A. COURSE OVERVIEW

Environmental problems typically arise from “market failures.” This course examines several environmental issues at local, national, and international levels, with a particular focus this year on the COVID-19 economic recovery and energy and climate change. The course explores the key fault lines between business and the environment and some of the potential remedies, including government regulation as well as potential related business opportunities. The schedule will also include guest lectures by relevant experts and industry representatives.

B. COURSE OBJECTIVES

The course exposes the students to the many nuances that characterize the interaction between the business world, the environment, and environmental policy. Most business activity impacts directly or indirectly the environment, by consuming non-reproducible resources, polluting water, air, and grounds, and contributing to climate change. There is both a risk to the environment from business practices, and also risks to businesses from environmental problems, including rising temperatures and sea levels, invasive species, freshwater shortages, overexploitation and extinctions, and global pandemics. Because of externalities, the market system is bound to produce more pollution than efficiency. This is the normative rationale for environmental policies whose goal is to reduce pollution-producing business activities. While economic science has often stark recipes for optimal regulatory instruments, in practice environmental policy is the outcome of a complex political process that mediates the desires of the citizenry, expressed via voting and interest groups, and those of the businesses themselves, which are channeled via the lobbying process.

Upon completion of this course, students will be able to:

- Understand the core challenges related to the business-environment intersection
- Participate in debates on the COVID-19 economic recovery and the energy transition
- Get a sense of how different businesses react differently to integrating sustainability into their business model and value chains
● Understand what businesses and sectors might be facing difficult times as a result of environmental policies, and which ones might have new opportunities to grow
● Have a deeper understanding of the challenge of the deep impacts of the energy transition on existing sectors and businesses

C. TEACHING AND LEARNING PHILOSOPHY

Healthy balance of theory and practice; focus on real-world sectors and problems; guest lectures to share expertise; case-based teaching; active student involvement.

D. ASSESSMENT

Assessment components

You are expected to attend class in person or remote synchronously. Failure to submit or fulfill any required component may result in failure of the class, regardless of grades achieved in other assignments.

● Class Participation (30%): You are expected to attend class in person or remote synchronously. Your active participation in class and attendance will be reflected in this part of the course requirements. For some classes, there will be short assignments to prepare the class. I also value questions and comments, and students are also encouraged to bring up a topic from the media and news themselves for critical discussion. I will also ask you to prepare questions ahead of the guest lectures (based on readings) and send them to me.

● Midterm Exam (20%): Before Spring Break, students will be given a midterm exam to assess their understanding of the theoretical and knowledge foundation portion of the course. This midterm will take place in class and will consist of multiple-choice questions as well as essay questions. The midterm will be closed book.

● Research Note (30%): Each student is required to prepare a research note of about 10 pages (excluding figures & tables) – Font 12, Times New Roman, 1.15 spacing. This research note needs to address a company and evaluate how the company relates to the environment. Students will receive an outline of what will be expected in terms of content. The note will have a data component and an analytical component. The data component will require the student to do research on primary sources such as government data, trade data, company sustainability reports, etc.

● Presentation & final (20%): Students will be invited to shortly present their research note. They will also draw one question to debate a topic from the second half of the course (i.e., after the midterm). This will take place in class and last about 15 minutes per student.

Late submissions

Work submitted late receives a penalty of 2 points on the 100-point scale for each day it is late (including weekends and public holidays), unless an extension has been approved (with a
doctor's note or by approval of NYU-DC site staff), in which case the 2 points per day deductions start counting from the day the extended deadline has passed. Without an approved extension, written work submitted more than 5 days (including weekends and public holidays) following the submission date receives an F. Assignments due during finals week that are submitted more than 3 days late (including weekends and public holidays) without previously arranged extensions will not be accepted and will receive a zero. Any exceptions or extensions for work during finals week must be discussed with the Washington, DC Site Director. Students who are late for a written exam have no automatic right to take extra time or to write the exam on another day. Please remember that university computers do not keep your essays - you must save them elsewhere. Having lost parts of your essay on the university computer is no excuse for a late submission.

