 increases, so does the level of marine acidity.

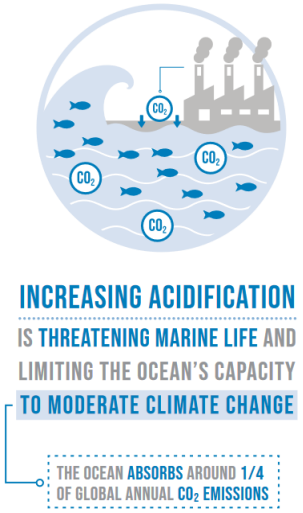
Ocean acidification is detrimental to many key marine species, including clownfish, crabs, oysters and corals. Low PH levels can start to dissolve shells and skeletons and change behavorial patterns of fish and other marine wildlife[33]. Additionally, even animals unaffected directly often experience slower larva growth which can affect future population growth. Some experts say that the lower PH levels may hamper or prevent coral reef growth which would have a compounded effect on the various wildlife that relies on coral reefs as a cornerstone species.

There is also the human element which is the people and communities who rely on shell fisheries and tourism for their livelihood or even their food source.

Unlike other effects of climate change, there are fewer major mitigation measures that can be taken to reduce the adverse effects of ocean acidification other than to tackle the levels of CO2

[32] The status of fishery resources
[33] Ocean acidification | National Oceanic and Atmospheric Administration

released through human activities. Some mitigation measures do include additional research to see which marine species will be most affected and how this can change the marine ecosystem. There can also be increased knowledge-sharing regarding sustainable fishery management of these affected species, coastal protection for vulnerable areas, increased marine spatial planning and tracking, and establishment of Marine Protected Areas for targeted communities.




Oil Spills:

One of the most insidious threats to ocean biodiversity are subsea oil spills. These spills can have a wide variety of causes and vary widely in magnitude but largely occur when there are malfunctions with barges, tankers, drilling rigs, and oil storage facilities that cause oil to be spilled into the surrounding ocean. The oil then spreads out throughout the water's surface to form an oil slick.

These oil spills are extremely dangerous to a wide variety of ocean life including "marine birds, sea turtles, mammals, … fish, and shellfish.[34]" Marine life that is not immediately poisoned by the spilled oil can experience changes in reproduction or growth rates which can continue to affect the species long after the spill is cleaned up.

Cleaning up oil spills is not an easy endeavor. Booms, or floating physical barriers, can slow the oil spread and buy time for the cleanup operation. Skimmers and boats can remove oil from the water surface. For larger spills, many operations include burning some of the oil that is on the surface of the water or using chemical dispersants and microbes to help break down the oil.

In 2022, the United Nations Yemen team launched a campaign to prevent a "catastrophic oil spill from [a] decaying tanker in the red sea.[35]" The mission has two main tracks:

