Environmental dimension of SDG 13

Controlling our changing climate both requires environmental and biodiversity restoration, and will help recover habitats and biodiversity already threatened by climate change and its causes today. Restoring degraded habitats such as mangrove forests and peatlands reduce risks related to climate change impacts, will act as a vital carbon sink and promote biodiversity recovery.

The speed with which we combat climate change will have fundamental environmental consequences: if we control global warming to 1.5°C, coral reefs will decline by 70-90%; at 2°C, virtually all coral reefs would be lost. Insects, vital for pollination of crops and plants, likely to lose half their habitat at 1.5°C; at 2°C; this is almost twice as likely. (IPCC)

Gaps identified, key challenges and policies to address them

Global greenhouse gas emissions show no signs of peaking, recording a high of 53.5 GtCO2e in 2017. Emissions from fossil fuels, industry and cement show a 1.2 percent increase in 2017. Emissions from G20 countries as a group will not have peaked by 2030 unless there is a rapid increase in ambition and action.

The SDG 13 Targets

- 13.1 Strengthen resilience and adaptive capacity to climate impact
- 13.2 Integrate climate change measures into national policies, strategies and planning
- 13.3 Improve climate education, awareness, human and institutional capacity
- 13.4 Mobilize $100 billion annually by 2020 to address the needs of developing countries in meaningful adaptation and transparency on implementation
- 13.5 Raise capacity for effective climate change-related planning and management in least developed countries

Climate change: the facts

- 0.9 degrees: how much the planet’s average surface temperature has risen by since the late 19th century, driven by increased carbon dioxide and other human-made emissions into the atmosphere. (NASA Global Climate Change)
- 53.5 GtCO2: the total annual global greenhouse gas emissions in 2017 – the highest ever recorded, with no signs of peaking. (EGR 2018)
- Impacts of a 0.9-degree increase are here today: increased frequency and magnitude of extreme weather events, heatwaves and storms, droughts, wildfires and flooding with loss to human life, habitat and biodiversity; changes in the distribution of disease vectors; exacerbation of air pollution and its health impacts; decreases in water supply with impacts on crop yields, food prices; increases in regional security risks driven by resource scarcity and unpredictability.
- Actions of the global community to date are insufficient: current commitments expressed in the Nationally Determined Contributions (NDCs) are inadequate to bridge the emission gap by 2030. (EGR 2018)

The current commitments expressed in the Nationally Determined Contributions (NDCs) are inadequate to bridge the emission gap by 2030. To attain the Paris Agreement Goal, the level of ambition expressed in the NDCs needs to be tripled for the 2-degree scenario and increased five-fold for the 1.5-degree scenario.

Support for climate change action is vulnerable to pro-fossil fuel propaganda. Potentially left-behind and under-reached audiences and stakeholders are at risk of being mobilized against climate action, without advance engagement and support for just transitions.
Non-state individuals, audiences, companies, organizations and subnational actors play important roles. Public/private partnerships are offering new solutions; public engagement is motivating bolder ambition. The number of participating NSAs is rising. There are now more than 7,000 companies with at least $36 trillion in revenue that have pledged mitigation action.

Examples of policies and practices that are working

UNEP works with governments, local authorities, cities, and audiences, focusing on the following areas:

**Climate Change Mitigation**

Low and zero emission approaches across energy, agriculture, buildings, forestry, industry and transport have the potential to reduce emissions by 33 GtCO₂e per year by 2030, and control temperature rise to under 2°C.

UNEP is closely linked to SDG 4, SDG 7, SDG 8 and SDG 12 to help the transition towards a sustainable green economy. It provides support to effectively communicate climate action, decarbonize schools, include climate in curricula, ensure access to renewable energy and establish of green jobs. The number of jobs created in the renewable energy sector grew by 5.3% in 2017 (10.3 million jobs).

**Climate Adaptation**

UNEP is helping more than 50 countries to adapt to the challenges of climate change. The Global Environment Facility (GEF) invests more than $173 million in UN Environment-supported climate change adaptation projects.

UNEP spearheaded the formation of the Climate & Clean Air Coalition (CCAC), that unites governments, civil society and the private sector to improve air quality and reduce short-lived climate pollutants (SLCP) across sectors.

**Reducing Emissions from Deforestation and Degradation and enhancing forest carbon stocks (REDD+)**

The Paris Climate Agreement recognizes the central role of forests in achieving the goal of keeping temperatures well below 2°C. UNEP is taking the lead through the UN-REDD Programme in partnership with other agencies to address deforestation and forest degradation.

UNEP’s work on nature-based solutions to climate change are closely linked with efforts to deliver SDG 14 and SDG 15.

**Key messages**

- **Urgency.** We’re facing an existential crisis and rapid prioritization of attention and action is necessary.

- **Opportunity.** We have the science, knowhow and finance it needs to move to a sustainable development pathway, if we act rapidly. If we do not act, we risk runaway global warming, which we do not have the financial or technological ability to solve.

- **No Excuses.** Countries can decarbonize their economies without putting them into recession, with benefits to the health and economic opportunities of their citizens.

- **Agriculture & land-use:** Scale up investments, increase productivity, shift to sustainable proteins and halve food waste.

- **Buildings & infrastructure:** Retrofit existing buildings, establish climate smart urban planning and building standards, with urgent attention paid to reducing emissions from refrigeration and cooling.

- **Energy:** Immediately stop investing in fossil fuel energy, incentivise large scale investment into renewable energy, invest in efficiency standards and support just transitions.

- **Industry:** Halve methane leaks and incentivise efficiency and usage of renewable energy in production, incentivize new efficiency standards for cooling and heating.

- **Transport:** Enforce vehicle efficiency standards, incentivize zero-emission transportation and non-motorized mobility.

For more information, please visit our website: [https://www.unenvironment.org/](https://www.unenvironment.org/)