

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

Discussion #24: Action Day #2

Ross Salawitch

rjs@atmos.umd.edu

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

ELMS Page: <https://myelms.umd.edu/courses/1269254>



<https://unfccc.int/cop25>

21 November 2019

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

Energy & Economic Plan Implementation

China: Room 3400

President: Peter

3 Member Senate: Aaron, Cristy, & Emma

Economic Minister: Sijing

Energy Minister: Thomas

Negotiator: Ammar

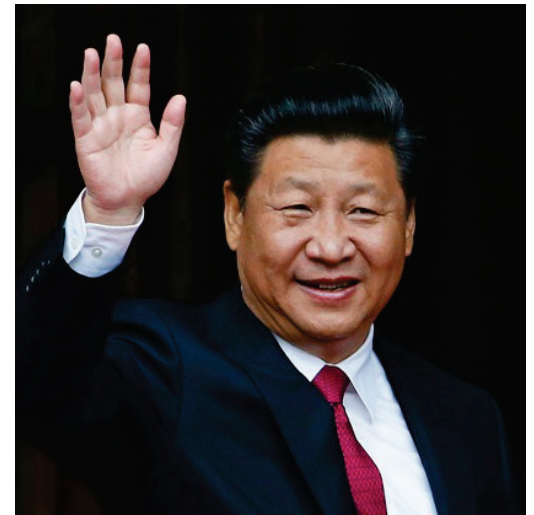
Trajectory: BAU

AH (33% by 2060) median pop **Channel the energy & vision of President Xi**

AH (33% by 2060) low pop

AI (50% by 2060) median pop

AI (50% by 2060) low pop



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Energy & Economic Plan Implementation

India & Africa: Room 3425

President: Hillary

3 Member Senate: Anna, Abhay, Eliza

Economic Minister: Michelle

Energy Minister: Amanda

Negotiator: Sam



**Channel the courage & wisdom of Dr. Sunita Narain
and Energy Minister Sospeter Muhongo**

Trajectory: BAU

AH (33% by 2060) median pop

AH (33% by 2060) low pop

AI (50% by 2060) median pop

AI (50% by 2060) low pop

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Energy & Economic Plan Implementation

