

Environmental Politics and Climate Action: Environmental Policy Design

Master in International Development MID SEP-2024 S-1

Area International Relations

Number of sessions: 12

Term: Term 3

Category: elective

Language: English

Professor: **MIN HU**

E-mail: mhu@faculty.ie.edu

HU Min is the Director and Co-founder of the Institute of Global Decarbonization Progress (iGDP), an independent climate and energy think tank.

She was the funding Executive President for the Beijing Institute of Finance and Sustainability. HU Min also served as the China Advisor and the Head for Access to Cooling at the Kigali Cooling Efficiency Program, a global philanthropic program supporting the transition to clean and efficient cooling technologies. Before that, she was the Program Director for the Low Carbon Economic Growth and Environmental Management programs at Energy Foundation China.

HU Min has 20 years diverse experiences in sustainable development with a wealth of knowledge on climate policy, the carbon market, energy efficiency, green finance, and air quality management. She followed the international climate talk leading up to the Paris Agreement and worked on implementing the Kigali Amendment of the Montreal Protocol. She was involved in efforts to assist China in initiating its carbon market pilots and low carbon economic growth pilots in 2010. She has published articles and co-edited books on just transition, low-carbon cities and environmental governance.

Hu Min received a BA in Economics from Renmin University (China), MPA from Tsinghua University (China) and a Mid-Career MPA from Harvard Kennedy School. She finished her Doctoral Program on Environmental Economics in 2014. She is a Senior Fellow at Energy Innovation, a Non-Resident Senior Fellow at the Brookings Institution's Tsinghua Brookings Center, and a member of the World Economy Forum's Global Future Council for Clean Air.

Office Hours

Office hours will be on request. Please contact at:

Please contact mhu@faculty.ie.edu. Office hour: Friday 12:00-2:00PM.

Professor: **PEDRO PIRIS CABEZAS**

E-mail: ppiris@faculty.ie.edu

Dr. Pedro Piris-Cabezas is an economist and professional engineer working for Environmental Defense Fund (EDF), a global environmental advocacy organization with headquarters in New York City, representing more than 3 million members and supporters in the United States of America. Pedro works to establish lasting environmental policies that are scientifically sound, economically sensible, and effective in meeting the needs of diverse countries and communities, while promoting sustainable development and international cooperation to pave the road for a meaningful implementation of the Paris Agreement.

Currently, Pedro leads EDF's Aviation Team, working as an international climate negotiator at the intersection of United Nations' International Civil Aviation Organization (ICAO) and the United Nations Framework Convention on Climate Change (UNFCCC), as well as at the country and regional level. He also directs analysis and policy advocacy to promote the use of high-integrity, sustainable alternative fuels as well as carbon markets and other robust policy frameworks. In the context of ICAO, Pedro has participated in the design of global market-based measures to tackle climate change since 2013. Pedro co-lead the task group working on sustainability matters related to alternative aviation fuels that led to the adoption of ICAO's Sustainability Framework for Sustainable Aviation Fuels (SAF). In 2022, after eight years of research and analysis, Pedro authored EDF's High-Integrity SAF Handbook to help stakeholders take smart, future-proof steps to advance high-integrity SAF and decarbonize aviation.

Office Hours

Office hours will be on request. Please contact at:

ppiris@faculty.ie.edu

SUBJECT DESCRIPTION

Nowadays, environmental policy –and particularly climate change policy— holds a pivotal role in policy discussions globally. Regardless of academic backgrounds and career goals, the impact of environmental policies will be crucial throughout our professional journeys. Whether directly shaping policies, advocating for change as stakeholders, or navigating regulatory frameworks within our respective fields, the impact of these policies will resonate deeply.

LEARNING OBJECTIVES

The objective of this course is to empower all students with the competences needed to understand the intricate process of crafting environmental policies. We will explore the theory and practice behind the multifaceted steps involved in designing such policies. Engaging students in hands-on activities through complementary small group assignments, we will cover all essential steps vital for creating robust and impactful environmental policies. These steps encompass: (i) identifying and setting environmental policy goals, (ii) involving stakeholders and creating public awareness, (iii) assessing the suitability of policy instruments, (iv) navigating legislative and regulatory processes across supranational, national, or subnational levels, (v) designing "monitoring, reporting, and verification" mechanisms, and (vii) evaluating policy performance for continuous improvement.

Throughout this course, we will examine the interaction of climate policy with broader environmental and development policies, exploring how climate action has developed over time and how it connects to the 2030 Agenda and the Sustainable Development Goals. We will also explore concepts such as international cooperation, market-based measures, environmental justice, conservation, climate finance, public health, or voluntary action. This course will build on core MID courses and apply data analysis skills where applicable.

