

## CHEMICAL SOCIETY WASHINGTON (CSW)

### Environmental/Sustainability

#### Focus: United Nations Sustainable Development Goal Number 13

#### Climate Action1

**Take Urgent Action to combat climate change and its impacts.**

United Nations Department of Economic and Social Affairs

Sustainable Development<sup>2</sup>

Sustainable Development Goals<sup>3</sup>

#### **VIDEOS.**

UN Data Commons for the SDGs

Video URL: <https://youtu.be/DLrtrzE3PdE>

Overview Video: The Sustainable Development Report 2024<sup>4</sup>

Animated overview of the main facts and figures found in the report.

Video URL: <https://youtu.be/47r7rWwuZLs>

#### **Climate change<sup>5</sup>**

**United Nations** Climate change refers to long-term shifts in temperatures and weather patterns. Human activities have been the main driver of climate change, primarily due to the burning of fossil fuels like coal, oil and gas.

United Nations

Climate Change: VIDEOS

Taking action for the environment and on climate change | United Nations

Video URL: <https://youtu.be/qFHCTEDDwe4>

The Tipping Points of Climate Change – and where we stand.

<https://youtu.be/Vl6VhCAeEfQ>

See What three degrees of global warming looks like

Video URL: <https://youtu.be/uynhvHZUOOo>

The Environmental Effects of Climate Change on our Planet | Breakthrough

VIDEO URL: <https://youtu.be/UkhaC6Pc0ZM>

## **UNITED NATIONS Sustainable Development Goal 13**

**Take Urgent Action to combat climate change and its impacts.**

### **CLIMATE ACTION<sup>6</sup>**

1. Every Person in the world will be impacted by Climate Change.
2. Climate Change is caused by human activities and threatens life on earth.
3. Climate Change is occurring at rates much faster than anticipated due to rising greenhouse emissions.
4. Climate Change impacts include extreme and changing weather patterns and rising sea levels.
5. Climate Change will provoke mass migrations.
6. Immediate measures are necessary such as including climate resilient development, while outlining a clear path to achieve net zero emissions.
7. Immediate measures are necessary to avoid catastrophic consequences and secure a sustainable future for generations to come.
8. 2010-2019 was the warmest decade ever recorded, bringing with it massive wildfires, hurricanes, floods and other climate disasters across continents.
9. Climate Change is disrupting national economies and affecting lives and livelihoods.

### **CONSEQUENCES OF NOT TAKING IMMEDIATE ACTION**

1. Climate Change will cause average global temperatures to increase beyond 3<sup>0</sup> C. And will adversely affect every ecosystem. Climate Change can exacerbate storms and disasters, and threats such as food and water scarcity, which can lead to conflict. Doing nothing will end up costing us a lot more.

### **SOLVING THE PROBLEM OF CLIMATE CHANGE**

1. Investments in renewable energy.

2. The world must transform its energy, industry, transport, food, agriculture and forestry systems to ensure that we can limit global temperature rise to well below 2° C. maybe 1.5°C.
3. The world took a significant first step by adopting the PARIS Agreement, in which all countries committed to take action to address climate change.
4. More Actions are critically needed to meet the targets.

## **INVESTMENTS FOR CLIMATE CHANGE**

1. According to UNFCCC, global climate finance flows reached an annual average of \$803 billion in 2019, a 12 percent increase compared to prior years. However, this still falls short of the levels to limit warming.
2. In 2019, at least 120 of the 153 developing countries had undertaken activities to formulate and implement National Adaption Plans to enhance climate adaptation and resilience, an increase of 29 countries over the past year. The progress overall for meeting the 2020 disaster risk reduction target has been slow,

## **SPRINGER LINK<sup>7</sup>**

### **UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS 2030 and environmental Sustainability: Race against time.**

UN Sustainable Development Goals 6, 7, 12, 13, 14 and 15 are directly related to environmental sustainability.

## **UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS**

### **CLIMATE ACTION**

### **VIDEOS**

#### **Climate Action for Sustainable Development**

**Video URL:** <https://youtu.be/iDg4Yif81rc>

#### **Why Taking Action to Fight Climate Change Matters- Sustainable Development Goal 13**

<https://youtu.be/oSqmCnNV2dQ>

## **10 new insights in climate Science| #COP26|Climate Action**

<https://youtu.be/febQEOF4IUl>

### **MYTH BUSTERS<sup>8</sup>**

#### **THE FACTS ON CLIMATE AND ENERGY**

THE FACTS Would help in building support for an urgent action.

FACT: Climate change is happening

FACT: Climate change is caused by human activity

FACT: Scientists agree that humans are responsible for climate change.

