Why so little progress on international climate negotiations?

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http://globalchange.mit.edu/pubs/
The State of Affairs

• The Kyoto Framework of binding commitments with option of international trading is for all practical purposes dead.
  – Proximate cause—US withdrawal
  – But Japan, Canada, Russia, Australia while ratifying are not fully committed—If US had stayed in?
  – Developing country and Annex I/B designations became a near impenetrable wall to coverage expansion.

• Overriding issue.
  – Negotiating both about how much to do overall, and how to share the burden.
  – Particularly with trading it is very complex to estimate whether a country might gain or lose from a particular commitment and it depends on what other’s commitment are and whether they live up to them
The State of Affairs II

• The success of international negotiations depend on the negotiators ability to implement measures within their own countries to achieve agreed reductions
  – Hard for negotiators to negotiate both internationally and with domestic actors that need to pass domestic legislation.
• Most successful international agreements ratify or codify what countries are already doing.
• Copenhagen finally accepted this fact, and included a list of what countries were willing to commit (kind of) to do.
  – Nowhere near achieving the 2 degree target.
  – Most commitments highly conditional. E.g. US,
  – A step backward or forward?
State of Affairs III

• Copenhagen finally, more or less, was an admission that the Kyoto Framework was not workable.
  – Kyoto process was a path to ever more “success” in negotiating worthless agreements.

• What could we have expected from Cancun?
  – We have is the patchwork of Copenhagen commitments—the issue is to implement them.
  – No reason to expect an ever bigger or broader commitment—a few more countries committing.
  – “Success” is just making progress in implementing, avoiding backsliding, working out details, reaffirming—even if we could do that there is not much “headline” in it.
  – The collapse of cap and trade legislation in the US sucked any air there might have been out of Cancun.
  – If US is not living up to commitment it’s not possible to pressure others that are much smaller, poorer, etc. and who’s pressing.
  – Can Europe carry the ball alone? Is Europe a success?
Some illustrative results on two key issues in negotiations

• Burden-sharing.
  – If the whole world participates it’s less costly to achieve a given goal.
  – But if developed countries must pay the full cost how much is the transfer?

• REDD
  – Are forests as carbon sinks a lever and what are the implications of creating incentives for reforestation?
What about burden-sharing among regions?

- G8-Global emissions should be 50% below current/1990 by 2050
  - Suppose Developed cut by 70%→Developing must cut only 30%

- International Negotiations under the Framework Convention on Climate Change have differentiated responsibilities:
  - Highly simplified…
  - Developing countries need positive incentives to reduce emissions—i.e. Developed countries need to pay for their own emission abatement and abatement in Developing Countries

See: Report 167. Sharing the Burden of GHG Reductions
2020 Consumption Loss
70-30 Shares

2020 Consumption Loss (%)

-10.0
-9.0
-8.0
-7.0
-6.0
-5.0
-4.0
-3.0
-2.0
-1.0
0.0

USA
CAN
JPN
ANZ
EUR
EET
PSU
MEX
ASI
CHN
IND
IDZ
AFR
MES
LAM
ROW

70-30 shares
-18%
2020 Consumption Loss
Full Compensation

Net Financial Flows from Developed to Developing:
~$430 billion/year in 2020; $3.3 trillion/year in 2050
One issue to be addressed in Cancun—REDD—Reducing Emissions from Deforestation and Forest Degradation

Using Land to Mitigate Climate Change: Hitting the Target, Recognizing the Tradeoffs
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Goal: Consider a Climate Mitigation Policy that is About as Stringent as Possible, keeping CO2 concentrations below 500 ppm

If we extend CO₂ pricing to land does that bring us closer to the 2 degree C target?

What is the role of biofuels vs. reforestation for carbon sequestration?

What are the impacts on agricultural prices?
Temperature and Atmospheric CO2 levels.

![Graph showing change in air temperature and CO2 levels over time with different policy scenarios.](Image by MIT OpenCourseWare.)
Global energy use top and land use bottom, with energy only policy left, and energy+land policy right.
Food, crop, livestock, and forestry price impacts
Non-governmental Action?

- Most companies want to look like they are environmentally responsible, and many even mean it.
- In a competitive economy, it's hard to sell "green" that costs more—companies are required to operate in shareholders' interests.
  - Threat of climate legislation makes fossil intensive investments risky and so in shareholders' interests to think hard and maybe avoid.
  - But even that depends on credible threat of legislation
Summary

• It’s not just the cost of the policy it’s the broader implications on distribution among countries and among different types of households within countries.

• Do you trust that all parties hold to the deal—Russian hot air—US withdrawal from Kyoto.

• Energy price and food impacts—even if countries are compensated will households within the country be compensated.

• It’s not just abatement cost but benefits or costs imposed through macroeconomic relationships—reduced demand for fuels undermines a value of oil resources in Middle East, Canada, Russia, etc.

• Very different perceptions of equity and responsibility
  – Developed countries—past is past, lets fix the problem from here on
  – Developing countries—you became rich by using fuels and forests without consideration of GHG implications so that is our right too.