TEACHING METHODOLOGY

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. Professor's main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following:

Learning Activity	Weighting
Lectures	30.0 %
Discussions	30.0 %
Group work	10.0 %
Individual studying	30.0 %
TOTAL	100.0 %

PROGRAM

SESSION 1 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Governance

Part 1: Introduction

Part 2: Identifying and setting environmental policy goals at local, national, and global level.

In this session we will explore how to define clear and actionable environmental policy goals at local, national, and global levels. First we will dive into setting goals for international aviation as a case study, illustrating how these goals are translated into actionable regulations. Then we will also explore other international, national and local illustrations.

Technical note: Climate Change Mitigation: CORSIA. Chapter six. NOTE: in-depth readings (ICAO)
Technical note: Consolidated statement of continuing ICAO policies and practices related to environmental protection – Global Market-based Measure (MBM) scheme. NOTE: in-depth readings (ICAO)

Article: All About the NDCs. NOTE: in-depth reading, identify sections setting environmental goals. (UN)

Kyoto Protocol – International Aviation (art. 2.2)
<https://unfccc.int/resource/docs/convkp/kpeng.pdf> (NOTE: only read art. 2.2 on international bunkers)

U.N. International Civil Aviation Organization (ICAO), 2022, 37th Assembly, Resolution A37-19 2 (9 pages). https://www.icao.int/environmental-protection/37thAssembly/A37_Res19_en.pdf (NOTE: skim through the document and identify sections setting environmental goals).

ICAO General Assembly 2022, Resolution A41-21 on ICAO's long-term aspirational goal (12 pages, significant overlap with A37-19 2 https://www.icao.int/environmental-protection/Documents/Assembly/Resolution_A41-21_Climate_change.pdf (NOTE: skim through the document and identify sections setting environmental goals).

ICAO Global Framework for sustainable aviation fuels, lower carbon aviation fuels and other aviation Cleaner Energies (12 pages)
https://www.icao.int/Meetings/CAAF3/Documents/ICAO%20Global%20Framework%20on%20Aviation%20Cleaner%20Energies_24Nov2023.pdf (NOTE: skim through the document and identify sections setting environmental goals).

Kigali Amendment to Montreal Protocol: <https://ozone.unep.org/treaties/montreal-protocol/amendments/kigali-amendment-2016-amendment-montreal-protocol-agreed> (NOTE: skim through the document, in-depth reading for section #6.)

Madrid City Council's Air Quality and Climate Change Plan:
https://www.madrid.es/UnidadesDescentralizadas/Sostenibilidad/CalidadAire/Ficheros/PlanAire&C_C_Eng.pdf (NOTE: skim through the document.)

SESSION 2 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Governance

Involving stakeholders and creating public awareness.

In the realm of environmental governance, collaboration and dialogue with stakeholders and public awareness are essential for designing environmental policies that are effective, equitable, durable and socially acceptable. This session explores the principles, methods, and best practices of consultation and stakeholder engagement throughout the design process. Additionally, we will explore the importance of public awareness in both driving informed participation and fostering a culture of environmental stewardship.

Article: Sustainable Aviation Fuel Credit, Request for Public Comments, Notice 2023-06. (NOTE: in-depth reading). (Environmental Defense Fund)

Article: A North Star for Sustainable Aviation: Science, People and Nature. Pedro Piris-Cabezas and Glenda Chen. Stakeholder engagement. General advocacy. Illustration (blog): (NOTE: in-depth reading, short article.) (Environmental Defense Funds)

Public consultations (Inflation Reduction Act, SAF tax credits
<https://www.congress.gov/117/plaws/publ169/PLAW-117publ169.pdf> (3 pages: 136 STAT. 1932-1935) (NOTE: skim through it.)

U.S. Treasury Notice 2023-06, available at: <https://www.irs.gov/newsroom/treasury-irs-issue-guidance-on-newsustainable-aviation-fuel-credit>; (NOTE: skim through it.)

Targeted media campaigns: <https://www.edf.org/sustainable-aviation-fuels> (NOTE: watch one of the short campaign videos)

Stakeholder engagement: General media. Op-eds (WSJ: The Politics and Science of Jet Fuel https://www.wsj.com/articles/the-politics-and-science-of-jet-fuel-climate-change-sustainability-tax-credits-regulators-d1e46020?st=okhno13qy6fipf8&reflink=desktopwebshare_permalink (NOTE: optional, skim through content.)