FACT: Every fraction of a degree of warming matters

FACT: The climate is changing faster than humans, animals and plants can adapt.

FACT: Climate change is a major threat to people's health.

FACT: Natural gas is a fossil fuel, not a clean source of energy.

FACT: Clean Energy Technologies produce far less carbon pollution than fossil fuels.

FACT: Entire Countries already rely on nearly 100 percent renewable electricity.

FACT: Renewable energy will soon be the world's top source of electricity.

FACT: Renewable energy is cheaper than Fossil Fuels.

FACT: Solar panels and wind turbines make good use of land.

FACT: Renewable energy is better at withstanding extreme weather events.

FACT: The Transition to clean energy will create millions of jobs.

FACT: Alternatives to petroleum-based products already exist.

FACT: We can still limit climate change, if we act now.

### **TACKLING CLIMATE CHANGE<sup>9</sup>**

"Goal 13 calls for urgent action to combat climate change and its impacts. It is intrinsically linked to all 16 of the other Goals of the 2030 Agenda for Sustainable Development. To address climate change, countries adopted the Paris Agreement<sup>10</sup> to limit global temperature rise to well below 2 degrees Celsius.

## UNITED NATIONS

### CLIMATE ACTION

#### UN Secretary-General's Panel on Critical Energy Transition Minerals<sup>11</sup>

The Panel's Report

#### RESOURCING THE ENERGY TRANSITION<sup>11</sup>

“This urgent action is estimated to almost triple the demand for critical energy transition minerals<sup>X1</sup> by 2030 and quadruple it by 2040<sup>X2</sup>. The construction and production of renewable energy technologies, and the distribution and storage of energy will require a significant increase in these resources, including lithium, graphite, nickel, cobalt, manganese, rare earth elements, and others.”

X1. This Panel uses the term ‘critical energy transition minerals’ (CETMs) to refer to the mineral commodities that are necessary for the construction, production, distribution and storage of renewable energy and associated infrastructure.

X2. IEA (2024). Critical Minerals Market Review 2024. International Energy Agency. May.

#### UN Environment Program<sup>12,38</sup>

#### Green and Sustainable Chemistry<sup>13</sup>

Publications & data<sup>42,43</sup>

The UN Environment Program offers more than 15,000 items, from real-time data, tools and platforms to key reports, publications, fact sheets, interactives and more.

[UNEP and the sustainable Development Goals<sup>14</sup>](#)

A list of the Sustainable Development Goals and the [environment related targets](#) are available here. There are thirty (30) indicators that the UN Environment is taking a lead on<sup>15</sup>

## **CLIMATE ACTION AND SYNERGIES<sup>41</sup>**

Climate Action Starting Now

### **ACT NOW<sup>40</sup>**

**United Nations Office for outer Space Affairs.**

### **Sustainable Development Goal 13: Climate Action**

#### **International Efforts for using space for Climate Action<sup>16</sup>**

Sustainable Development Goal 13 urges to take action to combat climate change and its impacts. Climate Change is now affecting every country on every continent. People are experiencing the significant impacts of climate change, which include changing weather patterns economics, rising sea levels, and more extreme weather events. Greenhouse gas emissions from Human activities are driving climate change and are continuing to rise. They are now at their highest levels in history. Without action, the world's average surface temperature is projected to rise over the 21<sup>st</sup> century and is likely to surpass 3<sup>o</sup>C. with some areas of the world expected to be warmer even before.

Space Technologies play a central role in

- Climate Change monitoring
- Weather forecasting
- Disaster Management
- Search and Rescue Operations

Acknowledging that the United Nations Framework connection on Climate Change is the primary international forum for negotiating the global response to climate change.

GLOBAL PARTENERSHIP ON SPACE TECHNOLOGY APPLICATIONS FOR DISASTER RISK REDUCTION. (GP-STAR).

SPACE CLIMATE OBSERVATORY

9<sup>th</sup> Multi-Stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals<sup>17</sup>

**“Accordingly, the theme for the STI Forum 2024 is: “Science, technology, and innovation for reinforcing the 2030 Agenda and eradicating poverty in times of multiple crises: the effective delivery of sustainable, resilient and innovative solutions.**

[UN 2025 Ocean Conference | Department of Economic and Social Affairs<sup>18</sup>](#)

“The high-level 2025 United Nations Conference to Support the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development (the 2025 UN Ocean Conference) will be co-hosted by France and Costa Rica and held in Nice, France, from 9 – 13 June 2025.”

