B8705 Business and Climate Change
July 2026 Block Week (1.5 Credits)

Gernot Wagner
Office: 392 Kravis
gwagner@columbia.edu

Office Hours:
Wednesday 2:30-4:30 pm
Please sign up via gwagner.com/oh, or join me on a morning run: gwagner.com/run. If none of these times work, please email me.[1]

TEACHING ASSISTANT
Anand Vardhan Singh
AnSingh27@gsb.columbia.edu
Office Hours by appointment.

Communications from professor and teaching assistants about the course will take place through Canvas. Students should make sure they regularly check for announcements and messaging notifications.

COURSE DESCRIPTION

Climate science informs us that global emissions of greenhouse gas emissions must be rapidly and dramatically reduced if humanity is to avoid catastrophic climate change. After three centuries of rising emissions, the entire global economy must now decarbonize in the coming three decades. Fortunately, most of the technologies and investment capital necessary to reduce and eventually eliminate emissions exist or are in development, but the urgency to implement those solutions is critical.

This course provides an overview of climate change, its effects on business, and how businesses can (and should) respond. The course covers emissions sources and their impact on climate change, followed by an exploration of the policy landscape, including current legislation, carbon markets, and climate justice. The course then evaluates current and evolving mitigation technologies, reviews the tools of climate finance, and considers strategies for reducing emissions to net zero. Finally, the course introduces the role of businesses in addressing climate change, including net-zero goals, actions they can take to mitigate their impact, and the perspectives of shareholders.

Throughout the course, the business case for climate action is emphasized, highlighting the economic benefits of taking action to address climate change.

[1] I realize that office hours during block week are…difficult. I'll try my best to be available during our breaks.

NOTE: Business and Climate Change is a pre-requisite course for several other elective courses, including Climate Finance (B8363), Climate Policy (B8212), Measuring and Managing Climate Risk (B8028), Climate Tech (B8320), and two Chazen travel courses: American Innovation in Climate Tech (B8705) and Green Industrial Policy in Europe (B8712).

PRE & COREQUISITE COURSES

Core courses in Managerial Economics and Corporate Finance.

STUDENT LEARNING OUTCOMES

This course is designed for MBA students interested in the intersection of business and climate change. It is an introductory course, covering topics at a high level, and applicable to a wide range of career interests. Students interested in a deeper dive on the topics covered in this course are recommended to enroll subsequently in one or more of the elective climate change courses. The specific course objectives for Business and Climate Change are for students to:

- Understand the basic science of climate change, causes and consequences, and mitigation pathways.
- Consider the role that policy plays in addressing climate change.
- Analyze current and emerging technologies for addressing climate change.
- Evaluate investor strategies for financing climate change technologies.
- Understand the business case for the transition to net-zero emissions.

CONNECTION TO THE CORE

Climate change will affect every industry and every business, so this course, unsurprisingly, connects to every core course. Specifically, the sessions on Climate Risk and Climate Policy connect to the Managerial Economics and Global Economic Environment courses. Sessions two and three on Climate Tech connect to core courses in Business Analytics, Operations Management and Strategy Formulation. Session five on Climate Finance connects to the Foundations of Valuation and Corporate Finance courses. The final session – The Business Transition – connects to topics in the Financial Accounting, Marketing, Strategy Formulation, and LEAD courses.

COURSE SCHEDULE

Session	Topic(s)	Required Pre-Readings
1a [Day 1]	**Climate Risk & Policy** • Climate Science • Climate Impacts • Emissions Sources • Mitigation and Adaptation Frameworks	• "Extreme Heat Isn't the Only Climate Impact Shocking Scientists" (Bloomberg) • "Early Investment in Decarbonization Can Help Save Trillions in Climate Costs" (CBS) • The Climate Policy Pendulum (Column)

