

# The USA and the UNFCCC Negotiations & Agreements

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# Science → Economics → Geopolitics of Climate Change

- Greenhouse gases *mix in the atmosphere*, so the location of emissions has *no effect* on impacts – in economic terms, climate change is a *global commons problem*
  - Any jurisdiction taking action incurs the *costs* of its actions
  - But climate benefits are *distributed globally*
  - Therefore, for virtually any jurisdiction, the climate benefits it reaps from its actions will be *less* than the costs it incurs ....
    - despite the fact that the global benefits may be *greater* – possibly *much* greater – than the global costs
- **This presents a classic free-rider problem, ....**
  - which is why *international*, if not global, cooperation is essential.
- **There's also a temporal dimension that takes us from science to economics to politics and policy ...**

# More Science → Economics → Geopolitics of Climate Change

- **Greenhouse gases accumulate in the atmosphere (100+ years for CO<sub>2</sub>)**
  - Damages are a function of the *stock*, not the flow
  - Most severe consequences of climate change will be in the *long term*
  - But climate change *policies* and the attendant *costs of mitigation* will be *up front*
- This combination of *up-front costs* and *delayed benefits* presents a great political challenge
  - Political incentive in democracies is to give benefits (to voters) today, and place costs on future generations
  - The climate problem asks politicians to do precisely the opposite!
- Together, the global commons nature of the problem plus its intertemporal asymmetry make climate change a *very tough political challenge*, suggest why *international cooperation* is necessary ...

# The Paris Climate Agreement (December, 2015)

- A Major Step Forward
  - A *landmark* climate accord, a dramatic *departure* from previous 20 years
  - Provides a broad *foundation* for meaningful future progress, due to expanded scope
  - So, this new approach *can be* key step toward reducing threat of climate change
- *But* whether the Agreement is *truly successful* may not be known for *decades*
  - Paris Agreement provides an important *opportunity* for new path forward
  - *Key necessary condition* met: adequate *scope* of participation (14% KP → 97% PA)
  - *Other key necessary condition*: adequate *ambition* of policies (plus, of course, successful implementation, i.e., compliance)
- So, what happened at COP27 in Sharm El-Sheikh, in November, 2022?

# Most Important Development During COP27

- Most important development during COP27 occurred 6,000 miles away in Bali, Indonesia.
  - U.S. President Joe Biden and China President Xi Jinping met on sidelines of G20 Summit for a 3-hour meeting, signaled their return to cooperation on climate change
  - Their co-leadership had been abandoned during Trump administration and first two years of Biden administration
  - New statement of cooperation immediately trickled down to leaders of two negotiating teams – John Kerry and Xie Zhenhua
  - There may even be a return to the co-leadership which had been instrumental for the enactment of the Paris Agreement

# Most Contentious & Dramatic Decision at COP27

- Establishment of a Fund for “Loss and Damage”
- Background: Paris Agreement
  - PA is largely about Emission Reductions (via Nationally Determined Contributions)
  - Also has elements addressing Adaptation (such as famous “\$100 Billion”)
  - But adaptation is *not possible* for some impacts, for example, the very existence of small island states
- Controversy: Who should pay for such “loss and damage”?
  - Essential for most vulnerable countries, unacceptable by major contributors to atmospheric stock of GHGs (worried about international legal liability)
  - Finessed in Paris Agreement: Loss and damage is important (Article 8), ...
    - ... but (in Decision 52) agreed that “it does not ... provide a basis for any liability or compensation”

# Loss and Damage at COP27 (continued)

- Last minute support from USA for creation of a Fund for “Loss and Damage.”
  - Demand Side: could eventually be in trillions of dollars (note World Bank estimate of \$40 billion damages of 2022 Pakistan floods)
  - But Supply Side: few quantitative pledges from Europe in tens of millions of dollars
- So, is the new Loss and Damage Fund an empty shell?
  - China supports creation of Fund, but as a “developing country” will not contribute
    - Note China’s position linked to 1992 UNFCCC list of non-Annex I countries
    - China’s 1992 per capita GDP was < \$400/year, but has since grown by 3,300%
  - U.S. story winds up in a similar place: “We support the Loss & Damage fund, but due to Republican majority in House of Representatives, it is impossible for us to make any commitments of new funding.”
- So, is the new Loss and Damage Fund an empty shell, or is it a principled first step toward equitable allocation of responsibility under the Paris Agreement?
  - It’s probably some of both!

# Other Developments and Issues at COP27

- Hand-wringing that COP27 closing statement did not fully embrace 1.5° C target
  - Valid concerns, but pre-Paris IPCC predicted 7.0° C this century
  - With original Paris Agreement NDCs, 3.0° C
  - With enhanced NDCs and Kigali Amendments (CFCs) to Montreal Protocol, 2.5° C
  - This process is a marathon, not a sprint
- Progress on Article 6 of Paris Agreement (“international cooperation”)
  - Article 6.2 as accounting mechanism to prevent double counting for international linkages
  - But recent developments cause concern (6.2 → Kyoto Protocol’s Article 17)



# What to Expect Next Year at COP28 in Dubai

- COP27 was officially the “Implementation COP”
- Next year’s COP28 in Dubai, UAE, is officially the “Global Stocktake COP”
- But if COP27 was, in effect, the “Loss & Damage COP,” ...
  - ... we might expect that the incoming UAE presidency of COP28 will make it the “Carbon Removal COP,” ...
  - ... with renewed attention to carbon capture & storage, carbon capture & utilization, direct carbon removal, as well as solar radiation management.
- If that happens, it will be controversial, like loss & damage was, ...
  - ... but for different reasons and with very different parties.

Thank You!

# For More Information

Harvard Project on Climate Agreements

[www.belfercenter.org/climate](http://www.belfercenter.org/climate)

Harvard Environmental Economics Program

[www.hks.harvard.edu/m-rcbg/heap](http://www.hks.harvard.edu/m-rcbg/heap)

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