### **UN 2023 Water Conference 22-24 Mar 2023 New York<sup>19</sup>**

“Water is a dealmaker for the Sustainable Development Goals, and for the health and prosperity of people and planet. But our progress on water related goals and targets remains alarmingly off track, jeopardizing the entire sustainable development agenda.”

UN Ocean Conference Lisbon, Portugal

[2022 UN Ocean Conference | United Nations<sup>20</sup>](#)

We must conserve and sustainably use the oceans, seas and marine resources for sustainable development. The overarching theme of the Conference is "Scaling up ocean action based on science and innovation for the implementation of Goal 14: stocktaking, partnerships and solutions".

### **OUR OCEAN, OUR FUTURE, OUR RESPONSIBILITY**

"The ocean is fundamental to life on our planet and to our future. The ocean is an important source of the planet's biodiversity and plays a vital role in the climate system and water cycle. The ocean provides a range of ecosystem services, supplies us with oxygen to breathe, contributes to food security, nutrition and decent jobs and livelihoods, acts as a sink and reservoir of greenhouse gases and protects biodiversity, provides a means for maritime transportation, including for global trade, forms an important part of our natural and cultural heritage and plays an essential role in sustainable development, a sustainable ocean-based economy and poverty eradication."

“POLITICAL DECLARATION OF THE 2022 UNITED NATIONS OCEAN CONFERENCE”

UNITED NATIONS

CLIMATE ACTION

Net Zero Coalition | United Nations<sup>21</sup>

## US GOVERNMENT ACTIONS ON ENVIRONMENTAL SUSTAINABILITY

THE WHITE HOUSE<sup>22</sup>

PRESIDENT BIDEN'S HISTORIC CLIMATE AGENDA

US HOMELAND SECURITY DEPARTMENT

ADDRESSING CLIMATE CHANGE<sup>23</sup>

### **DHS Video by OPA Multimedia Services /Released**

Secretary Alejandro Mayorkas Delivers Remarks at the Leaders Climate Summit.

Video URL: <https://www.dhs.gov/medialibrary/assets/videos/23519>

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY(EPA)

CLIMATE CHANGE<sup>24</sup>

EPA United States of America Nonattainment Areas for Criteria Pollutants  
(Greenbook)<sup>25</sup>

EPA Strategic Plan 2022-2026<sup>26</sup>.

Incorporating Sustainability in the US Environmental Protection Agency<sup>27</sup>

VIDEO

Sustainability and the U.S.EPA.mov

Video URL: <https://youtu.be/dXslHdzLzt0>

US General Services Administration (GSA)

Climate Action and Sustainability

GSA: Tackling the Climate Crisis<sup>28</sup>

US Department of State: Climate Crisis<sup>29</sup>

FEDERAL SUSTAINABILITY PLAN<sup>30,44</sup>

OFFICE OF THE FEDERAL CHIEF SUSTAINABILITY OFFICER

COUNCIL ON ENVIRONMENTAL QUALITY

US Department of Energy



Climate Change<sup>31</sup>

## CLIMATE CHANGE AND CHEMISTRY

### 1. American Chemistry Council<sup>32</sup>

Effective Solutions that reduce Greenhouse Gas Emissions

#### 1. American Chemical Society (ACS)

##### **Global Climate Change**

ACS Position Statement<sup>33</sup>

#### 2. World Economic Forum<sup>34</sup>

Chemistry is part of the solution to climate change

## UNITED NATIONS

Peace, dignity, and equality on a healthy planet<sup>35</sup>.

Support Sustainable Development and Climate Action.

## UNITED NATIONS CLIMATE ACTION

CLIMATE AMBITION SUMMIT<sup>36</sup>

20 September 2023, United Nations Headquarters, New York

UNITED NATIONS

Climate Action

Protecting the world's biodiversity<sup>37</sup>

UNITED NATIONS

Climate Change

VIDEO

Climate Change impacts our rights.

Video URL: <https://www.youtube.com/watch?v=v8SmSc4AhLI>

United Nations

Climate Change

VIDEO

Hindou Oumarou Ibrahim, AFPAT Chad, speaks at United Nations PARIS Agreement signing, 22 April 2016.

