



SUMMER SCHOOL IN GLOBAL POLITICS, DEVELOPMENT AND SECURITY 2021

Climate Change: Update and Options to Achieve the Paris Agreement

Instructor: Michele de Nevers (Haas School of Business, University of California)

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Date: June 28 – 30

Time: 3.30 pm – 5.30 pm (CEST, Barcelona time)

Format: online

The course will provide a short introduction to the science of climate change and the status of global negotiations, including progress in achieving the Paris Agreement goals and expectations for the upcoming Glasgow climate summit in November 2021. It will introduce the global carbon budget and explore technology and policy options to stay within the budget, while allowing developing countries the space to continue to grow their economies and reduce poverty.

Session 1. The Paris Agreement – where do we stand? What are the challenges? The 2018 IPCC report on 1.5° and “net zero emissions.” (Michele de Nevers)

The Paris Agreement was signed in December 2015. It embodied the goal of holding the increase in global average temperatures (GAT) to 2° Celsius above pre-industrial

temperatures and included a stretch goal to try to hold the increase to only 1.5° Celsius. What has been accomplished in the past 6 years since the Paris Agreement was signed? What is expected in Glasgow in November of 2021?

Required reading:

William Nordhaus , “The Climate Club: How to Fix a Failing Global Effort” Foreign Affairs, Friday, April 10, 2020 <https://www.foreignaffairs.com/articles/united-states/2020-04-10/climate-club>

Carbon Brief, Carbon Brief Staff, “In-depth Q&A: The IPCC’s special report on climate change at 1.5C”
<https://www.carbonbrief.org/in-depth-qa-ipccs-special-report-on-climate-change-at-one-point-five-c>

Recommended reading:

The history of rising CO2 levels in the atmosphere:

[Reading 1](#)

Climate Risks:

[Reading 2](#)

Net Zero targets:

[Reading 3](#)

Session 2. The carbon budget and options for achieving the Paris Agreement goals: technology and policy choices. (Michele de Nevers)

Achieving the Paris Agreement goals requires a global collective action to reduce emissions of greenhouse gases from all sectors of the global economy. What is the global carbon budget? How can we reach “net zero emissions?” It is increasingly thought that, in addition to dramatically cutting emissions, measures must be taken to remove greenhouse gases from the atmosphere, so-called negative emission technologies. How realistic are these technologies? What are the policy choices that will promote the reduction in emissions and removal of carbon from the atmosphere?

Required reading:

Baiping Chen, Lars Fæste, Rune Jacobsen, Ming Teck Kong, Dylan Lu, and Thomas Palme “How China Can Achieve Carbon Neutrality by 2060”, BCG, DECEMBER 14, 2020,
[file:///C:/Users/mdene/Dropbox/How%20China%20Can%20Achieve%20Carbon%20Neutrality%20by%202060%20 %20BCG.htm](file:///C:/Users/mdene/Dropbox/How%20China%20Can%20Achieve%20Carbon%20Neutrality%20by%202060%20%20BCG.htm)

Luke Sussams, “Carbon Budgets Explained” 06 February 2018, Carbon Tracker Initiative
<https://carbontracker.org/carbon-budgets-explained/>

Axel Dalman, “Carbon budgets: Where are we now?” 11 May 2020, Carbon Tracker Initiative
<https://carbontracker.org/carbon-budgets-where-are-we-now/>

Recommended reading:

On geo-engineering:

[Reading 1](#)

[Reading 2](#)

[Reading 3](#)

Understanding carbon taxes:

<https://www.youtube.com/watch?v=xxtElseSkZM>

Session 3. The climate emergency in the context of global crises: why the metropolitan scale is crucial. (Anna Romero)

Climate Emergency Declarations are being promoted by climate activists in order to bring a necessary sense of urgency to a long lasting and drawn-out problem.

The first government to declare a climate emergency was the Australian city of Darebin in Melbourne in May 2016. The Declaration made by Bristol (2018) and that of Scotland (2019) were the catalysts in Europe for the emergence of emergency declarations. On November 29 of that same year, that the climate crisis was declared a "climate emergency" by the European Parliament. Many local governments around the world have declared a climate

emergency in their territories. The Barcelona Metropolitan Area declared a climate emergency last April.

How is the emergency approached from local action? What funding channels and governance systems currently exist? Does it make sense to talk about climate justice at the metropolitan and local levels?

Required reading:

Le Quéré, C., Jackson, R.B., Jones, M.W. *et al.* Temporary reduction in daily global CO₂ emissions during the COVID-19 forced confinement. *Nat. Clim. Chang.* 10, 647–653 (2020). <https://doi.org/10.1038/s41558-020-0797-x>

Lövbrand, E., Mobjörk, M., Söder, R. The Anthropocene and the geo-political imagination: Re-writing Earth as political space. *Earth System Governance*. Vol.4 (2020) <https://www.sciencedirect.com/science/article/pii/S2589811620300100?via%3Dihub>

Recommended reading:

The European environment — state and outlook 2020: knowledge for transition to a sustainable Europe
<https://www.eea.europa.eu/soer/2020>