Grade conversion

Your lecturer may use one of the following scales of numerical equivalents to letter grades:

- A = 94-100; A- = 90-93
- B+ = 87-89; B = 83-86; B- = 80-82
- C+ = 77-79; C = 73-76; C- = 70-72
- D+ = 67-69; D = 63-66; D- = 60-62
- F = below 65

At NYU Stern, we strive to create courses that challenge students intellectually and that meet the Stern standards of academic excellence. To ensure fairness and clarity of grading, the Stern faculty have adopted a grading guideline for core courses with enrollments of more than 25 students in which approximately 35% of students will receive an “A” or “A-” grade. In core classes of less than 25 students, the instructor is at liberty to give whatever grades they think the students deserve, while maintaining rigorous academic standards.

E. PLAGIARISM AND ACADEMIC HONESTY

Academic integrity means that the work you submit is original. Obviously, bringing answers into an examination or copying all or part of a paper straight from a book, the Internet, or a fellow student is a violation of this principle. But there are other forms of cheating or plagiarizing which are just as serious — for example, presenting an oral report drawn without attribution from other sources (oral or written); writing a sentence or paragraph which, despite being in different words, expresses someone else’s idea(s) without a reference to the source of the idea(s); or submitting essentially the same paper in two different courses (unless both instructors have given their permission in advance). Receiving or giving help on a take-home paper, examination, or quiz is also cheating, unless expressly permitted by the instructor (as in collaborative projects).

F. BASIC RESPECT AND APPROPRIATE CLASS BEHAVIOR

While generally an easygoing teacher, I am very picky about basic respect and appropriate class behavior. A failure to respect this will affect your participation grade.
• I check attendance. If you cannot attend a lecture, you need to tell me before class and state a good reason.
• Classes on zoom are always with cameras on. I check during class and the recordings after.
• Please keep in mind we can see each other over zoom. Do not chat or laugh with people in the background, or do anything else that can take attention away from class.
• This is a class, not a walk in the park. If we meet on zoom, please do so in a calm environment.
• Make sure to let your classmates finish speaking before you provide feedback or speak yourself.
• When in class and as long as the pandemic requires it, you are required to wear a mask over your mouth and nose. One mistake is allowed. Two can lead to a failing grade. Wearing a mask well isn’t rocket science. If you have a problem with this, don’t take my class.
• When in class, you are not allowed to eat (unless you are in dire need of sugar due to health reasons).

G. COURSE MATERIAL & DATA SOURCES

Readings will be made available before class via Brightspace. Slide packs will be uploaded immediately after every course.

For their papers and for students that are interested in doing more in-depth research on global energy and environmental policies, I recommend looking into the following academic journals:

• Business Strategy and the Environment
• Global Environmental Politics
• International Environmental Agreements
• Nature Energy
• Organization and Environment
• Corporate Social Responsibility and Environmental Management
• International Journal of Corporate Social Responsibility
• Journal of Industrial Ecology
• Clean Technologies and Environmental Policy
• Climate Policy
• Sustainable Development
• Sustainable Environment
• Environment, Development and Sustainability
• Journal of Environmental Management
• Management of Environmental Quality
• Energy Economics
• Energy for Sustainable Development
• Energy Policy
Renewable Energy
Resource and Energy Economics
Comparative Political Studies
International Organization
International Studies Quarterly
Journal of Politics
Political Studies

Given our focus on energy and climate change, students should make a habit out of following international energy news and trends. We will try to discuss global energy news during class. Students are welcome to introduce a topic themselves. Some source to consult:

- Financial Times Energy
- Bloomberg Energy
- Oil Price
- Reuters Energy
- Renewable Energy World
- Business Green Energy
- IEEE Spectrum
- Green Tech Media
- The Barrel (Platts blog)

If students have a deeper interest, they are encouraged to dig into data to get a better understanding of the topic. Good sources include:

- IEA Energy Statistics
- OECD Energy data
- World Bank Energy
- World Bank’s ESMAP
- World Development Indicators
- Enerdata
- Energydata.info

The following institutes provide some of the more critical assessments of problems in global energy and climate policy, and will come in handy during the preparation of cases:

- Columbia University’s CGEP
- International Institute for Sustainable Development Energy Program
- IISD Global Subsidies Initiative
- SAIS Initiative for Sustainable Energy Policy
- Oxford Institute of Energy Studies
- ODI Climate & Energy Program

H. DISABILITY DISCLOSURE STATEMENT
Academic accommodations are available for students with disabilities. The Moses Center website is [www.nyu.edu/csd](http://www.nyu.edu/csd). Please contact the Moses Center for Student Accessibility (212-998-4980 or mosescsd@nyu.edu) for further information. Students who are requesting academic accommodations are advised to reach out to the Moses Center as early as possible in the semester for assistance.