Video URL: <https://www.youtube.com/watch?v=n1b7ZskKukE>

United Nations

Climate Action<sup>39</sup>

**Science Solutions and Solidarity**

## For a livable planet

United Nations

ACT NOW<sup>40</sup>

### REFERENCES:

1. [Goal 13 | Department of Economic and Social Affairs \(un.org\)](#)
2. United Nations Department of Economic and Social affairs  
  
Sustainable Development: <https://sdgs.un.org/>
3. Sustainable Development Goals: [Home - United Nations Sustainable Development](#)
4. The Sustainable Development Goals Report 2024 — SDG Indicators (un.org)
5. [What Is Climate Change? | United Nations](#)
6. 13 CLIMATE ACTION: <https://www.un.org/sustainabledevelopment/climate-change/>
7. SPRINGER LINK: <https://link.springer.com/article/10.1007/s42398-019-00092-y>
8. UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS Climate Action: [Myth Busters | United Nations](#)
9. Tackling Climate Change: <https://www.un.org/sustainabledevelopment/climate-action/#:~:text=Goal%2013%20calls%20for%20urgent,well%20below%202%20degrees%20Celsius>
10. Paris Agreement: <https://www.un.org/sustainabledevelopment/climate-action/>
11. Resourcing The Energy Transition  
  
[https://www.un.org/sites/un2.un.org/files/report\\_sg\\_panel\\_on\\_critical\\_energy\\_transition\\_minerals\\_11\\_sept\\_2024.pdf](https://www.un.org/sites/un2.un.org/files/report_sg_panel_on_critical_energy_transition_minerals_11_sept_2024.pdf)
12. UN Environment Program: [UNEP - UN Environment Program](#)
13. <https://www.unep.org/topics/chemicals-and-pollution-action/circularity-sectors/green-and-sustainable-chemistry>

14. [UNEP and the Sustainable Development Goals | UNEP - UN Environment Program](#)
15. Environment Related Targets:  
<https://wedocs.unep.org/bitstream/handle/20.500.11822/27284/SDGs%20related%20to%20Environment%2024.01.17.pdf?sequence=2&isAllowed=y>
16. International Efforts for using space for Climate Action:  
<https://www.unoosa.org/oosa/en/ourwork/space4sdgs/sdg13.html>
17. [9th Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals | Department of Economic and Social Affairs \(un.org\)](#)
18. [UN 2025 Ocean Conference | Department of Economic and Social Affairs](#)
19. UN 2023 Water Conference: <https://www.un.org/waterforpeople/>
20. [2022 UN Ocean Conference | United Nations](#)
21. Net Zero Coalition | United Nations [Net Zero Coalition | United Nations](#)
22. The US WHITE HOUSE President Biden Climate Agenda:  
<https://www.whitehouse.gov/climate/>
23. US Homeland Security Department. Addressing Climate Change:  
<https://www.dhs.gov/climate-change>
24. EPA Climate Change: <https://www.epa.gov/climate-change>
25. EPA Nonattainment Areas for Criteria Pollutants (Greenbook)  
<https://www.epa.gov/green-book>
26. EPA Strategic Plan 2022-2026.  
<https://www.epa.ie/publications/corporate/governance/EPA-Strategic-Plan-2022--2026.pdf>
27. <https://www.nationalacademies.org/our-work/incorporating-sustainability-in-the-us-environmental-protection-agency>
28. GSA: Tackling the Climate Crisis: <https://www.gsa.gov/climate-action-and-sustainability>
29. <https://www.state.gov/policy-issues/climate-crisis/>
30. <https://www.sustainability.gov/federalsustainabilityplan>
31. US Department of Energy Climate Change <https://www.energy.gov/climate-change>

32. [https://www.americanchemistry.com/driving-safety-sustainability/climate#:~:text=Chemistry%20is%20a%20crucial%20element,greenhouse%20gas%20\(GHG\)%20emissions.](https://www.americanchemistry.com/driving-safety-sustainability/climate#:~:text=Chemistry%20is%20a%20crucial%20element,greenhouse%20gas%20(GHG)%20emissions.)
33. Global Climate Change American Chemical Society Position Statement  
<https://www.acs.org/policy/publicpolicies/sustainability/globalclimatechange.html>
34. World Economic Forum :  
<https://www.weforum.org/agenda/2021/12/green-chemistry-manufacturing-climate-change/>
35. [Support Sustainable Development and Climate Action | United Nations](#)
36. Climate AMBITION SUMMIT 2023:  
<https://www.un.org/en/climatechange/climate-ambition-summit>
37. Protecting the world's Biodiversity:  
<https://www.un.org/en/climatechange/thought-leaders-elizabeth-mrema>
38. <https://www.unep.org/evaluation-office/our-evaluation-approach/sustainable-development-goals>
39. UNITED NATIONS Climate Action [Climate Change | United Nations](#)
40. <https://www.un.org/en/actnow>
41. [Climate Action and Synergies | Department of Economic and Social Affairs \(un.org\)](#)
42. <https://www.unep.org/publications-data>
43. <https://www.unep.org/data-resources>
44. <https://www.sustainability.gov/leadingbyexample.html>