1. Introduction

Climate change is an issue affecting ecosystems, economies, and societies globally. That's why all countries need policy frameworks which are suggested to include environmental education and the development of green career paths to meet the demands of a sustainable economy and governance structures in guiding climate action.

2. Policy and Governance in Climate Change

Policy frameworks shape the actions and regulations needed to combat climate change at local, national, and global levels and governance structures ensure the implementation, monitoring, and enforcement of those climate policies.

Several international climate change conventions and actions have significantly built global efforts to address climate change. These frameworks and agreements have brought nations together to collaborate on reducing greenhouse gas emissions, adapting to climate impacts, and promoting sustainability. Here are some of the most impactful ones:

3. Key International Conventions and Agreements on Climate Change

1. United Nations Framework Convention on Climate Change (UNFCCC) – 1992

Signed in 1992 at the Earth Summit in Rio de Janeiro, it set the stage for future global climate agreements. It established the principle of common but differentiated responsibilities, recognizing that all countries are responsible for addressing climate change, but developed nations should take the lead.

2. Kyoto Protocol – 1997

The Kyoto Protocol, adopted in 1997, was a legally binding international treaty that committed developed countries to reducing their greenhouse gas emissions based on targets negotiated for each country.

3. Paris Agreement – 2015

The Paris Agreement, adopted at COP21 in 2015, is a landmark international treaty that aims to limit global warming to well below 2°C above pre-industrial levels, with efforts to limit it to 1.5°C.

4. The Kyoto Mechanisms: Emissions Trading, CDM, and JI

Under the Kyoto Protocol, three market-based mechanisms were created to help countries meet their emissions reduction targets: Emissions Trading: Clean Development Mechanism (CDM): Joint Implementation (JI):

5. Montreal Protocol on Substances that Deplete the Ozone Layer – 1987

The Montreal Protocol is considered one of the most successful international environmental agreements. Its implementation has led to a dramatic reduction in ozone-depleting substances, and its associated climate benefits include preventing the release of millions of tons of CO2-equivalent emissions.

6. Global Climate Finance Mechanisms: Green Climate Fund (GCF) and Adaptation Fund

The Green Climate Fund (GCF) was established to provide funding to developing countries for climate mitigation and adaptation projects. The Adaptation Fund supports vulnernerable countries in adapting to the impacts of climate change.

7. IPCC Reports (Intergovernmental Panel on Climate Change)

The IPCC, established by the UN and the World Meteorological Organization (WMO), assesses the science related to climate change, its impacts, and potential adaptation and mitigation strategies.

8. COP Summits (Conference of the Parties)

COP is the decision-making body of the UNFCCC. COP summits play a central role in shaping international climate policy and fostering global cooperation. They provide a platform for countries to make new commitments, update their NDCs, and discuss climate finance and technology transfer.

9. The 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs)

In 2015, world leaders adopted the 2030 Agenda for Sustainable Development, which includes 17 SDGs, one of which (SDG 13) specifically focuses on climate action. The SDGs aim to eradicate poverty, protect the planet, and ensure prosperity for all by 2030.

10. The 2021 Glasgow Climate Pact (COP26)

At COP26 in Glasgow, countries made new commitments to accelerate climate action, including stronger targets for emissions reductions, efforts to phase out coal, and commitments to increase climate finance for developing countries.

These international conventions, actions, and agreements have collectively shaped the global response to climate change, advancing both policy frameworks and practical initiatives for addressing environmental challenges.

Besides these guiding actions there is also a certain need to mention several guiding documents which offer a foundation for up-to-date and evidence-based environmental and climate education. Those documents are:

1. **UNESCO Education for Sustainable Development (ESD) Framework**: This document includes pedagogical approaches, global competencies, and recommendations.
2. **Intergovernmental Panel on Climate Change (IPCC) Reports**: These reports provide the latest scientific data on climate change, including the impacts, risks, and recommended strategies for mitigation and adaptation
3. **OECD Environmental Education Policy and Practices Report**: This report offers insights into effective environmental education policies and practices across various countries.
4. **The Tbilisi Declaration (UNESCO-UNEP, 1977)**: It defines the objectives and principles that underpin environmental education programs worldwide.
5. **Next Generation Science Standards (NGSS)**: These standards outline specific learning goals for students, particularly in environmental science.
6. **CLIL (Content and Language Integrated Learning) Teaching Guide**: It offers relevant strategies for integrating language learning into environmental and climate science education.
7. **Global Environmental Outlook (GEO) Reports**: Published by the United Nations Environment Programme (UNEP), these reports present data and analysis on environmental issues worldwide.
8. **International Youth White Paper on Climate Action**: Produced by youth networks and organizations, these documents often provide unique insights into how young people perceive and address climate issues.
9. **UNESCO Declaration with ethical principals from 2017 into Climate Change:** It expresses the concern of UNESCO Member States that climate change could create morally unacceptable damage and injustice.