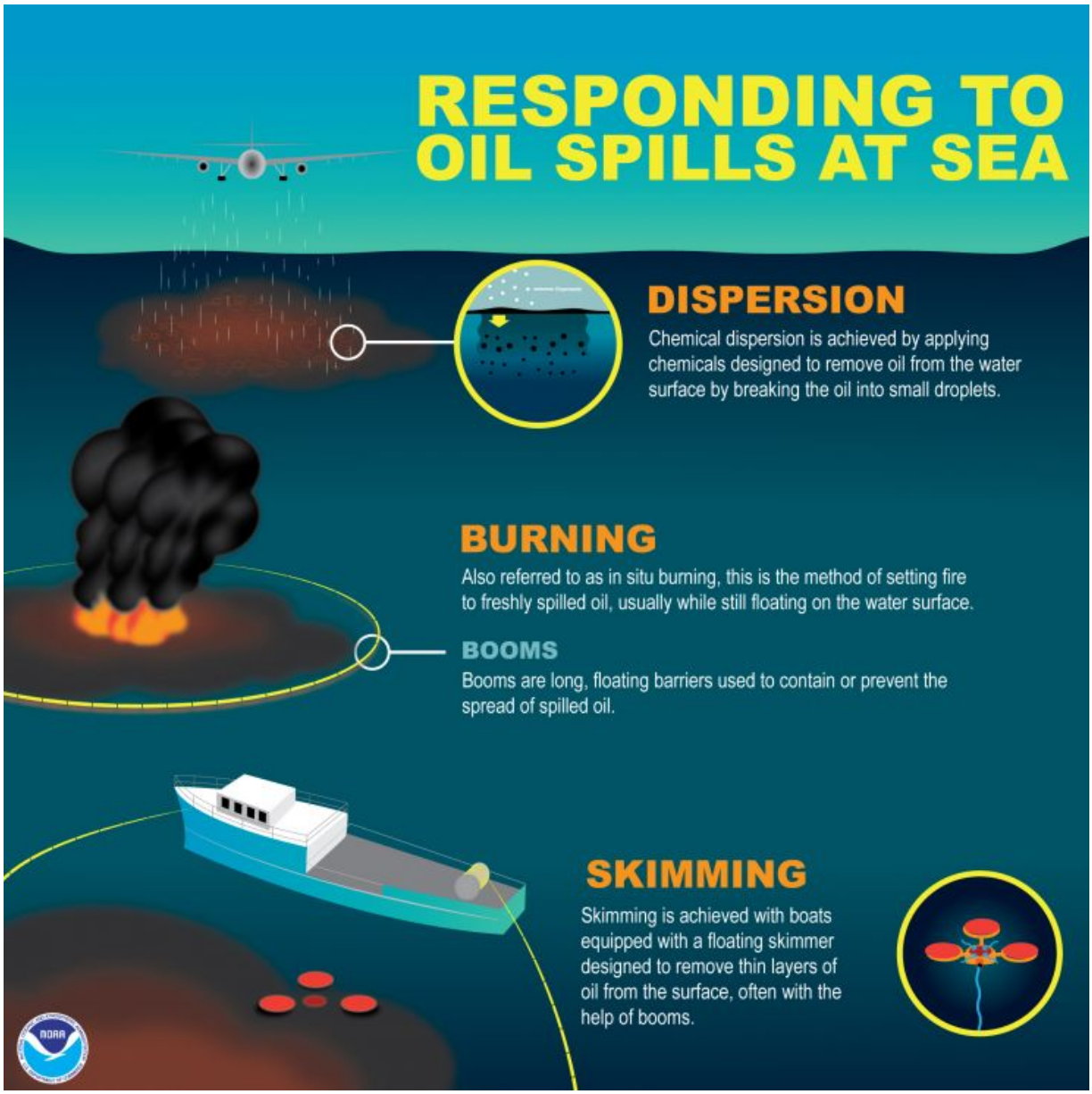
1. Installing a long-term replacement vessel
2. Conducting an emergency operation to transfer the oil from the current Safer vessel to a secure temporary vessel

This mission, while still ongoing, shows an example of the kind of public mission which can pre-empt and mitigate potential future oil spill catastrophes

This committee should look at ways to improve safety and risk mitigation features on drilling rigs, barges, underwater pipelines, and storage facilities. The committee should look at monitoring and reporting systems that can anticipate oil spills before they happen. The

[34] Oil spills: A major marine ecosystem threat | National Oceanic and Atmospheric Administration
[35] UN Yemen team launches campaign to prevent catastrophic oil spill from decaying tanker in the Red Sea

committee should also look at how to respond to imminent or current oil spills and how to do so equitably to ensure surrounding communities are not unduly burdened and to help preserve and protect the surrounding marine life. Finally, the committee should look at building on previous work done by United Nations bodies and other organizations including the Cartagena Convention.



[36]

[36] Infographics

Plastic Pollution:

*"If we get this right – if we win the battle against plastic pollution – it will not only be a tangible victory for people and planet, but a clear example of how the United Nations is relevant to the lives of citizens around the world."*

- *Maria Fernanda Espinosa, President of the General Assembly* [37]

Plastic has revolutionized every aspect of our day to day lives, from medicine, to consumer goods, to clothing, and even to the tools that astronauts use on the international space station. It is everywhere, in a multitude of forms, fulfilling a multitude of vital important uses for us as humans.