US & Europe: Room 3408

President: Edison

3 Member Senate: Anne, Ryan, Rhea

Economic Minister: Eric

Energy Minister: Luke

Negotiator: Nyah

Trajectory: BAU

AH (33% by 2060) median pop

AH (33% by 2060) low pop

AI (50% by 2060) median pop

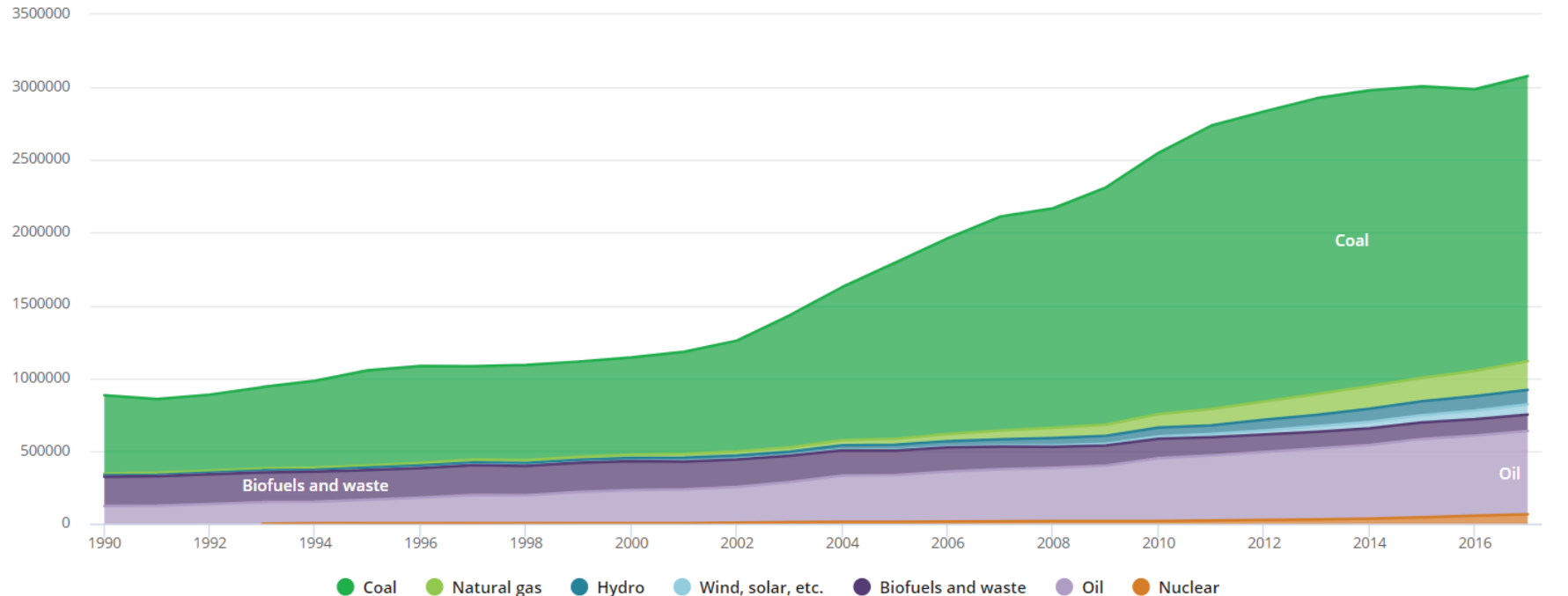
AI (50% by 2060) low pop



Channel the voice of America's Pledge

Energy Supply, China

Total primary energy supply (TPES) by source, China (People's Republic of China and Hong Kong China) 1990-2017
ktoe



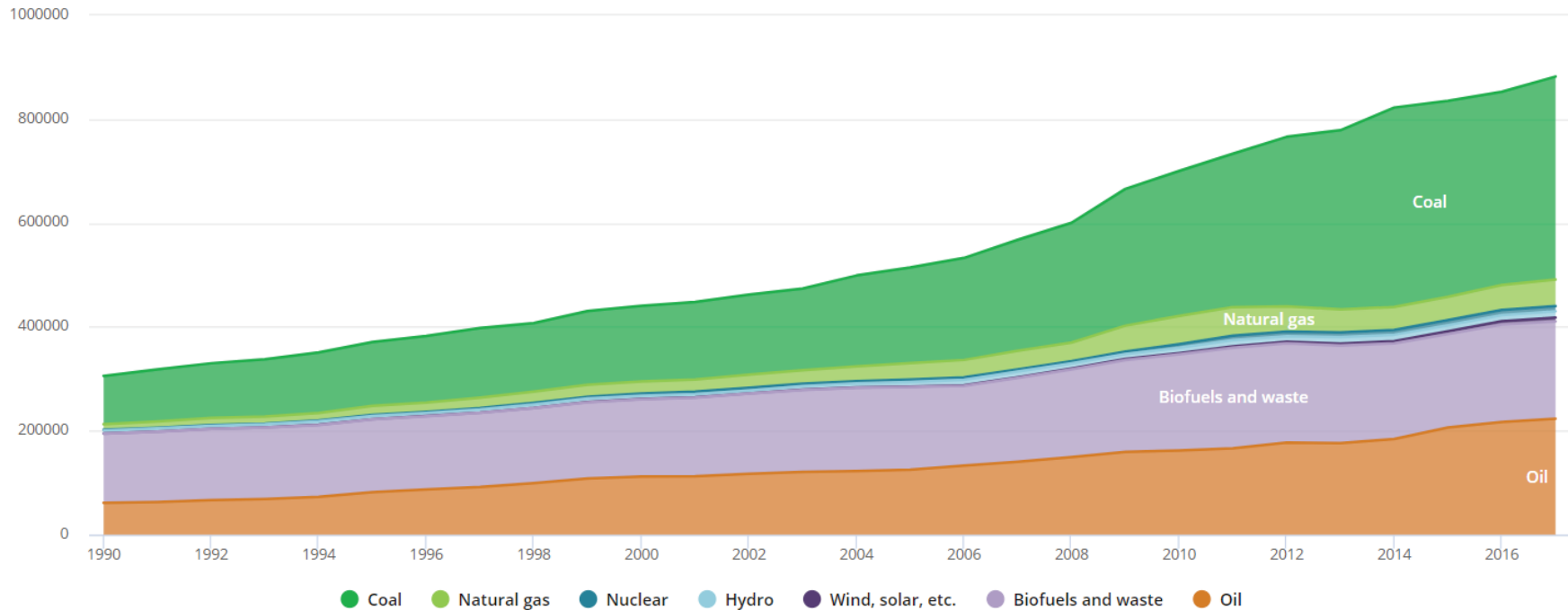
In 2017, ~11% of the primary energy supply in China was from sources other than coal, oil, and natural gas. The largest contributor to this share is biofuels & waste at ~3.7%, with hydropower 2nd at ~3.2% Wind & solar together provided 2.3% of China's primary energy supply in 2017.

