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

Discussion #23: Action Day #1

Ross Salawitch & Walt Tribett

rjs@atmos.umd.edu  wtribett@umd.edu

Class Web Site: http://www.atmos.umd.edu/~rjs/class/honr229L

ELMS Page: https://myelms.umd.edu/courses/1229919

UN Climate Change Conference - November 2017


27 November 2017
HONR 229L: Climate Change: Science, Economics, and Governance

Action Day 1

5:00 to 5:20  Your Charge

5:20 to 5:40  Countries meet under direction of President: discuss which GHG trajectory you favor and approach to international negotiation

5:40 to 5:50  Negotiation Session 1

During negotiation session, countries should focus on:
   a) energy plan; b) econ. develop. plan; c) popul plan (if appropriate)

5:50 to 6:00  Negotiators back to countries:
   a) verbal presentation of outcome of negotiation
   b) revision of GHG trajectory, if warranted
   c) thoughts on presentation to follow

6:00 to 6:10  Verbal from each president: 3 minutes each, focusing mainly on GHG trajectory and how their country feels about the negotiation

6:10 to 6:15  Charge for Wed
**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
Energy Plan Evaluation

Formal presentation on either Wed, 6 Dec *or* Mon, 11 Dec, 5 pm before panel of 3 judges who will be asked to evaluate:

1. **Efficacy of overall plan**

   For each country:

   2. **Are plans realistic?**
   3. **Did country give up too much or too little in the negotiation?**

Which country did the best?
World Energy Consumption and CO₂ Emissions, Attain & Hold High Population

(a) History

Nuclear: 5.7%
Renewables: 32.6%
Coal: 15.2%
Natural Gas: 23.1%
Liquid Fuels: 23.5%

(b) A. H. Attain & Hold

A.H. High Pop
RCP 8.5
- Coal: 29.8%
- Natural Gas: 34.0%
- Liquid Fuels: 36.2%

Copyright © 2017 University of Maryland.
This material may not be reproduced or redistributed, in whole or in part, without written permission from Ross Salawitch.
Energy Plan Implementation

China: Room 3408 (this room)

President: Anders
3 Member Senate: Kevin, Maggie, Sarah
Energy Minister: Julia
Negotiator: Satvik

Channel the energy & vision of President Xi
Energy Plan Implementation

India: Room 3425

President: Gustavo
3 Member Senate: James, Gisue, Luis
Energy Minister: Priya
Negotiator: Kelly

Channel the courage & wisdom of Dr. Sunita Narain
HONR 229L: Climate Change: Science, Economics, and Governance

Energy Plan Implementation

United States: Room 3400

President: Brad
3 Member Senate: Nate, Rachel, Walt
Energy Minister: Poiret
Negotiator: Brendan

Represent your vision for our country
Your choices: BAU, AH median popul, AH low popul, AI median popul, AI low popul
Your choices: BAU, AH median popul, AH low popul, AI median popul, AI low popul
Your choices: BAU, AH median popul, AH low popul, AI median popul, AI low popul

India

India
https://www.thebalance.com/gross-national-income-4020738
2015 Total Spending

Total Federal Spending 2015: $3.84 trillion

- Social Security, Unemployment & Labor: $1.28 trillion (33%)
- Military: $609.3 billion (16%)
- Medicare & Health: $1.05 trillion (27%)

Interest On Debt: $229.2 billion / 6%
Veterans Benefits: $160.6 billion / 4%
Food & Agriculture: $135.7 billion / 4%
Education: $102.3 billion / 3%
Transportation: $85 billion / 2%
Housing & Community: $61.5 billion / 2%
International Affairs: $50.2 billion / 1%
Energy & Environment: $44.8 billion / 1%
Science: $29.8 billion / 1%

Source: OMB National Priorities Project

https://www.nationalpriorities.org

U.S. Funding, Discretionary and Non-Discretionary

https://en.wikipedia.org/wiki/Expenditures_in_the_United_States_federal_budget#Discretionary_vs._mandatory_spending
U.S. Funding, Discretionary

https://en.wikipedia.org/wiki/Expenditures_in_the_United_States_federal_budget#Discretionary_vs._mandatory_spending

2015 Discretionary Spending

Discretionary Spending 2015: $1.11 trillion

- Military: $598.5 billion (54%)
- Government: $72.9 billion (7%)
- Education: $70 billion (6%)
- Medicare & Health: $66 billion (6%)
- Veterans Benefits: $65.3 billion (6%)
- Housing & Community: $63.2 billion (6%)
- International Affairs: $40.9 billion (4%)
- Energy & Environment: $39.1 billion (4%)
- Science: $29.7 billion (3%)
- Social Security, Unemployment, & Labor: $29.1 billion (3%)
- Transportation: $26.3 billion (2%)
- Food & Agriculture: $13.1 billion (1%)

https://www.nationalpriorities.org
Expenditures in the 2008 Central Budget

- General public services (6.9%)
- National defense (11.3%)
- Public security (2.4%)
- Education (4.4%)
- Science and technology (3.2%)
- Culture, sports and mass media (0.7%)
- The social safety net and employment (7.5%)
- Medical and health care (2.3%)
- Industry, commerce and banking (10.7%)
- Transportation (3.5%)
- Agriculture, forestry and water conservancy (5%)
- Urban and rural communities (0.7%)
- Fiscal transfer payments to local governments (22.8%)
- Tax rebates to local governments (11.8%)
- Miscellaneous expenditures (1.6%)
- Post-earthquake recovery and reconstruction (1.6%)

Environmental protection (2.9%)

China Expenditures, 2013

How China's government spends

- Education: 2.3 trillion yuan
- Social security and employment: 1.4 trillion yuan
- Agriculture, forestry and water: 1.3 trillion yuan
- General public service: 1.3 trillion yuan
- Urban and rural society: 970 billion yuan
- Transportation: 839 billion yuan
- Healthcare: 814 billion yuan
- Public security: 769 billion yuan
- National defense: 740 billion yuan
- Other: 3.3 trillion yuan

Source: HSBC/Ministry of Finance

The largest category shown above -- labeled "other" -- contains smaller items, including interest payments on debt, commodity reserves, foreign affairs and public housing. The decentralized nature of government in China muddles the picture, with a majority of spending administered by provincial and local governments.

http://economy.money.cnn.com/2014/01/15/china-budget/
India Funding

Funding of Maharashtra (state in which Mumbai resides)

Break-Up Of Allocations In Maharashtra Budget 2013-14

Total Budgetary Allocations: Rs 46,938 cr

Source: Maharashtra Budget 2013-14