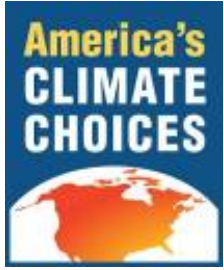


Bridging the science-policy interface:  
America's Climate Choices and the role  
of science in climate governance

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# America's Climate Choices: the request from Congress

The Department of Commerce Appropriations Act of 2008 (Public Law 110-161) calls for the National Oceanic and Atmospheric Administration (NOAA) to execute an agreement with the National Academy of Sciences to:

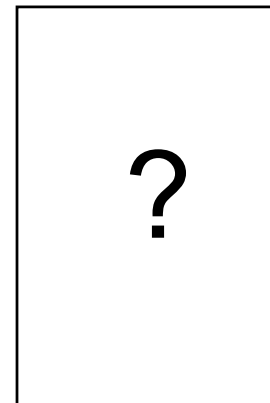
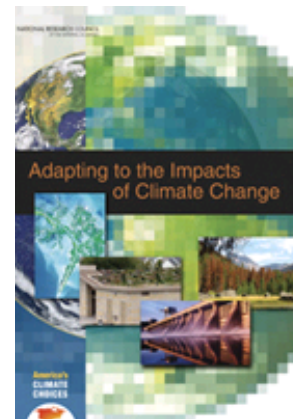
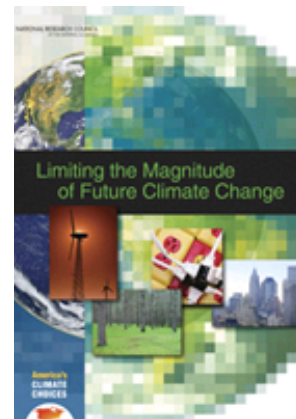
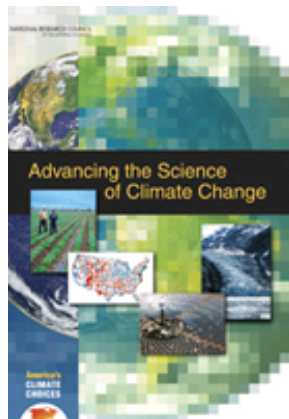
**“...investigate and study the serious and sweeping issues relating to global climate change and make recommendations regarding what steps must be taken and what strategies must be adopted in response to global climate change, including the science and technology challenges thereof.”**

# America's CLIMATE CHOICES

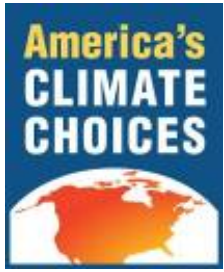
AT THE NATIONAL ACADEMIES



<http://americasclimatechoices.org>

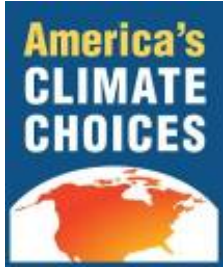


**‘Strong Evidence on Climate Change Underscores Need For Actions to Reduce Emissions and Begin Adapting to Impacts’**



# Science Panel

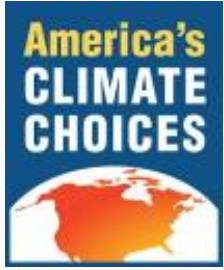
- The science is credible with multiple lines of evidence for warming, anthropogenic causes and risk of serious impacts
- Research needs greater coordination and more attention to understanding the responses to climate change



# Limiting Panel

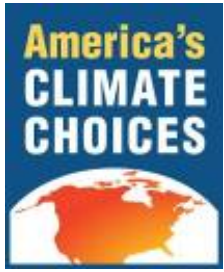
The US should limit emissions through

- a budget (170 to 200 Gt 2012-2050)
- a price on carbon
- increased efficiency, renewables, full scale demo of nuclear and CCS, infrastructure retrofit and R&D spending