<https://www.iea.org/statistics>

Energy Supply, India

Total primary energy supply (TPES) by source, India 1990-2017

ktoe

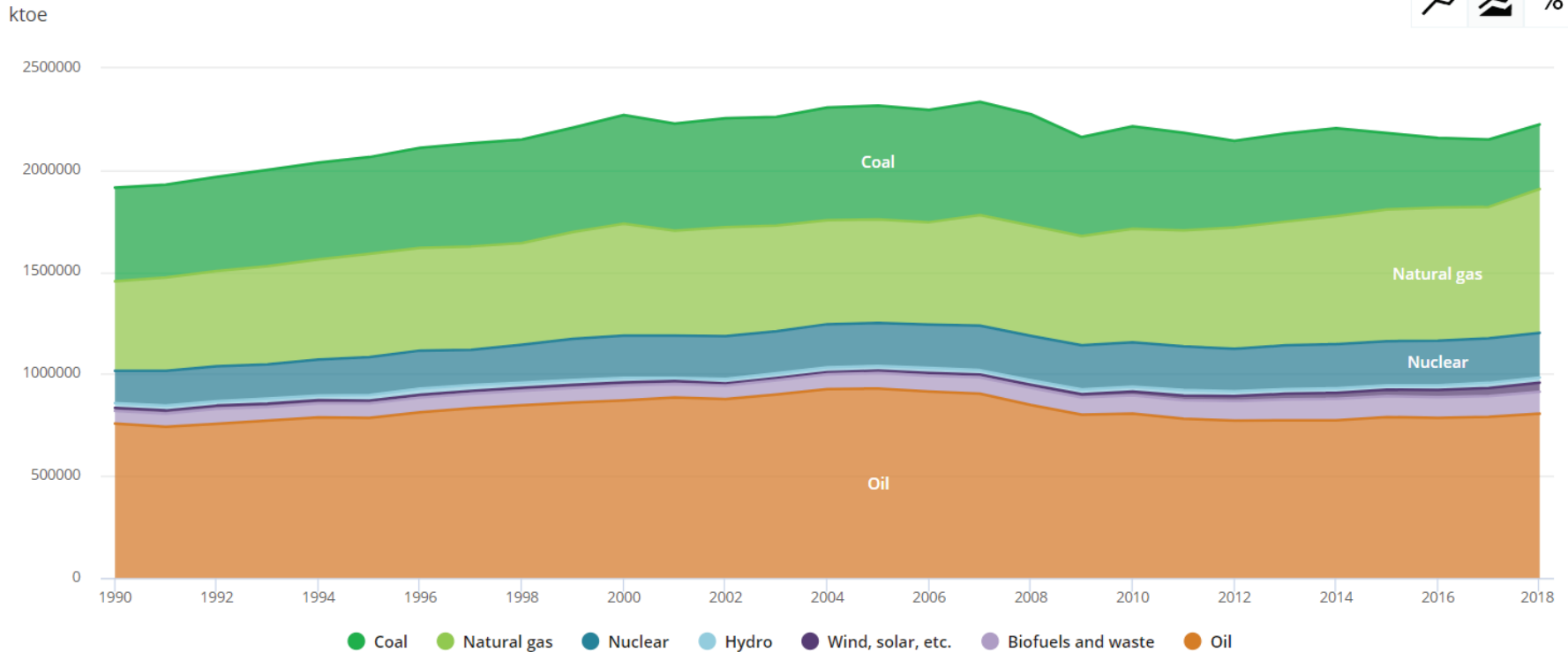


In 2017, ~25% of the primary energy supply was from sources other than coal, oil, and natural gas. However, the vast majority of this share is biofuels and waste.