I. STUDENT WELLNESS

In a large, complex community like NYU, it's vital to reach out to others, particularly those who are isolated or engaged in self-destructive activities. Student wellness ([https://cas.nyu.edu/content/nyu-as/cas/academic-programs/student-wellness.html](https://cas.nyu.edu/content/nyu-as/cas/academic-programs/student-wellness.html)) is the responsibility of all of us.

The NYU Wellness Exchange is the constellation of NYU’s programs and services designed to address the overall health and mental health needs of its students. Students can access this service 24 hours a day, seven days a week - wellness.exchange@nyu.edu; (212) 443-9999. Students can call the Wellness Exchange hotline (212-443-9999) or the NYU Counseling Service (212-998-4780) to make an appointment for Single Session, Short-term, or Group counseling sessions.

J. DETAILED COURSE OUTLINE

Please note that I will provide students with the most up-to-date readings and audiovisual material via Brightspace. The list below is a preliminary list of readings. Each week, I will send out an e-mail highlighting what readings (or sections thereof) are required to prepare next week’s class. I will also upload audio-visual material to support the preparation of class.

<table>
<thead>
<tr>
<th>Date</th>
<th>Class</th>
<th>Readings &amp; student tasks</th>
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<tbody>
<tr>
<td>M 24 Jan</td>
<td>1A. Introduction to course; globalization; the Anthropocene</td>
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| W 26 Jan | 1B. Environmental Challenges; types of goods & managing the environment | **Readings:**  
  - UNEP (2021) Making peace with nature: Key messages & Executive Summary  
| M 31 Jan | 2A. Tragedy and management of commons            | **Readings:**  
  - Hardin (1968) Tragedy of the Commons  
  - Ostrom (1990) Governing the Commons: Chapter 1  
  - Frischman (2019) Retrospectives: Tragedy of the Commons after 50 years  
  **Task:**  
  - Send in 1 page essay of a good and the challenge of environmental protection by engaging with the readings (by Sunday evening) |
### W 02 Feb

**2B. Multilateralism and the environment: Montreal, Kyoto and Paris**

**Readings:**
- Cumberlege (2020) Multilateral environmental agreements
- Pfluger (2010) Why Montreal is not a template

### M 07 Feb

**3A. Core concepts in Business & the Environment - part 1**

**Task:**
- Prepare definition of concept and how it relates to the environment in shared slide deck (by Sunday evening)
- Go through the reversals of environmental rules by the Trump Administration (found here) and be ready to talk about one you found particularly impactful.

### W 09 Feb

**3B. Guest speaker: Irene Martinetti, World Business Council for Sustainable Development**

**Readings:**
- WBCSD (2021) Driving the transition to circular economy

**Task:**
- Send 2 questions for guest speaker (by Tuesday evening)

### M 14 Feb

**4A. Core concepts in Business & the Environment - part 2**

**Task:**
- Prepare definition of concept and how it relates to the environment in shared slide deck (by Sunday evening)

### W 16 Feb

**4B. Guest speaker: Justin Meier, Forest Stewardship Council**

**Readings:**
- ITC (2020) Sustainability standards: Chapter 2 and 3
- Rafols and Brander (2005) The stewardship council model

**Task:**
- Based on the readings, share 2 questions for the guest speaker (by Tuesday evening)

### M 21 Feb

**No class – President’s Day**

**Task:**
- Communicate chosen company for research note

### W 23 Feb

**5. Guest speaker: Luz Cervantes, World Wildlife Fund**

**Readings:**
- Go through https://sciencebasedtargets.org/
<table>
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<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
<th>Task</th>
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</thead>
</table>
| M 28 Feb   | 6A. Intro to Energy: High Carbon (oil, coal, natural gas) | - MSCI (2021) Breaking down corporate climate targets  
- Read the sustainability strategy and report, as well as the annual report of the company you chose for your research note. | - Based on the readings, share 2 questions for the guest speaker (by Tuesday evening) |
| W 02 Mar   | 6B. Intro to Energy: Low Carbon (hydro, wind, solar, nuclear) | - IEA (2021) Coal: Executive Summary  
- IEA (2021) Oil: Executive Summary  
- IEA (2020) Gas: Executive Summary | -  

