

Olli Study Group 395

Climate Policies: What Works, What Doesn't

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Course outline

Climate change is the defining issue of our time. Over 40 countries have committed to reaching net-zero carbon emissions by 2050 but these promises have yet to be reflected in actions. Why do politicians fail to take effective measures to tackle climate change? How do we explain the lack of policy cooperation on this global issue? And what would a politically feasible response to climate change look like? This course draws on real-world examples to discuss the challenges posed by climate change and to learn from policy failures and successes. After a brief overview of the science and economics of the climate change problem, the course will discuss (a) fiscal and financial policies to mitigate and adapt to climate change; (b) the current landscape of international policy issues that inhibit global cooperation; and (c) feasible climate policies that work in the real world.

1. Introduction

Sustainability and climate change. The scientific base for our understanding of climate change. Drivers of Emissions; Impacts of climate change; Responsibility for climate change. Air pollution The Clean Air Act.

Discussion: Lessons from the Clean Air Act.

Reading: *Overview of the Clean Air Act and Air Pollution | US EPA*; [Our Nation's Air 2019 \(epa.gov\)](https://www.epa.gov/our-nation-air-2019); <https://www.newyorker.com/news/daily-comment/the-supreme-court-tries-to-overrule-the-climate>

2. Climate mitigation policies.

Mitigation policies: putting a price on carbon; Standards and regulations, Emission trading systems; Why economists prefer carbon taxes; Distributional and competitiveness effects of carbon pricing; How to spend the revenues; Returning carbon dividends to citizens.

Discussion: are carbon dividends a good idea for the US?

Reading: *The Economics of Global Climate Change [Updated in 2017]*

by Jonathan M. Harris, Brian Roach, and Anne-Marie Codur

https://www.bu.edu/eci/files/2019/06/The_Economics_of_Global_Climate_Change.pdf pages 29-43.

Carbon Dividends: <https://www.scientificamerican.com/article/carbon-dividends-a-win-win-for-people-and-for-the-climate/>

<https://www.carbontax.org/dividends/><https://www.carbontax.org/dividends/>

3. The role of forests in climate mitigation.

The critical role of forests for climate change mitigation and adaptation. Is deforestation unstoppable? Drivers of deforestation and forest degradation. Policies for the sustainable management of forests: Regulations, certification, Payments for ecosystem services, REDD; Fiscal instruments to fight deforestation.

Discussion: How to stop deforestation.

Reading: [Forests and Climate: Economics and Policy Issues \[Updated 2022\]](#) by Anne-Marie Codur, Jonathan M. Harris and Maliheh Birjandi Feriz

4. Climate change and monetary policy

The US Federal Reserve System. Monetary policy mandates. Monetary Policy and Climate Change. Mark Carney's 'The tragedy of the Horizons speech'. Physical and transition risks. Why and how climate change threatens our savings. Should central banks assume responsibility for policies to fight climate change? ESG investing

Discussion: Should central banks assume responsibility for policies to fight climate change?

Readings: Listen to: <https://www.bankofengland.co.uk/speech/2015/breaking-the-tragedy-of-the-horizon-climate-change-and-financial-stability>

Climate change is relevant for monetary policy. Here is why.

<https://www.weforum.org/agenda/2022/06/climate-change-monetary-policy-finance/>

5. Climate adaptation and development.

Study Group leader: Carter Brandon, World Resources Institute.

Climate change adaptation: what is adaptation and why it matters. Economic, social, and environmental dimensions of adaptation and resilience. Since we can't adapt our way out of climate impacts, what do we adapt to? A framework for investing in adaptation. Balancing risk reduction (i.e., reducing impacts such as through sea walls, zoning measures, and drought-resistant crops) and risk management (i.e., managing the impacts of extreme events through social safety nets, fiscal buffers, and evacuation planning). The essential role of nature in building resilience.

Discussion: Climate adaptation in the UN negotiations

6. Low-carbon innovation and technology transfer

The role of technology in the energy transition. Determinants of low-carbon innovation. The rise of China in low-carbon innovation. Poor countries are not receiving low-carbon technology. Why? Transferring low-carbon technology as a process of collaboration, learning, and adaptation. Different paths to global leadership in the electric vehicle markets

Discussion: What is needed to accelerate the transfer of low-carbon technologies to developing countries?

Readings: Pigato M., S.J. Black, D. Dussaux, Z. Mao, M. Mckenna, *Technology Transfer and Innovation for Low-Carbon Development*. 2020. ffhal-03109951f, **Executive Summary**.

<https://openknowledge.worldbank.org/handle/10986/33474>;

Rubin E.R., *Innovation, and Climate Change*, [Article from the book Innovation. Perspectives for the 21st Century](#) <https://www.bbvaopenmind.com/en/articles/innovation-and-climate-change/>

7. International climate policies and justice

Games of climate change. A short history of international climate policy: Rio Summit (1992), Kyoto Protocol (1997), Copenhagen (2009), Cancun (2010), Paris (2015), Glasgow (2021). Global inequality in climate emissions. Equity and Climate justice. The remaining carbon budget: how do we share it?

Discussion: How to share the remaining carbon budget

Readings: Hickel J. (2020). Quantifying national responsibility for climate breakdown: an equality-based attribution approach for carbon dioxide emissions in excess of the planetary boundary. The Lancet Planetary Health [https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(20\)30196-0/fulltext](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30196-0/fulltext)

8. Behavioral Economics of Climate Change

Why do politicians commit to take climate actions but do not implement them? Perceptions of climate change (US, Europe, Developing Countries); Perceptions of climate change policies (US, rest of the world). Examples of systematic departures from rational choice: Generosity and Selflessness, Information bias, Fairness bias, Overconfidence, Predictions bias, Time inconsistency/Hyperbolic Discounting, Framing, Trust. Moving forward: nudges, defaults, heuristics

Discussion: How to use environmental behavioral suggestions to fight climate change.

Readings: Anastasia C. Wilson, 2020, Behavioral Economics in Context. Global Development Policy Center, pages 4-8 and 30-37. https://www.bu.edu/eci/files/2020/05/Behavioral-Economics_final.pdf

9. Climate Policies that work

Using a political economy approach to climate policies. The job-killing argument against climate policies. L. Summers 1991 memo at the World Bank. The political economy of fossil fuel subsidy reform. Case studies: Iran, Ecuador. The political economy of carbon pricing policies. Case studies: France, British Columbia, Switzerland, Canada, Washington State.

Discussion: Climate policies that work in the US.

James K. Boyce (2020), Political Economy of the Environment: A Look Back and Ahead, working paper. https://scholarworks.umass.edu/peri_workingpapers/277/