

Understanding the mechanism to implement the Paris Agreement to the UNFCCC

United Nations University (UNU-IAS) Autumn 2023

Lecturers:

Dr Akio Takemoto, Dr Himangana Gupta and Dr Atsushi Sato

Contact Information:

atakemoto@unu.edu, gupta@unu.edu, atushi.sato@unu.edu

1. Course Description

The climate negotiations process started in 1992 when countries signed the international treaty — United Nations Framework Convention on Climate Change (UNFCCC) during the Rio Earth Summit. This Convention was the result of the revelation that climate change was unequivocal and anthropogenic. The UNFCCC had put in place several principles through its 26 articles, laying the foundation for mitigation action, adaptation, finance, technology, and monitoring and reporting. The first protocol under the UNFCCC, the Kyoto Protocol, agreed upon in 1997, furthered the objective of the Convention, with set timelines and targets. However, this protocol was not considered fully effective in abating global greenhouse gas emissions to the level needed. Therefore, the Paris Agreement (PA) was adopted in 2015 during the 21st Conference of the Parties to the UNFCCC. It commits all countries to climate action based on their capability and intent. The Agreement is being celebrated as a milestone in the history of climate negotiations as it is hoped that it will be key to implementing climate-positive solutions and also enhancing climate governance from local to national levels.

Even with the past efforts to abate climate change, human activities caused approximately 1.1°C of global warming above pre-industrial levels, which is likely to reach 1.5°C by 2040 if it continues to increase at the current rate as per the Sixth Assessment Report of the Intergovernmental Panel on Climate Change in 2021. Therefore, PA holds much more responsibility to tackle the global crisis in a shorter span of time. The impact of PA is expected to be more far-reaching, including on all domains of development, namely the economic, social and environmental, as well as on all countries. The world has already pledged to make the best of its efforts to do away with carbon intensive technology and be less dependent on non-renewable energy resources.



With increased complexities in the climate change regime, including new market mechanisms, transparency arrangements, reporting requirements, and global stocktake assessments, it has become much more important to understand the modalities under the Paris Agreement (PA) for its effective implementation at the national level and achievement of global temperature and adaptation goals set under PA. Following the Common but Differentiated Responsibilities principle from the UNFCCC, PA provides some flexibility associated with finance, technology, and transparency to developing countries. This makes finance, capacity building, and technology transfer also relevant topics under the agreement. Therefore, beginning with an overview of the UNFCCC, and its Kyoto Protocol, this course will discuss each article of the Paris Agreement and its implementation and governance mechanism in detail.

2. Requirements and Grading Policy Class participation and discussion (10%)

Assignment 1: Class presentation 1 (20%)

- Analysis of national GHG emissions and removals, including profile and trend, and key mitigation actions for a selected country.
- For the above, an analysis of NDC and GHG from national documents should be carried out.
- Time: 10 minutes

Assignment 2: Class Presentation 2 - (30%)

- In the context of Assignment 1, identify potential ways to improve NDC and GHG reporting.
- Identify the mitigation and adaptation actions needed to meet the NDCs.
- Identify key national circumstances, including vulnerability, adaptation, and loss and damage, etc that may affect their ability to meet the national commitment under PA.
- Time: 20 minutes

Assignment 3: Research paper (40%)

- Write a research paper based on Assignment 1 & 2 covering key analysis of GHG and NDCs, ways of improving transparency in GHG reporting, enablers and barriers to achieve the national targets, key mitigation and adaptation strategies, and role of finance, international cooperation, and stakeholder engagement, etc. in effective implementation of PA in the selected country.
- Format:



- Arial 12, 1.5 space, justified alignment, double side, cover page, references (in-text citation and bibliography can include both reports and academic articles)
- Harvard referencing style
- o Maximum of 3,500 words (excluding references)

3. Course Objectives and Learning Goals:

This course will aim at enhancing the understanding of the students on the key climate agreements, and their modalities and relevance for the Paris Agreement. It will discuss the key articles of the agreement in detail, including that on climate change mitigation (Article 4), market mechanisms (Article 6), climate change adaptation (Article 7), Finance (Article 9), transparency (Article 13), and Global Stocktake (GST, Article 14). The course will also examine the enablers and barriers in the context of the science-policy interface in the current climate regime. First, the course will present an overview of the UNFCCC agreement and its Kyoto Protocol, discussing key modalities and goalposts. Second, it discusses each key article, as mentioned above, in the context of negotiations, rules and procedures agreed, and its relevant science-policy aspects. Third, the course will provide an opportunity to develop students' ability to explore information on climate change data and policy and measures which are necessary to consider solutions of different goals of the Paris Agreement for a common temperature goal.