See sample of related media coverage: <https://www.edf.org/sustainable-aviation-fuels> (NOTE: skim through it; media coverage available at the end of the website.)

SESSION 3 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Governance

Navigating legislative and regulatory processes across supranational, national, or subnational levels (1/4): United Nations (International Civil Aviation Organisation) & United States

Understanding the intricacies of legislative and regulatory processes is paramount for designing effective policies. Through case studies involving the United Nations' International Civil Aviation Organisation, the European Union, the United States and China, sessions 3 to 7 will provide a comprehensive overview of the mechanisms and dynamics involved at various levels of governance. Session 3 explores legislative and regulatory processes at the United Nations level and the United States, building on sessions 1 and 2.

Technical note: Paris agreement. Introduction to Article 6 on Cooperative Approaches. Article 6.2 and article 6.4.(pages 7-8). (NOTE: in-depth reading) (United Nations)

Article: Article 6 and its Glasgow Rulebook: the Basics. STEVE ZWICK. (Ecosystem Marketplace)

Article: Guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement. then read guidance for art. 6.2 and art. 6.4 approved in Glasgow COP26. NOTE: in-depth readings, identify intersection with international aviation. (FCCC/PA/CMA/2021)

United States: Introduction to legislative and regulatory processes (building on materials from Session 2).

Subnational: California Air Resources Board (CARB). Low Carbon Fuel Standard (LCFS) reform to include aviation as regulated sector, read overview <https://www.arb.ca.gov/lists/com-attach/33-lcfsupdate2023-AmcHb1wrBD5X11M8.pdf> (stakeholder submission). (NOTE: skim through the document)

U.S. Subnational. Legal issues. Federal preemption. Explore definition: <https://www.law.cornell.edu/wex/preemption>).

SESSION 4 (LIVE IN-PERSON)

Sustainability Topics:

- Environment

Navigating legislative and regulatory processes across supranational, national, or subnational levels (2/4): United States (continuation) and the European Union

Technical note: REGULATION (EU) 2023/2405 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL. (NOTE: in-depth reading) (Official Journal of the European Union)

Technical note: Sustainable aviation fuels – ReFuelEU Aviation. read original proposal from Q1 2020. and look for Environmental Defense Fund submission. (NOTE: in-depth readings) (European

Commission)

Introduction to the EU regulatory process. EC, EU Parliament and Council (co-decision), Trilogues. <https://www.consilium.europa.eu/en/council-eu/decision-making/ordinary-legislative-procedure/> (quick overview). (NOTE: optional reading)

EU Emissions Trading System-Aviation provisions (consolidated version of the Directive including latest amendments from 2023

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02003L0087-20230605>. (NOTE: skim through the document and identify sections related to aviation)

SESSION 5 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Governance

Navigating legislative and regulatory processes across supranational, national, or subnational levels (3/4): China (national and subnational)

This session offers an in-depth exploration of legislative and regulatory frameworks, emphasizing the intricate dynamics at supranational, national, and subnational levels. Using China as a primary example, we will analyze how policies are formulated and implemented across different governance layers, providing students with practical insights and a comprehensive understanding of the largest GHG emitters' unique legal and regulatory landscape.

Practical Case: China's Environmental Policy Process. Required. (University of Lund STV103 Department of Political Science)

Article: Public Participation in China's Environmental Lawmaking: In Pursuit of Better Environmental Democracy. 2017, 0, 1–28. Required. (Journal of Environmental Law)

Optional:

The Carbon Brief Profile China: <https://interactive.carbonbrief.org/the-carbon-brief-profile-china/>

OECD's Environmental Compliance and Enforcement in CHINA: <https://www.oecd.org/env/outreach/37867511.pdf>

Policy Making in China: Leaders, Structures and Processes: Kenneth Lieberthal & Michel Oksenberg, https://books.google.es/books?hl=en&lr=&id=7kgIN9KJwSwC&oi=fnd&pg=PR11&dq=china+environmental+policy+making+process&ots=0bZ_ZSVhlu&sig=p1jbM1JAmcl-xfyPaQNDzCUhViA#v=onepage&q=china%20environmental%20policy%20making%20process&f=false

Understanding China's NDC: <http://www.igdp.cn/wp-content/uploads/2022/04/2022-04-21-iGDP-Report-EN-NDC-3.0.pdf>

SESSION 6 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Governance
- Economic Development

Navigating legislative and regulatory processes across supranational, national, or subnational levels (4/4): From global treaty to corporate compliance.

