Science Policy
“... in the news...”

AP Seminar
September 16, 2014
Guest Speakers

- **Andrew Holland** – Senior Fellow for Energy and Climate, American Security Project
  
  http://www.americansecurityproject.org/about/staff/andrew-holland/

- **Dr. Adam Rosenberg** – Staff Director, Subcommittee on Energy, House Committee on Science, Space and Technology
  
  http://democrats.science.house.gov/committee-staff

- **Lawrence Loftin Flowers** – Assistant VP for Government Relations, Columbia University
  
  http://gca.columbia.edu/loftin-flowers
How can science and applied physics contribute solutions to our nation’s leading issues?

- Develop clean/renewable energy sources and techniques to minimize climate change (14)
- Create new jobs, economic growth, advancing technology, and enhanced productivity of our national workforce (10)
- Improve education and promote social well-being (5)
- Discovery and invention (3)
- Cure disease and improve health care (2)
- Improving national security (2)
In the news...

- *Yesterday*, White House announces “new private sector commitments and executive actions” to reduce HFC emissions and extends time for public comment on new EPA carbon rules (until after the November elections).

- *Yesterday* at CDC in Atlanta, President Obama announces increased U.S. response to fight West African Ebola epidemic.

- *Yesterday*, Nicholas Stern (renown British economist) releases new report *New Climate Economy* (with terrific website!)

- *Today* in the House Committee on Science: “Failure by Design”

- *Ahead*: UN Climate Summit “Catalyzing Action” (Tuesday) and “People’s Climate March” (Sunday)
FACT SHEET: Obama Administration Partners with Private Sector on New Commitments to Slash Emissions of Potent Greenhouse Gases and Catalyze Global HFC Phase Down

The Obama Administration is committed to taking responsible steps to slow the effects of climate change so we leave behind a cleaner, more stable environment for future generations. That’s why, today, the Administration is announcing new private sector commitments and executive actions to reduce emissions of hydrofluorocarbons (HFCs), powerful greenhouse gases that contribute to climate change. The commitments made today would reduce cumulative global consumption of these greenhouse gases by the equivalent of 700 million metric tons of carbon dioxide through 2025, equivalent to 1.5% of the world’s 2010 greenhouse gas emissions and the same as taking nearly 15 million cars off the road for 10 years. In addition, the Administration is announcing a set of executive actions to continue progress in reducing HFC emissions.
FACT SHEET: Clean Power Plan Overview

CUTTING CARBON POLLUTION FROM POWER PLANTS

On June 2, 2014, the U.S. Environmental Protection Agency, under President Obama’s Climate Action Plan, proposed a commonsense plan to cut carbon pollution from power plants. The science shows that climate change is already posing risks to our health and our economy. The Clean Power Plan will maintain an affordable, reliable energy system, while cutting pollution and protecting our health and environment now and for future generations.

Our climate is changing, and we’re feeling the dangerous and costly effects right now.

- Average temperatures have risen in most states since 1901, with seven of the top 10 warmest years on record occurring since 1998.
- Climate and weather disasters in 2012 cost the American economy more than $100 billion.

Although there are limits at power plants for other pollutants like arsenic and mercury, there are currently no national limits on carbon.

- Children, the elderly, and the poor are most vulnerable to a range of climate-related health effects, including those related to heat stress, air pollution, extreme weather events, and others.

Public comment extended from October 16 to December 1
Remarks by the President on the Ebola Outbreak

Centers for Disease Control and Prevention
Atlanta, Georgia
A new pathway for growth.

Countries at all income levels have the opportunity to build lasting economic growth and at the same time reduce the immense risk of climate change. But action is needed now.

The GLOBAL COMMISSION, advised by some of the WORLD'S LEADING ECONOMISTS, sets out a ten point GLOBAL ACTION PLAN for governments and business to secure better growth in a low-carbon economy.
Fixing Climate Change May Add No Costs, Report Says

By JUSTIN GILLIS
SEPTEMBER 16, 2014

In decades of public debate about global warming, one assumption has been accepted by virtually all factions: that tackling it would necessarily be costly. But a new report casts doubt on that idea, declaring that the necessary fixes could wind up being effectively free.

A global commission will announce its finding on Tuesday that an ambitious series of measures to limit emissions would cost $4 trillion or so over the next 15 years, an increase of roughly 5 percent over the amount that would likely be spent anyway on new power plants, transit systems and other infrastructure.

When the secondary benefits of greener policies — like lower fuel costs, fewer premature deaths from air pollution and reduced medical bills — are taken into account, the changes might wind up saving money, according to the findings of the group, the Global Commission on the Economy and Climate.
Full Committee Hearing - The Administration’s Climate Plan: Failure by Design

2318 Rayburn House Office Building Washington, D.C. 20515 | Sep 17, 2014 10:00am

The Administration’s Climate Plan: Failure by Design

Hearing Charter

Witnesses

The Honorable John Holdren, Director, Office of Science and Technology Policy, Executive Office of the President

Ms. Janet McCabe, Acting Assistant Administrator, Office of Air and Radiation, U.S. Environmental Protection Agency
1,600 pages of EPA proposed carbon rules/targets

Figure 1: Calculation of national average fossil EGU CO₂ emissions standards based on BSER

Source: The Brattle Group
Figure 2: Fossil EGU CO₂ emissions standards by state

Source: The Brattle Group
9/21 • NYC
JOIN THE LARGEST CLIMATE MARCH IN HISTORY.

http://peoplesclimate.org/march/
Opening Ceremony

8:00 – 8:30 General Assembly Hall

- UN Secretary-General Ban Ki-moon
- Mr. Bill de Blasio, Mayor of the City of New York
- Dr. Rajendra Pachauri, Chair of the Intergovernmental Panel on Climate Change
- Mr. Al Gore, Nobel Laureate
- Ms. Li Bingbing, Actress and UN Environment Programme Goodwill Ambassador
- Mr. Leonardo DiCaprio, actor and UN Messenger of Peace
- Ms. Kathy Jetnil-Kijiner, civil society representative from the Marshall Islands

ENERGY

The Issue: About 80 per cent of the world’s energy is supplied through the combustion of fossil fuels, which releases carbon dioxide and other pollutants into the atmosphere. At the same time, energy demand is growing along with expanding global wealth, a world population expected to reach 9 billion by 2050, and efforts to provide electricity to the 1.3 billion people now living without it.
## Science Policy Committees

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Last Week’s Assignment

• Contact everyone in your policy committee

• Discuss and listen:
  
  How can you apply your understanding of applied physics to address a national policy issue?

• Report one or more ideas next week.

(One or two sentences please.)
Science for Policy Assignment

- Technical and science-based
- Timely and ahead of the political curve
- Clear, factual, easy to explain, wide consensus
- “Big” or “small”?