- IEA (2021) Net zero by 2050 – Executive Summary | -  

| W 09 Mar   | MIDTERM | / | -  

| M 14 Mar   | No class – Spring Break | / | -  

| W 16 Mar   | No class – Spring Break | / | -  

| M 21 Mar   | 8A. History of oil & gas firms; standard oil, international oil companies, national oil companies, petrostates, shale | - OIEA (2020) A comparative history of oil and gas markets  
- History of oil: [https://ektinteractive.com/history-of-oil/](https://ektinteractive.com/history-of-oil/) | - Submit bibliography list of sources to be used for research note (by Monday evening) |

- Scholl (2019) The future of shale | -  

Business and the Environment | Dr. Tom Moerenhout
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<th>Date</th>
<th>Task</th>
<th>Readings</th>
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- Check [http://fossilfuelsubsidytracker.org](http://fossilfuelsubsidytracker.org)  
- IMF (2021) Still not getting energy prices right: executive summary  
| W 30 Mar | **9B. Guest Speaker: Arjun Murti (Conoco Phillips) on oil companies and the energy transition** | - IRENA (2021) Oil companies and energy transition  
- IEA (2021) The oil and gas industry in energy transitions: Section III & Section 4  
**Task:**  
- Based on the readings, share 2 questions for the guest speaker (by Tuesday evening) |
| M 04 Apr | **10A. Renewable energy subsidies: definition, target, estimates, types** | - Moerenhout (2022) Energy subsidies draft  
- REN21 (2021) Renewable energy status report: 02 Policy landscape Power & Systems integration of variable renewable energy |
| W 06 Apr | **10B. Guest Speaker: TBC (Equinor) on oil companies, renewable energy, and the energy transition** | - IRENA (2021) Oil companies and energy transition  
- UNESCWA (2021) Guidebook RE project development: parts 3 and 4  
**Task:**  
- Based on the readings, share 2 questions for the guest speaker (by Tuesday evening) |
| M 11 Apr | **11A. Industrial policy & local content; international trade & investment law** | - Kuntze and Moerenhout 2013) Local content requirements: P1-19  
- Johnstone et al (2021) Industrial policy |
| W 13 Apr | **11B. Panel debate on Development & Sustainability in sub-Saharan Africa** | - TBC  
**Task:**  
- TBC |
<table>
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<tr>
<th>Date</th>
<th>Activity</th>
<th>Readings</th>
<th>Task</th>
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- IEA (2021) Global EV Outlook: Executive summary and Trends and developments in electric light-duty vehicles | Based on the readings, share 2 questions for the guest speaker (by Tuesday evening) |
| W 20 Apr   | 12B. Guest Speaker: Albert Gore (Tesla) on electric vehicles and innovative business models | - IEA (2021) Global EV Outlook: Policies to promote electric vehicle deployment | Based on the readings, share 2 questions for the guest speaker (by Tuesday evening) |
| M 25 Apr   | 13A. COVID 19 recovery; Innovation in the energy transition;               | - Check: [http://energypolicytracker.org](http://energypolicytracker.org)  
- TBC                                                               | - Based on the readings, share 2 questions for the guest speaker (by Tuesday evening) |
| W 27 Apr   | 13B. Guest Speaker: Vicente Loyola (World Bank) on green hydrogen        | - TBC                                                                     | - Based on the readings, share 2 questions for the guest speaker (by Tuesday evening) |
| M 02 May   | 14A. Energy transition debate                                            | /                                                                         | Final deadline to submit research note (by Wednesday evening)         |
| W 04 May   | 14B. Conclusions & B&E quiz                                              | - Final deadline to submit research note (by Wednesday evening)         | - Final deadline to submit research note (by Wednesday evening)         |
| M 09 May   | FINAL                                                                   | /                                                                         | - Final deadline to submit research note (by Wednesday evening)         |