This session offers a detailed analysis of international environmental agreements, using the implementation of Montreal Protocol's Kigali Amendment and UNFCCC's Paris Agreement as important context. It highlights the interactions between major greenhouse gas emitters, the challenges of implementing the treaty in key regions, and the importance of corporate involvement.

Required:

Article: Kigali Amendment to Montreal Protocol (UN)

Article: Indian Cooling Action Plan (Ozone Cell Ministry of Environment, Forest and Climate Change Government of India)

Optional:

National Determined Contribution (NDCs): <https://www.un.org/en/climatechange/all-about-ndcs#countries>

Reasons that Daikin Addresses the Environmental Impact of Refrigerants
<https://www.daikin.com/csr/information/influence/protocol#:~:text=Daikin's%20Position%20on%20the%20Kigali,Sooner%2C%20the%20Better%22%20approach>

[Report accuses China firms over ozone-depleting gas](#)

Multilateral Fund for the Implementation of the Montreal Protocol

<https://ndcpartnership.org/knowledge-portal/climate-funds-explorer/multilateral-fund-implementation-montreal-protocol>

SESSIONS 7 - 8 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Governance
- Economic Development

Assessing the suitability of policy instruments

In these sessions we will explore the diverse range of policy instruments available to address environmental challenges. The goal is to learn how to evaluate the effectiveness, efficiency, and feasibility of different policy tools such as market-based mechanisms and command and control regulations in achieving desired environmental outcomes while promoting sustainable development.

Session 7 readings:

The role of carbon prices and markets: "Estimating the potential of international carbon markets to increase global climate ambition" <https://doi.org/10.1016/j.worlddev.2023.106257> (14 pages, open source). (NOTE: **in-depth reading**)

Command and control regulation. Regulation under the United States Clean Air Act Section 231-233 (42 U.S. Code paragraphs 7571-7573) and <https://www.law.cornell.edu/uscode/text/42/7571> (then press "next" for paragraphs 7572 and 7573) (NOTE: skim through the document). Ex.: public health and non-CO2 climate impacts (environmental justice, criteria pollutants). EDF's nvPM letter to the U.S. Environmental Protection Agency, https://downloads.regulations.gov/EPA-HQ-OAR-2019-0660-0207/attachment_1.pdf (13 pages) (NOTE: **in-depth reading**).

Session 8 reading:

Ensuring the promotion of sustainable development as a core component of policy design. Ex. Sustainability criteria-ICAO CORSIA eligible fuels. Read EDF High Integrity SAF Handbook <https://www.edf.org/sites/default/files/2022-08/EDF%20HIGH-INTEGRITY%20SAF%20HANDBOOK.pdf> (section A.5.2, pages 21-24 and pages 27-29). (NOTE: **in-depth reading**).

SESSION 9 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Governance

Designing "monitoring, reporting, and verification" (MRV) mechanisms

This session will delve into the crucial role of robust MRV mechanisms in ensuring the effectiveness and accountability of environmental policies. We will explore the principles, methodologies, and challenges associated with MRV systems, as well as best practices for designing and implementing them.

Technical note: ICAO CORSIA MRV: Annex 16, Environmental Protection, Volume IV chapter 2 on MRV (10 pages)(NOTE: in-depth reading) (ICAO ENVIRONMENT)

Technical note: MRV of sustainable aviation fuels under ICAO CORSIA. ICAO document, CORSIA Eligibility Framework and Requirements for Sustainability Certification Schemes.(14 pages) (NOTE: in-depth reading) (ICAO)

UNFCCC Paris Agreement art. 13 (pages 16-18 https://unfccc.int/sites/default/files/english_paris_agreement.pdf) and its guidance on modalities, procedures and guidelines for the transparency framework https://unfccc.int/sites/default/files/resource/cp24_auv_transparency.pdf (36 pages with a focus on Section C paragraph 77) (NOTE: optional reading, but at least skim through the document and read Section C paragraph 77, making the connection to art. 6 of the Paris Agreement.)

SESSION 10 (LIVE IN-PERSON)

Sustainability Topics:

- Environment

Part 1: Evaluating policy performance for continuous improvement. Exercise involving Microsoft Power BI based on aviation emissions data from the European Union Emissions Trading System.

Part 2: Voluntary action by corporations (offsetting versus value chain emissions reductions)

In this session we will first explore the importance of systematic evaluation in assessing the effectiveness, efficiency, and equity of environmental policies. Then, we will delve into the role of voluntary initiatives and corporate sustainability strategies in addressing environmental challenges. We will examine the motivations, benefits, and limitations of voluntary corporate actions, as well as their potential to complement regulatory frameworks.