4. Course Outline

| Lecture / Assignment | Date | Content | Instructor | | |
|---|----------------------|---|--|--|--|
| Block 1: Climate Science, Mitigation, and Reporting | | | | | |
| Lecture 1 | 3 rd Oct | Orientation and course overview Introduction to climate science and need for global agreements | Dr. Akio Takemoto Dr. Himangana Gupta Dr. Atsushi Sato | | |
| Lecture 2 | 10 th Oct | - Overview of UNFCCC and Kyoto Protocol - Overview of the Paris Agreement | Dr. Himangana Gupta Dr. Atsushi Sato | | |
| Lecture 3 | 17 th Oct | Climate mitigation Part 1 - Transparency framework (Article 13) - Mitigation rules and NDCs (Article 3 and 4) | Dr. Atsushi Sato | | |
| Lecture 4 | 24 th Oct | Climate mitigation Part 2 - GHG inventories: Monitoring, calculation, and data management | Dr. Atsushi Sato | | |



| Lecture / Assignment | Date | Content | Instructor | | |
|--|--|---|--|--|--|
| Lecture 5 | 31st Oct | Assignment 1 – Class presentation (NDCs and GHG emissions) | Dr. Akio Takemoto Dr. Himangana Gupta Dr. Atsushi Sato | | |
| Block 2: Adaptation, loss and damage, and global stocktake | | | | | |
| Lecture 6 | 7 th Nov | Climate adaptation Part 1 - Impacts, vulnerability and adaptation needs - Global goal on adaptation and reporting - Introduction to loss and damage | Dr. Himangana Gupta | | |
| Lecture 7 | 14 th Nov | Climate adaptation Part 2 - Adaptation planning and implementation - Loss and damage estimations; finance | Dr. Naoyuki Okano Ms. Nagisa Shiiba (IGES) | | |
| Lecture 8 | 21st Nov | Integrating climate mitigation and adaptation - Land-based options such as REDD+, NbS, EbA - Case examples of implementation | Dr. Himangana Gupta Dr. Atsushi Sato | | |
| Lecture 9 | 28th Nov | - Action for Climate Empowerment under PA - Global Stocktake | Dr. Himangana Gupta | | |
| Lecture 10 | 14 th Dec | Assignment 2 – Class Presentation: Mitigation and adaptation | Dr. Akio Takemoto Dr. Himangana Gupta Dr. Atsushi Sato | | |
| Block 3: Mea | Block 3: Means of implementation - Finance and international cooperation | | | | |
| Lecture 11 | 9 th Jan | International cooperation of climate change - Example of Japan International Cooperation Agency (JICA) - Article 10, 11 and 12 | JICA - Office for Climate Change | | |
| Lecture 12 | 16 th Jan | Climate finance and role of Private sector (Article 2.1.(c) and 9) | Dr. Kanako Morita | | |
| Lecture 13 | 25 th Jan | Paris Agreement Implementation: multistakeholder engagement (Article 10, 11 and 12) | Mr. Makoto Kato (OECC) | | |
| Lecture 14 | 30 th Jan | Market mechanisms under the Paris Agreement (Article 6) | tbc | | |
| Lecture 15 | 6 th Feb | Net-zero targets and relevance of circular economy for PA implementation | Dr. Joni Jupesta | | |
| Assignment 3 – Research paper (25th Feb 2024) | | | | | |

Important Information

Class Conduct & Etiquette

Students are expected to arrive on time and not to engage in disruptive behaviours during class, e.g., private conversations, using cell phones and other electronic devices, and reading newspapers. Cell phones should be switched off and stored in a bag. We wish to create an atmosphere of open and



tolerant discussion in the classroom and request students recognise every individual's right to have an opinion. The lecturer and other students should be treated with dignity and respect, particularly in discussions on contentious political issues where diverse opinions are likely to arise. However, we also recognise tolerance limits, and the lecturer reserves the right to request disciplinary action against any student who violates this policy or repeatedly shows disruptive behaviours in class.

Academic Misconduct

If evidence of academic misconduct on tasks and final test should be found, the student may receive a failing grade for the entire course and will be reported to the appropriate authorities for disciplinary action.

Computer Use in Class

The use of computers (including tablets) in the classroom is restricted to taking notes, reading the course material, or searching for course-related information on the internet. Any disruption of the class by cell phones, instant messaging programs, or other communication devices will not be tolerated. The lecturer reserves the right to revoke this permission if a student is found using a computer for any non-course-related activities.

Plagiarism & Academic Misconduct

Please be aware that the consequences of plagiarism are severe, and students found guilty of academic misconduct will be punished in accordance with UNU's academic honesty policies. The lecturer reserves the right to run all assignments through anti-plagiarism software provided by the UNU. If evidence of academic misconduct on the assigned presentations, the mid-term exam or the final essay should be found, the assignment will receive a failing grade. In case of repeated violations of academic conduct, the student may receive a failing grade for the entire course and will be reported to the appropriate authorities for disciplinary action.