

# ENVS 4100/3521 Climate Politics & Policy

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COP17 country position paper



- (1) What your country position has been on **mitigation commitments** as well as **actual emissions reductions**
- (2) What your country position has been on **adaptation commitments and needs**
- (3) What are particular issues in climate change that your country has **prioritized** (e.g. sea level rise, drought, poverty, the economy) in negotiations

*[due next Thursday, copies for LMC members and me]*

## Obama State of Union address 2012



this past Tuesday

(1) What did Obama say about climate change?

“the difference in this chamber may be too deep right now to pass a comprehensive plan to fight climate change” ~ Obama SOTU 2012



(2) What did Obama say about energy (security)?

called for “an all-out, all-of-the-above strategy that develops every available source of American energy” ~ Obama SOTU 2012

## top themes in today’s readings



Hulme – Chapter 3 *The Performance of Science*

- ‘one of the reasons we disagree is that science is not doing the job we expect or want it to do’ (p. 74)
  - 3.2 *What is scientific knowledge?*
  - three limits to science (p. 106-109)
- Three models of the relationship between **scientific knowledge** and **regulatory decisionmaking**
- post-normal science (p. 78)

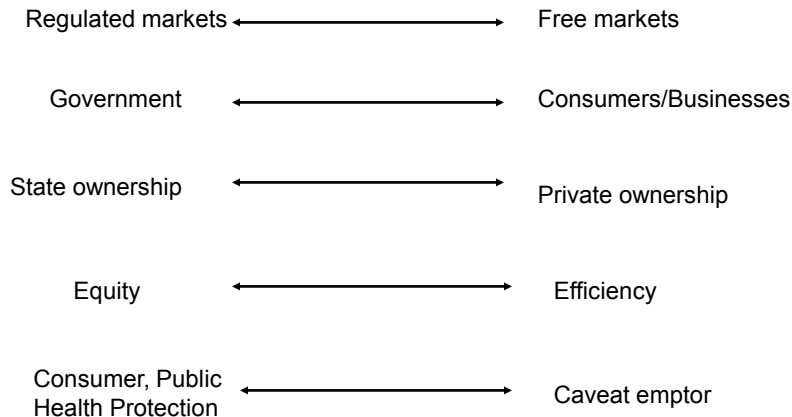
## post-normal science (& policy)



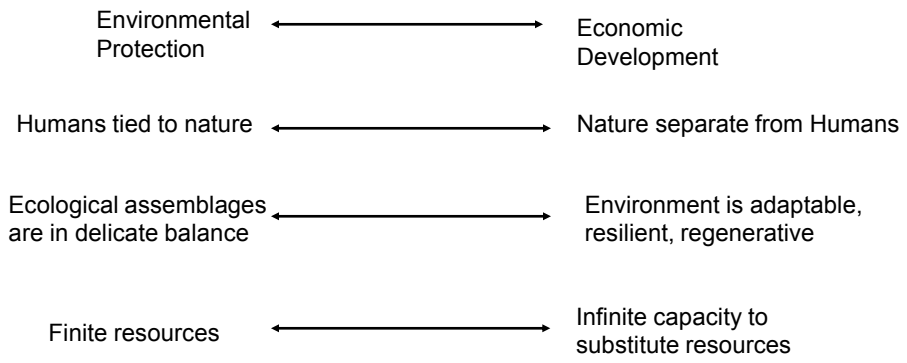
“intended to provide guidance through the new perplexities of the uncertainties, value-loadings, and commitments that characterize contemporary policy-related science” ~ Silvio Funtawicz and Jerry Ravetz

- (1) Goes beyond assumptions that science is both **certain** and **value free**
- (2) recognizes contemporary science-policy interactions as
  - A. Uncertain facts**
  - B. Disputed valued**
  - C. High stakes**
  - D. Politicized alternatives for action**

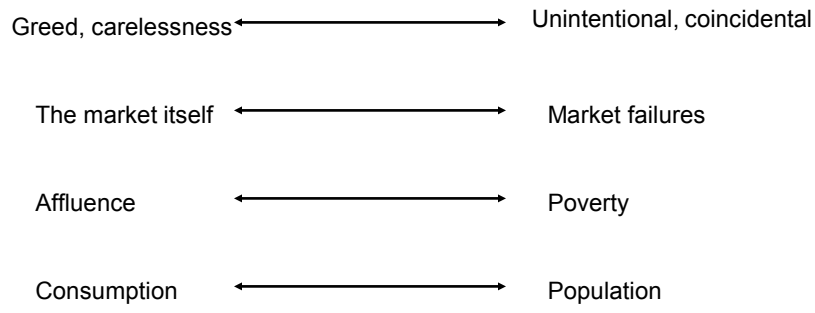
## economic perspectives & perceptions



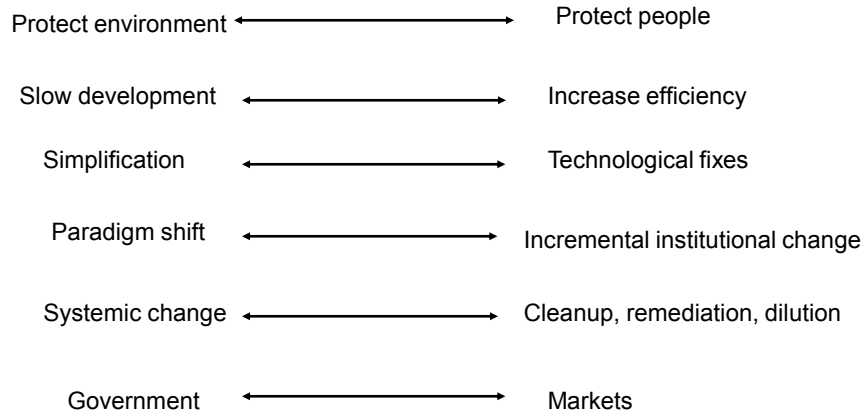
competing environmental perspectives & perceptions



competing perspectives regarding what are the causes?