Working Paper: Voluntary action and its interaction with the Nationally Determined Contributions under the Paris Agreement: The imperative to avoid double counting.(section B.2. pages 32-50).NOTE: in-depth reading. (EDF)

Voluntary carbon market integrity initiative: <https://vcminegrity.org/wp-content/uploads/2023/11/VCMI-Claims-Code-of-Practice-November-2023.pdf> (NOTE: skim through the document, read executive summary and explore the rest of the document)

Science based target initiative (SBTi). <https://sciencebasedtargets.org/resources/files/SBTi-Corporate-Manual.pdf> (NOTE: skim through the document)

Read SBTi's module for the aviation sector: https://sciencebasedtargets.org/resources/files/SBTi_AviationGuidanceAug2021.pdf (NOTE: skim through the document)

Mitigation contributions under Paris Agreement art. 6.4 (outcome of COP 27, 2022): <https://www.goldstandard.org/blog-item/mitigation-contribution-under-article-6-key-understandings-and-what-it-means-vc> (NOTE: voluntary reading)

SESSION 11 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Governance
- Economic Development

Integrating environmental safeguards into economic and development policies: Using Sustainable Finance as a case

This session provides a comprehensive understanding of how environmental considerations can be effectively integrated into economic and development strategies, with a special focus on the evolving field of sustainable finance. We will explore the principles and cases of sustainable finance, reflecting the growing importance of eco-conscious policies in today's global economic landscape.

Required:

Article: Corporate Sustainability Reporting Directive (CSRD): EU Corporate Sustainability Reporting Directive (European Commission)

Technical note: EU Taxonomy for Sustainable Activities (European Commission)

Optional:

EU Sustainable Finance Disclosure Regulation (SFDR): KPMG - EU Sustainable Finance Disclosure Regulation <https://home.kpmg/xx/en/home/insights/2020/07/eu-sustainable-finance-disclosure-regulation.html>

China's Green Credit Guidelines: China Banking and Insurance Regulatory Commission - Green Credit Guidelines <https://www.cbirc.gov.cn/en/>

China's ESG Reporting Guidelines: Shanghai Stock Exchange - ESG Reporting Guide <http://english.sse.com.cn/aboutsse/esg/>

SESSION 12 (LIVE IN-PERSON)

Sustainability Topics:

- Environment

Group work assignment presentation and evaluation.

The last session will be devoted to the final evaluation with group work assignment presentations and a follow up with a Q&A session. The group work assignment will focus on a relevant environmental policy case study.

- **Illustrative case study idea:** sustainable aviation fuel (SAF) incentives. Students will be tasked with designing incentives to promote the production and use of SAF within the aviation industry. The case study will examine the potential benefits and challenges associated with SAF incentives and explores different policy options for incentivising SAF production and uptake. Key points of the analysis would include: overview of SAF and importance; rationale for incentives; evaluation of effectiveness; stakeholder engagement; lessons learned and best practices from existing experiences). The goal is for students to gain practical insights into the complexities of designing and implementing environmental policies.

Students will deliver a joint presentation of the group work assignment followed by a Q&A.

EVALUATION CRITERIA

Individual work (20%): Data analysis exercise.

Group work assignment (25%): Written report on a case study focusing on a relevant environmental policy (see further details under session 12).

Class participation (25%): Preparation of the sessions and participation in class exchanges and discussions.

Group presentation (30%): Presentation and Q&A of group work assignments.

criteria	percentage	Learning Objectives	Comments
Group Presentation	30 %		
Class Participation	25 %		
Group Work	25 %		
Individual work	20 %		

FAILING GRADE AND REASSESSMENT

When students receive a Fail in a course, they have the opportunity to present themselves for reassessment in order to earn the necessary credits toward graduation.

The reassessment of students should be scheduled between 5 and 10 working days after the review session takes place.

Grades for the reassessment are limited to a Low Pass and Fail.

Both, the initial Fail as well as the grade of the reassessment remain on the transcript. For the purpose of calculating the GPA however, only the grade of the reassessment is to be considered. Students receiving a failing grade in the reassessment of a course will not be able to continue in the program.

BEHAVIOR RULES

Please, check the University's Code of Conduct [here](#). The Program Director may provide further indications.

ATTENDANCE POLICY

Please, check the University's Attendance Policy [here](#). The Program Director may provide further indications.

ETHICAL POLICY

Please, check the University's Ethics Code [here](#). The Program Director may provide further indications.