Considering the initiatives and the documents created, it is observed that there have been impactful actions. However, much more action is needed to achieve long-term climate goals and international cooperation is the key to mitigate the effects of climate change.

Our **LeMoon** project has given us that chance of international cooperation. While working on the project our studies often end up at policy frameworks which convinced us to make collaboration with the policymakers. We could connect with policymakers with the efforts of each partner, specifically **AFAD – Manisa City Disaster and Emergency Directorate** – as it is also a governmental organisation studying policy frameworks itself.
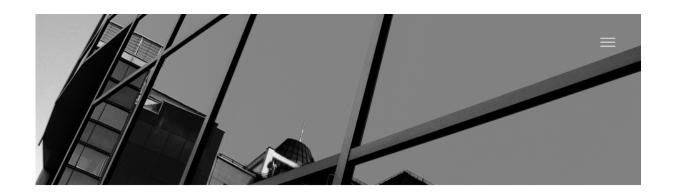
Under the roof of Manisa AFAD **LeMoon's Youth Team** came together at a forum event. They discussed environmental challenges and climate crisis in different committees and released a solution proposal which has been forwarded to the policymakers.

INTERNATIONAL FORUM

Le_Moon:
Love Earth to
the Moon and
Back

ABOUT FORUM
VISION

It's all important to provide young people with an environmental education that will enable them to define environmental problems, collect relevant information and make correct decisions

4. Recommendations for Policymakers

- **Strengthen Climate Education**: Investing in climate literacy programs within educational institutions and communities builds a knowledgeable and prepared population.
- **Support for Green Technology and Innovation**: Grants, subsidies, and favorable tax policies encourage the development of clean energy, waste management, and water conservation Technologies.
- **Increase Investment in Renewable Energy**: Incentives and government-supported projects foster transition from fossil fuels by promoting solar, wind, hydro, and other renewable sources.
- **Enforce Environmental Regulations**: Implementing and enforcing regulations limit pollution, safeguard ecosystems, and encourage responsible resource use.
- **Focus on Climate Equity**: Addressing environmental justice by supporting policies that benefit marginalized communities protects indigenous rights, recognizing their unique relationship with the environment.

5. Project- Specific Recommendations for Policymakers

The project has resulted in an e-curriculum, e-modules and e-learning platform. To effectively integrate the Environmental Education and Climate Change e-Curriculum, e-modules and e-learning platform into school education, collaboration among the Ministry of National Education, environmental organizations, and school administrators is essential. The authorities should conduct initial teacher training and orientation programs to familiarize educators with the project methodology, content, and interactive approach. Schools could adopt a blended learning model, where students engage with digital content enhancing both face-to-face and remote learning environments. The project results can be piloted within selected schools across regions to gauge their impacts and adapt them based on teacher and student feedback. Schools could further support the project works by organizing environmental clubs or extracurricular activities that promote hands-on projects, discussions on current environmental policies, and collaboration with local communities on sustainability initiatives. By fostering environmental literacy and sustainability practices through this project, students all over Europe will be better equipped to address and mitigate the impacts of climate change on a local, national, and global scale.

6. Conclusion

A strong, collaborative approach is essential in addressing the complex challenges posed by climate change. Policies and governance frameworks, coupled with education and a well-prepared workforce, can pave the way toward a sustainable, resilient future.

UNESCO policy lab:

"*Various movements, including those seeking gender, climate, and economic justice need to coalesce to pressure for eco-social welfare (Jones and O'Donnell, 2018). At every level, whether in ideas, language, or imagination, collective mobilization, and inclusive participation are needed to build our transformative power*"(Murphy, 2022)

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