<https://www.iea.org/statistics>

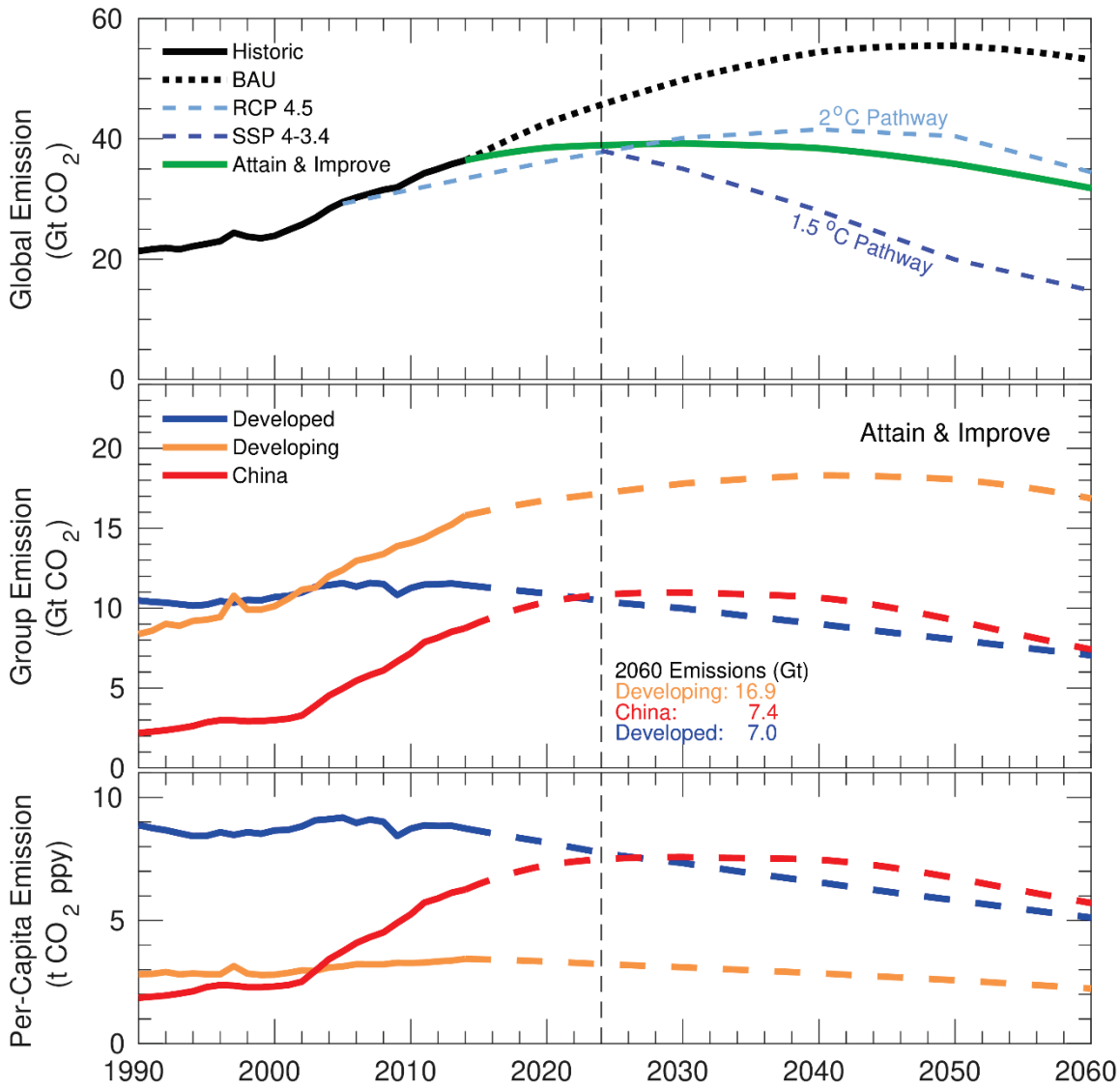
Energy Supply, United States

Total primary energy supply (TPES) by source, United States 1990-2018

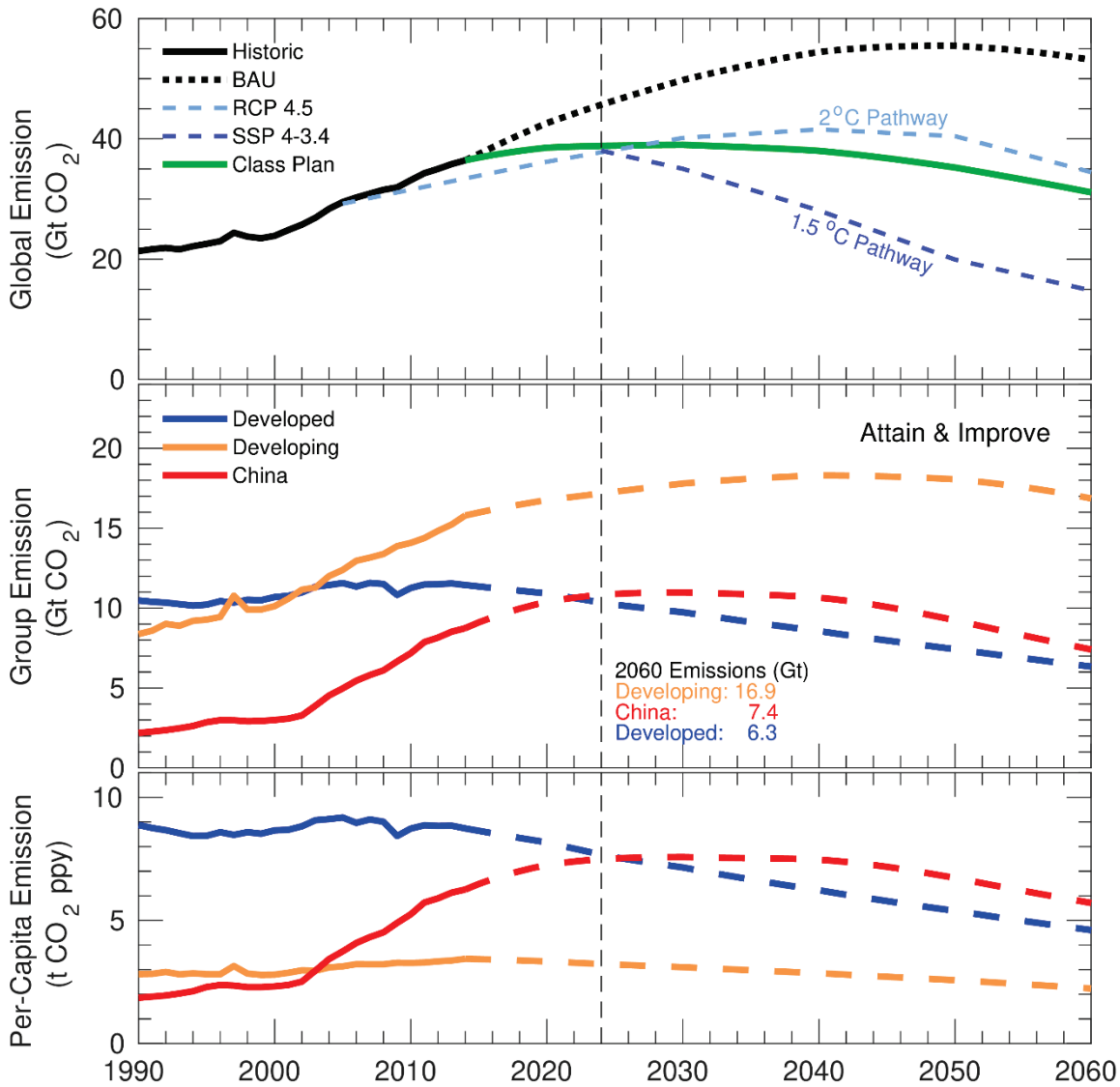


In 2018, ~18% of the primary energy supply in the U.S. was from sources other than coal, oil, and natural gas. The largest contributor to this share is nuclear, at ~10%. Wind & solar together provided 2.0% of US's primary energy supply in 2018 and hydropower supplied a little more than 1%.

<https://www.iea.org/statistics>



All groups at Attain & Improve, median popul



All groups at Attain & Improve, median popul + Developed nations achieve 55% renewables in 2060

Action Day 2

On class website, it is stated:

Grades will be determined based on short writing assignments for each reading (50%), a mid-term paper (25%), evaluation of student led discussion and class participation during the semester (10%), and a brief final paper that reflects each student's view of the final project, connecting to the real world issues related to the governance of climate change (15%).

as well as:

Final Paper: 3 pages maximum single spaced. For the last few weeks of class students will break into three groups, select roles within each group, and assemble an energy plan. The plans will be presented Thurs, 5 Dec. Final paper is due Mon, 9 Dec 2019 (last day of the semester), just before midnight. The paper should reflect your view of the energy plan, defending or critiquing the plan from your perspective in the framing of the plan. You are welcome to also include commentary on the problems and/or success the real-world is having regarding a transition towards renewable energy. More specifically, the Final Paper requirement is explained at:

[https://www.atmos.umd.edu/~rjs/class/honr229L/assignments/HONR 229L 2019 Final Paper.pdf](https://www.atmos.umd.edu/~rjs/class/honr229L/assignments/HONR_229L_2019_Final_Paper.pdf)

which will be handed out in class.