## competing perspectives regarding what are some solutions?



**key challenge: overcoming binaries!**

## top themes in today's readings



### CARBON ECONOMIES

- carbon-based energy generation is central (e.g. coal, oil, natural gas)
- incentive schemes support carbon-based economies (e.g. subsidies, tax relief)
- associated effects of anthropogenic climate change, pollution, oil geopolitics

### 'NEW' CARBON ECONOMIES

“represents the emerging trade in carbon emissions, along with the series of market-based policy instruments designed to reduce global greenhouse gas emissions through the creation of markets for carbon such as the flexibility mechanisms of the Kyoto Protocol” ~ Brown & Corbrera (2003)

- decarbonization of industry and society (e.g. greater efficiencies; mode-switching to renewable energy generation)
- incentive schemes (e.g. taxation, net metering, feed-in tariffs, cap-and-trade)
- diminished contributions to anthropogenic climate change, air pollution etc.
- introduction of multi-scale agreements to promote policy cooperation

## top themes in today's readings



### Political Economy

- branch of the social sciences
- studies interrelationships between political and economic institutions and processes

### Political Economists

- analyze government intervention in the allocation of scarce resources
- explore various laws and policies
- investigate how economic structures affect human behavior
- feedback: interactions between politics, economics and people/society → how they shape policies and laws



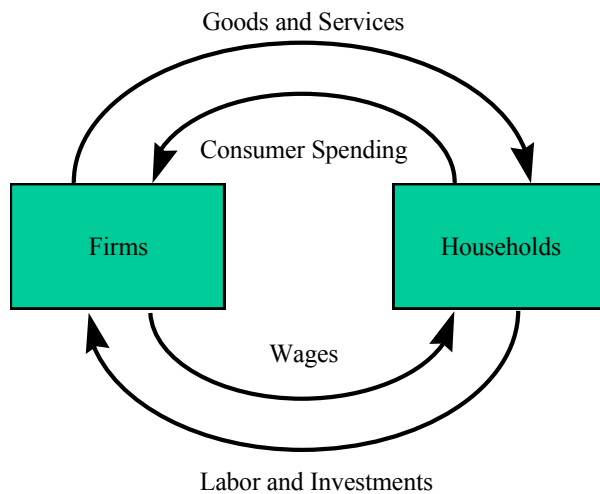
## Adam Smith (1723-1790)



- wrote *The Theory of Moral Sentiments* and *Inquiry into the Nature of Causes of the **Wealth of Nations*** among many works
- 'labor is the source of value'
- 'the invisible hand' of the market
- The market mechanism as self-regulating
- first to formulate a broad-based conception of capitalism



## Smith's View of Capitalist Economic Activity



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- *laissez-faire* view of markets and society



# capitalism

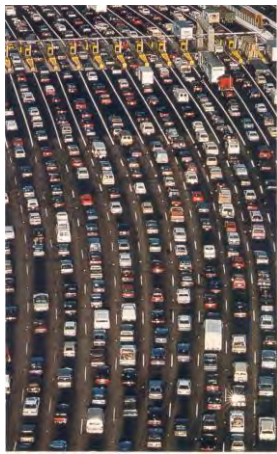


- goods and services are produced for profitable exchange
- human labor power is a commodity for sale in the market
- economic actors are dependent on the market
- fundamental requirements of competition and profit maximization
- financial, natural, social, political and human capital

→ dominant form of business ownership



# carbon-based industry & society



Revkin (1992)

The Anthropocene Era  
~ Crutzen & Stoermer

The 'Hydrocarbon Man'  
~ Apenzeller

The 'Greenhouse Century'  
~ Schneider



Revkin (1992)



## carbon-based industry &amp; power



	<b>ExxonMobil</b>	<b>BP</b>	<b>Royal Dutch/Shell</b>
Headquarters	Texas, USA	London, UK	London/the Hague
Annual sales/ emissions (tons CO <sub>2</sub> )	\$328 billion 138 million	\$249 billion 78 million	\$307 billion 105 million
operations/employees	190 countries 92,000 employees	100 countries 104,000	145 countries 118,000
climate policy	No - oppose Kyoto	Yes - support Kyoto	Yes - support Kyoto
climate science	critical of IPCC reports	cautiously supportive	cautiously supportive

adapted from Pulver (2007) and Forum for the Future (2006)<sup>17</sup>

## top themes in today's readings

Hallegate & Ambrosi – Chapter 13*Assessing Economic Impacts*

- *Stern Review of the Economics of Climate Change* (p. 144)
- “Cost-benefit analysis may not be the best tool for designing climate policies” (p. 147) → **‘Five numeraires’**

Schneider & Mastrandrea – Chapter 15*Risk, Uncertainty & Assessing Dangerous Climate Change*

- Risk = consequence x probability (p. 163)
- Dangers of Type I and Type II errors (p. 164) → links to the **‘precautionary principle’**
- Special Report on Emissions Scenarios (SRES) (p. 165)

Newell & Paterson – Chapter 5 (in Boykoff 2009)

*The Politics of the Carbon Economy*



- will climate governance create an enabling environment where 'climate capitalism' is compatible with climate change mitigation and adaptation?
- OR will carbon markets exist as isolated sites of accumulation in an economy separated from climate reduction efforts?
- **'climate capitalism'** – system where capitalist imperatives of accumulation are achieved through low carbon economic growth
  - **future paths?** 'cowboy climate capitalism' vs. 'climate Keynesianism'