		• Optional CaseWorks case: "The Cost to Achieve Net-Zero" [+ Spreadsheet][2] • Optional HBS case: "Risks and Opportunities from the Transition to a Low Carbon Economy"
1b [Day 1]	**Climate Tech Overview**	• Explore Climate Knowledge Initiative's sectoral and technological deep dives via: business.columbia.edu/insights/climate/cki
2a [Day 2]	**Climate Tech** • AI & Power Demand *Guest: Mark Rodgers (CBS)*	• "The AI Revolution Mirrors the Green Transition" (Column) • *Required* CaseWorks case: "PSEG and the PJM Capacity Crisis: A Utility at the Crossroads of Reliability, Affordability, and the AI Demand Surge" (by guest lecturer Mark Rodgers)
2b [Day 2]	**Climate Tech** • Solar Power • Wind Power • Energy Storage • Nuclear	• "How should solar-panel makers respond to falling prices?" (*FT* mini case) [Optional CaseWorks case: "LONGi: Facing Strategic Challenges in the Solar PV Sector"] • "How can Ørsted overcome its US challenges?" (*FT* mini case) [Optional CaseWorks case: Orsted's Offshore Wind Farms] • "Reenergizing Nuclear Power" (CKI)
2c [Days 2]	**Emerging Climate Tech** • Geothermal • Cement/Steel • Carbon Removal *Guest: Bernd Heid (McKinsey)*	• "Geothermal Energy" (CKI) • "Capture or cut carbon to make steel greener?" (*FT* mini case) • "Carbon Capture" (CKI)
2d [Day 2]	**Climate Finance** • Equity Investments • Project Finance • Blended Finance *Guest: Andrea Turner Moffitt (Future Heights)*	• "The future of climate finance" (OPEC Fund) • Skim: "Eight lessons learned from 20 years of ESG investing" (Allianz Research)

[2] Readings without URLs are available via CourseWorks (\Files\Readings)

3 [Day 3]	**The Business Transition** • Net-Zero Pledges • Corporate Strategy • Business Case for Action • Individual Action *Guest: Devon Swezey (Google)*	• "Google's AI boom sends emissions, power use soaring" (Axios) & skim Google's "2026 Environmental Report" • "How does a multinational become a B Corp?" (*FT* mini case) [Optional CaseWorks case: "Danone: Redefining Corporate Responsibility"] • *Economist* By Invitation: How individual actions can combat climate change

METHOD OF EVALUATION

The focus of the classes is on understanding concepts, and the challenges and opportunities of applying those concepts in real-world settings. The chosen readings and cases analyze climate change mitigation and adaptation by businesses, and the strategies used by business leaders to manage the resulting opportunities and challenges. This course requires active class participation, and students' grades will be heavily dependent on the quality of class discussion. Students are expected to challenge one another, guests, and the professor.

Students' grades in the course are based on the following metrics:

Class participation (C – individual)	40%
Business Transition Assignment (A – group, largely in-class)	30%
Final exam (C – individual, online)	30%

CLASSROOM NORMS AND EXPECTATIONS

Core Culture

Students are expected to adhere to CBS Core Culture in this class by being Present, Prepared, Participating. Students are required to prepare for each class by reading and analyzing the assigned cases and other materials and utilizing any study guidance questions provided via Canvas. In class, students are expected to add thoughtful points to each class discussion.

Honor Code and Academic Integrity

The Columbia Business School Honor Code calls on all members of the School community to adhere to and uphold the notions of truth, integrity, and respect both during their time in school, and throughout their careers as productive, moral, and caring participants in their companies and communities around the world. All students are subject to the Honor Code for all of their academic work. Failure to comply with the Honor Code may result in Dean's Discipline. Here you can review examples of Academic Misconduct which may result in discipline.

Course Attendance Policies

Students from all programs should review and be familiar with the MBA Core attendance policy here. Students are required to attend each class – class attendance and participation will be recorded. Students should reach out to the professors and the TA regarding excused absences (for religious observances; personal, medical, and family emergencies; military service; court appearances such as jury duty). Unexcused absences will affect your class participation grade and your overall course grade, as follows:

- Students that miss more than 33% of their classes (unexcused absences) will at most receive a P for the course grade.
- Students that miss more than 50% of their classes (unexcused absences) will receive an F for the course grade.

This course may use PollEverywhere as a tool to increase in-class student engagement. PollEverywhere may also be used to confirm student attendance and participation records. Students who have concerns regarding whether their responses have been recorded should contact the instructor. If a student is not present in the classroom at the time of a poll (due to absences or any other reasons), the poll should not be answered. Responding to a poll when not present in the classroom is a violation of the Honor Code.

Generative AI Policy

You may use Generative AI to aid understanding and engage with course materials. You may not use AI to generate assignments submitted in the course. Using these tools to generate responses to assignments violates the CBS Honor Code. Please contact me if you have any questions about this policy. [For my personal 'AI policy', see: gwagner.com/AI]

Inclusion, Accommodation, and Support for Students

At Columbia Business School we believe diversity strengthens any community or business model and brings it greater success. The School is committed to providing all students with equal opportunity to thrive in the classroom by providing a learning, living, and working environment free from discrimination, harassment, and bias on the basis of gender, sexual orientation, race, ethnicity, socioeconomic status, or ability.

Students with documented disabilities may receive reasonable accommodations. Students are encouraged to contact the Columbia University's Office of Disability Services for information about registration.

Columbia Business School adheres to all community, state, and federal regulations as relate to Title IX and student safety. Read more about CBS' policies to support Inclusion, Accommodations and Support for Students here.