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Need to produce 7 “plans”

Attain & Improve, US & Europe ← Energy Plan for 55% renewables, 2060
Economic Development Plan for transition

Attain & Improve, China ← Energy Plan for 50% renewables, 2060
Economic Development Plan for transition

Attain & Improve: India & Africa ← Energy Plan for 50% renewables, 2060
Economic Development Plan for transition

Negotiators: International Agreement setting forth mechanism for placing an international price on carbon, as well as any financial or technical trades needed for achieve “Attain & Improve” throughout the world

Each of these 7 “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 by Tuesday, 3 Dec. The sooner the better. 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 & you all will stand up & describe.

Action Day 2

12:30 to 12:45 Charge for today

12:45 to 12:55 Countries meet with a focus on their plans for moving forward on 2°C target
China (3400), India & Africa (3425), US & Europe (3408)

12:55 to 1:10 **Negotiating Session 2 (3426):**

Negotiators: Focus on written, financial & technical measures to occur such that each country entity will achieve their respective Attain & Improve target.

Country groups focus on your **economic plan** (which can include a Carbon Tax and/or Cap & Trade within your region, as well as other economic carrots (incentives for use of renewables) or sticks (penalties for use of fossil fuels))

1:10 to 1:15 Negotiators back to countries

a) negotiator: Summarize Session 2

b) rest of country: react & redirect, if necessary

1:15 pm any President desiring another Negotiating Session tell Ross, outside room 3408

1:15 to 1:35 **Negotiation Session 3 (3426), if necessary**

Negotiators: Seal the Deal, if possible. If not, will spill over to Tues (11/26) or Tues (12/3)

Country groups: Focus on your **energy plan** to achieve 50% of all energy (55% for the US & Europe) by renewables in 2060

1:35 pm Everyone return to 3408

1:35 to 1:43 **2 mins max** summary from team of negotiators & each President, focused on **whether** the target of CO₂ reductions consistent with 2.0°C is achievable?

1:43 to 1:45 Charge for Tuesday

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Charge for next Action Day:

students, please consider bringing laptops to class, so plans can be modified in real time and work can begin on PowerPoints for the 5 Dec “Show”

Will first gather in 3408 for quick meeting

Will break into three groups soon after initial gathering

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

Hope is that the 7 plans (3 energy, 3 economic development, & the international agreement) will be finalized before start of class on Tuesday, 3 December

If your Country group can not reasonably expect to achieve finalization of respective plans by start of class on Tues, 3 Dec, then either: a) We must use Tues, 26 Nov as an Action Day
b) folks will need to either arrive early on Tues, 3 Dec or meet / communicate on your own prior to 3 Dec

Once plans are approved and signed, each group should then devote time to develop a 6 to 8 slide Powerpoint presentation, to be presented on Thurs, 5 Dec that details the international agreement (will be presented first) and then the energy & economic development of their country group

On Thurs Dec 5, we'll have four 10-minute presentations:

- * **negotiators present int'l agreement**
- * **China, India & Africa, US & Europe present their respective energy & economic development plans**

Class meeting on Tues, Dec 3 will be devoted to finalizing these presentations

Show of hands:

How many will be attending class on Tuesday, 26 November?

We will either have “Action Day 3” for the project or we will watch a film entitled *Climate Refugees* (trailer at <https://www.youtube.com/watch?v=XYBrg5W4mJ0>)

Climate Refugees

★★★★★ (17) IMDb 8.0 1h 23min 2010 

This documentary elucidates what transpires when an overpopulated world, dwindling resources, and a shifting climate all collide—an intersection of humanity that many call the greatest challenge mankind will ever face. If an "Inconvenient Truth" depicted what causes climate change, this film illuminates the calamity that we kindle by continuing to facilitate climate change.

Genres Special Interest
Director Michael P. Nash
Starring Lester Brown, Barack Obama, Ed Begley Jr.