# Adapting Panel

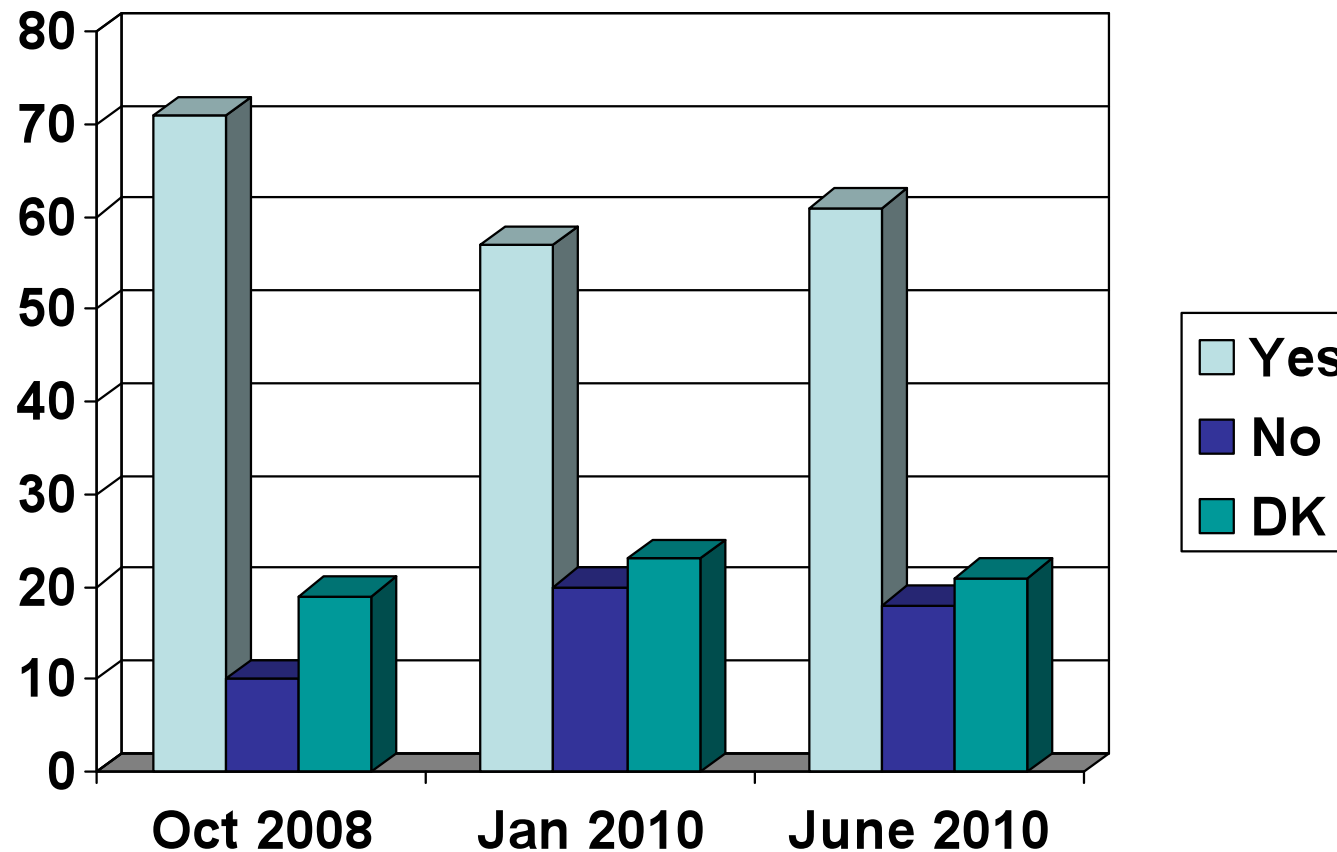
- Impacts already evident across US
- Short term actions can be low cost, win-win, with co-benefits.
- Review and reverse maladaptive policies
- Recommends a **National Adaptation Strategy** to support and coordinate decentralized efforts in which Federal government should provide technical and scientific resources, incentives, guidance, research and be a role model
- Adaptation is a process that requires a risk management approach



# Informing Panel

- Who is making decisions about climate change?
  - Importance of non-federal actors such as state and local government, private sector
- What information do they need?
  - Improved information services and decision support tools for responding to climate change
  - Climate services, greenhouse gas accounting
- The challenge of public education and communication

