HONR 229L: Climate Change: Science, Economics, and Governance

Discussion #24: Action Day #2

Ross Salawitch & Walt Tribett

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Class Web Site:  http://www.atmos.umd.edu/~rjs/class/honr229L
ELMS Page:  https://myelms.umd.edu/courses/1229919


29 November 2017
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All 17 submissions of paper 1 have been received, and will be graded no later than Monday, Dec 4

29 November 2017
Action Day 2

5:00 to 5:15 Charge for today

5:15 to 5:25 Countries meet under direction of President: regroup, react, redirect China (3425 Conf Room), India (3400 Seminar Room), U.S. (3408 here)

5:25 to 5:35 Negotiating Session 2 (Mail Room):
Negotiators: Focus on financial & technological exchanges
Others: Focus on energy plan (led by Energy Minister) & initial thoughts on financial measures for attaining (i.e., Carbon Tax, Cap & Trade) (led by Senate)

5:35 to 5:45 Negotiators back to countries
   a) negotiator: Summarize Session 2
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5:45 pm any Pres. desiring 3rd Negotiating Session tell Ross, outside room 3408

5:46 to 5:55 Negotiation Session 3 (Mail Room), if necessary
Negotiators: Seal the Deal, if possible. If not, will spill over to next week

5:46 to 6:00 Others: Focus on economic development plan (which can include Carbon Tax, Cap & Trade, Other Market Ideas, etc.) & population plan if appropriate (led by Senate)

6:00 pm Everyone return to 3408

6:01 to 6:10 3 mins max summary from Pres. of US, China, & India focused on:
   GHG emission route and/or popul path; status of negotiation

6:10 to 6:15 Charge for Mon
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Current situation, after Action Day 1

China, India and US have chosen:

- **BAU**: Business as Usual
- **Attain & Hold, median population growth**: US
- **Attain & Hold, low population growth**: India
- **Attain & Improve, median population growth**: China
- **Attain & Improve, low population growth**
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Roadmap

China, India and US choose between:

**BAU: Business as Usual**
- Attain & Hold, median population growth
- Attain & Hold, low population growth
- Attain & Improve, median population growth
- Attain & Improve, low population growth

\[
\begin{align*}
33\% \text{ of energy from renewables, 2060} \\
50\% \text{ of energy from renewables, 2060}
\end{align*}
\]

Low population growth choice requires legislation outlining how this will be attained
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Need to produce 8 “plans”

Attain & Hold, median popul. growth: US ← Energy Plan for 33% renewables, 2060
Economic Development Plan for transition

Attain & Improve, median popul. growth: China ← Energy Plan for 50% renewables, 2060
Economic Development Plan for transition

Attain & Hold, low popul. growth: India ← Energy Plan for 33% renewables, 2060
Economic Development Plan for transition

Population Control Legislation

Negotiators: International Agreement setting forth mechanism(s) for achieving reductions in GHG emissions: can focus on transfer of capital, technology, international cap & trade, carbon tax, loan forgiveness, etc.

Each of these 8 “plans” should:
   a) appear on a single piece of paper using 12-point font (front and back *or* just front OK)
   b) must be approved by responsible Senates either next Monday or Wednesday
      Need unanimous approval of each piece of legislation & Presidential signature;
      however, each President can over-ride one single negative Senate vote
   c) on day of presentation, we will hand these 7 plans to our judges & of course you all will stand up & describe
Energy Plan Organization

President: Organizes group and must sign three documents, but only after Senate approval:
1) International agreement for exchange of technology and finance
2) Region’s energy plan (written by Energy Minister)
3) Region’s economic development plan (written by Senate)

3 person Senate: Votes on international agreement, energy plan, & authors economic plan:
Each needs unanimous approval of the Senate, except the President can override a 2 to 1 vote and grant his or her “approval” ... only once!

3 pieces of legislation: President get’s one override

Energy Minister: One to two page document outlining how the Paris NDCs will be implemented within the region (i.e., specific mix of renewables, etc)

Economic Development Plan: One to two page document overview of how the transition to renewables will impact the economy, including jobs, to be written by the Senate

Negotiator: Communicates with other groups and formulates international agreement
One to two page document detailing how 3 regions will cooperate to achieve their respective energy plans: could be cap & trade, carbon tax with funds flowing internationally, technology transfer, etc
Action Day 1, A.I. for U.S. & Other Developed Nations
Action Day 1, Low Population for China
Action Day 1
Action Day 1, A.I. for India & Other Developing Nations
Action Day 1

Global Emission (Gt CO₂-eq)

Group Emission (Gt CO₂-eq)

Per-Capita Emission (t CO₂-eq ppy)

Historic
RCP 8.5
RCP 4.5
Class Agreement

USA (A.H. mid)
China (A.I. mid)
India (A.H. low)
Other Developed (A.H. mid)
Other Developing (A.H. low)

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In 2015, U.S. obtained ~18% of primary energy from non F.F. sources
In 2015, China obtained ~9% of primary energy from non F.F. sources
In 2015, India obtained ~26% of primary energy from non F.F. sources. However, most of this was biofuels/waste, which must decline as other renewables or nuclear sources grow, due to the serious public health concerns associated with biofuels/waste.
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Action Day 2

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From this point forward, specific details of how each country plans to achieve their GHG reduction targets should be treated as “state secrets”

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It’s 5:15 pm: time for groups to proceed to their meeting rooms!

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**Charge for Monday: students, please consider bringing laptops to class**

Class will first meet in 3408 to review grades of Paper 1.

Next, class will immediately break into groups

Expectation is that the 8 plans (3 energy, 3 economic development, 1 population, & the int’l agreement) will be finalized before end of class

If your Country can not reasonably expect to achieve finalization of respective plan by end of class on Monday, then either: a) iterate between now and Mon b) arrive early on Mon

*If more negotiating sessions are needed, this will be done on an ad-hoc basis*

Once plans are approved and signed, each group should then devote time to develop a 6 to 8 slide Powerpoint presentation, to be presented to our judges as well as a public audience, that details the energy, economic development, & population control plan of their country

*On either Wed Dec 6 or Mon Dec 11, we’ll have four 10-minute presentations:*

* negotiators present int’l agreement
* China, India, US present their respective energy & economic development plans

Would like to limit each 10-minute slot to no more than 3 speakers

All students expected to be present and participate in Q / A to follow