Unfortunately, there is a downside to our love affair with plastic. Decades of overuse, and an emphasis on single-use plastics, have created a situation where humans are throwing away 17 million tonnes of plastics into our oceans. The plastics that remain intact form "islands of plastic," like the infamous Great Pacific Garbage Patch which is three times the size of France and kills thousands of marine animals every year[38]. The plastics that erode and break down get consumed by fish and other marine life, often harming the marine life and creating deadly micro-plastics that then show up in our tap water and on our plate[39].

This committee should look at ways to reduce overall plastic consumption and to shift from single-use plastics to multi-use plastics. The committee should also look at ways to divert plastics away from going into the ocean and how to deal with plastics that are already in the ocean. Finally, this committee can look at incentivizing and applying research on new technologies that can help collect and break down plastic in the ocean and mitigate the harmful effects that microplastics are having on biodiversity and on our health.


[37] Plastics | General Assembly of the United Nations
[38] PLASTIC ISLAND IN THE PACIFIC The plastic continent floating in the Pacific
[39] Plastic Island in the Pacific Ocean, the Seventh Continent - Iberdrola

**Key Terms**

- International Maritime Organization (IMO)
- Sustainable Development Goals (SDGs)
    - SDG Goal #14 - Life Below Water
- Millenium Development Goals (MDGs)
    - MDG Goal #7: Ensure Environmental Sustainability
- Marine Biodiversity
- Eutrophication
- Low-Lying Coastal Zones
- Strategic Plan for Biodiversity 2011-2020
- Aichi Biodiversity Targets of the Convention on Biological Diversity
- The UNEP Regional Seas Programme and the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities
- Global Biodiversity Outlook 4
- Marine Pollution (Oil Spills, Chemical Pollutants, Plastic, etc)
- Overfishing
- Ocean Warming
- FAO Fisheries and Aquaculture
- UNEP Ecosystem Management
- Convention on Biological Diversity
- UNDP Water and Ocean Governance
- UN Division for Ocean Affairs and Law of the Sea
- Acidification
- 1982 Law of the Sea Convention
- 1973 International Convention for the Prevention of Pollution by Ships
- 1978 International Convention for the Prevention of the Sea by Oil
- The Protocol Concerning Co-operation and Development in Combating Oil Spills in the Wider Caribbean Region (1986)
- UN-OCEANS
- 2022 UN-Oceans Conference
- Key Biodiversity Areas (KBA)
- Deep Sea Conservation Coalition
- International Seabed Authority
    - Underwater Mining Code
    - Exploratory Permits

**Discussion Questions**

- Do people in your country rely on the ocean for food, transportation, industry, or trade?

- Has your country been affected by any recent instances of oil spills or other ocean pollution? What is the best way to prevent oil spills in the future and how can the United Nations best support this risk mitigation and prevention?

- Today, many of the largest companies in the world are focusing their efforts on building underwater mining programs to search for diamonds, copper, manganese, nickel, and cobalt. The International Seabed Authority, the main body charged with regulating this

practice,  has sought “not to prevent mining on the seafloor, but to mitigate its damage” and many ocean activists worry that these companies will do irreparable harm. On the other hand, some experts say that sea-floor mining could unlock the minerals needed to spark an EV and clean energy revolution and that the stakes of climate change are too dire to not take advantage of the existing seabed resources. How does your country feel about sea-floor mining programs and what should be the best path forward to balance the need for these resources with the desire to protect the ocean floor’s biodiversity?

**Additional Resources**

- Sea-Floor Mining - Deep-Sea Mining and the Race to the Bottom of the Ocean - The Atlantic
- 2022 UN Ocean Conference - 2022 UN Ocean Conference | United Nations
- Life Below Water: Why it matters - LIFE BELOW WATER: WHY IT MATTERS
- SDG Goal #14 - Goal 14: Conserve and sustainably use the oceans, seas and marine resources
- Infographic: Life Below Water - https://www.un.org/sustainabledevelopment/wp-content/uploads/2022/07/Goal-14-infographic.pdf
- The State of World Fisheries Report (2022) - The status of fishery resources
- Fifty Years of Ocean Protection - Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter
- Acidification Infographic - The decline of marine biodiversity - Ocean & Climate Platform
- United Nations - Plastic: Plastics | General Assembly of the United Nations
- Eutrophication Infographic - Conserve and sustainably use the oceans, seas and marine resources for sustainable development