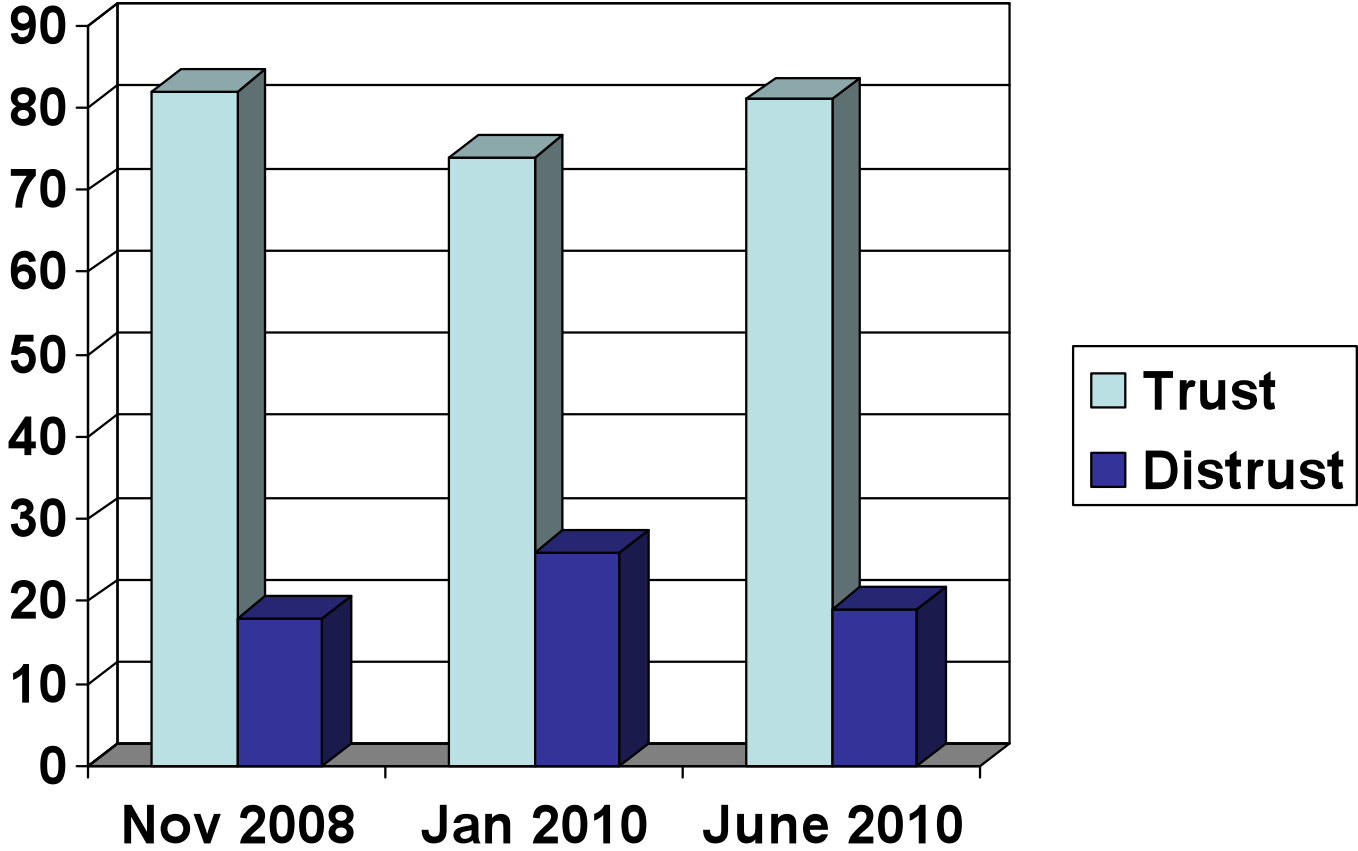
# American attitudes to climate change: Is global warming happening?



Leiserowitz, A., Maibach, E., Roser-Renouf, C., & Smith, N. (2010) *Climate change in the American Mind: Americans' global warming beliefs and attitudes in June 2010*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication.  
<http://environment.yale.edu/climate/files/ClimateBeliefsJune2010.pdf>



# American trust in scientists as a source of information about global warming



# Science and policy processes

## Science (and governmentality)

- is used to legitimate and evaluate policy and to support arguments about what policies are most effective
- scrutiny of science increases when powerful interests and/or significant money are at stake

## Science and the international politics of adaptation

- Increased attention and funding at local, national and international level, including private sector and NGOs
- Who should pay and how much, who is eligible, how success is measured?
- GHG emissions, damage estimates, vulnerability indices, MRV (monitoring, reporting, verification)

# Accounting for adaptation: lessons from offsets/CDM

- Debates over ethics, economics, science and sustainability
- Multiscale and multiactor governance
- Baselines, additionality, MRV, sustainable development

# Science/governance challenges

- Baselines
- Additionality
- Sustainable development
  
- Certification?
- Professionalization?
- Rigorous evaluation?