







## Utilitarianism [revisited]





#### **ATTRIBUTES**

- · anthropocentric
- management of natural world in the name of progress
- · technocentric
- can be a conservationist approach
- · outcomes over process
- · view of market system: efficient allocation of goods and services

#### **IMPLICATIONS**

- use of cost-benefit analyses (CBA)
- · well-being is quantifiable: social welfare function
- · distribution blind
- · favors market systems
- basis for efficiency standard and efficiency approaches

### carbon-based industry & society CIRES







Revkin (1992)

The Anthropocene Era ~ Crutzen & Stoermer

The 'Hydrocarbon Man' ~ Apenzeller

The 'Greenhouse Century' ~ Schneider

> Energy, Population, Consumption and Inequality



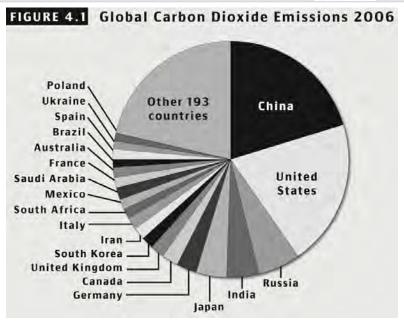
Revkin (1992)

2 February 2012 2

in Pielke, Jr. (2010) 'The Climate Fix'



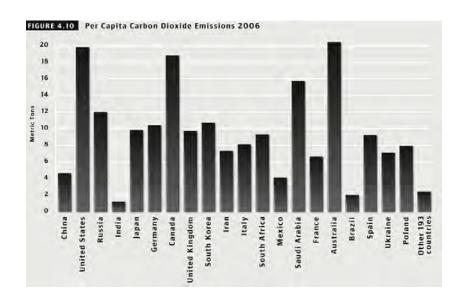




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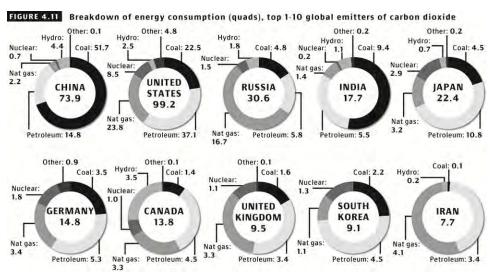




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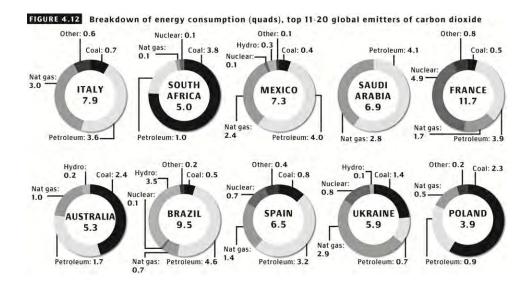




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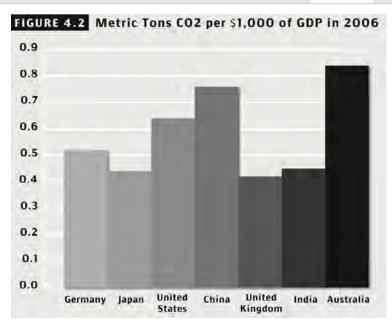


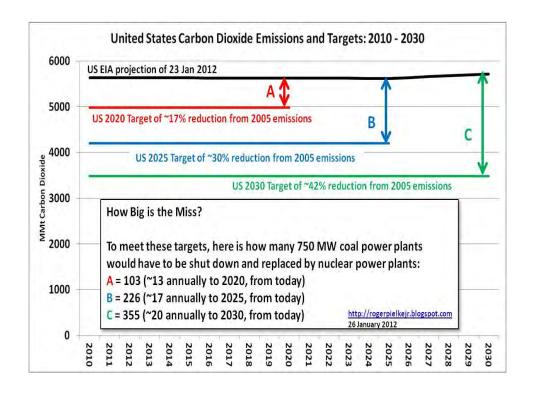
2 February 2012

### in Pielke, Jr. (2010) 'The Climate Fix'









## the Kaya identity



- →elements shaping human impact on climate by way of CO<sub>2</sub> emissions
- →developed by Japanese economist Yoichi Kaya
- → distilled to 2 main considerations:
  - consumption (noted by GDP per capita)
  - energy use (noted by carbon intensity of energy)

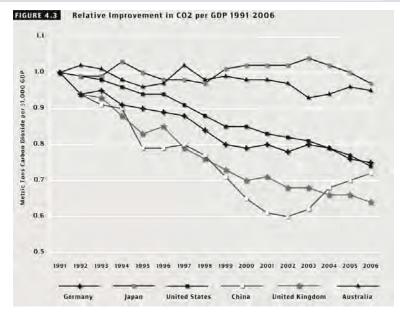
global anthropogenic  $CO_2$  emissions =  $P \times G \times E \times F$  P = global population E = global energy consumptionG = world GDP F = carbon intensity of energy

...a case for innovation policy & decarbonization

#### in Pielke, Jr. (2010) 'The Climate Fix'

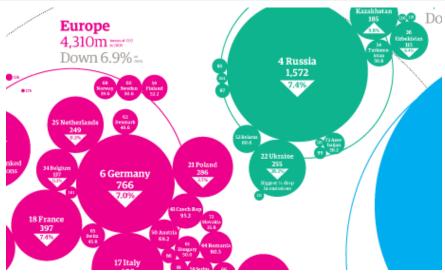






### An Atlas of CO<sub>2</sub> Pollution





energy information administration (2011)

### top themes in today's readings





#### Hulme - Chapter 4 The Endowment of Value

- 4.1 economic applications to climate policy decisions
  - measures of welfare
  - cost-benefit analyses (CBA)
  - discounting the future
  - uncertainty, risk and precaution
- 4.3 The Stern Review and its Critics
  - e.g. "discount rate too low"...climate policy considerations need to be more closely tied to markets – William Nordhaus
  - e.g. "The Stern authors maintain allegiance to an economic othodoxy which perpetuates the dominant political myth that traditional economic growth can be both sustained and answer all of our problems" – Clive Spash

# Economies must grow for the climate change fight

The "climate problem" suffers from a more powerful and enduring force: economic stagnation

Maxwell Boykoff guardian.co.uk, Monday 16 January 2012 03.00 EST

A larger | smaller Article history



The "climate problem" suffers from a more powerful and enduring force; economic stagnation. Photograph:

Rei Fenø/RPA

These days, dormant climate policy in Washington DC is like Mitt Romney's coiffure: seemingly no prospects for change. And, with the 2012 US presidential election on the

# debate: economic growth &

climate policy action

#### SESSION TUESDAY, FEBRUARY 7





#### **GUEST LECTURE**

Jessica Weinkle – climate change & disasters: signals & noise?

# A CASE-STUDY AT THE HUMAN-ENVIRONMENT INTERFACE & ENROLLING POST-NORMAL SCIENCE

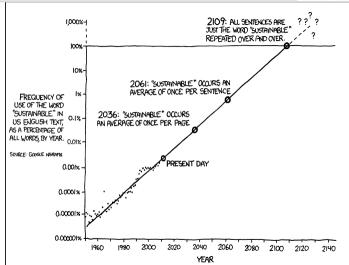
"intended to provide guidance through the new perplexities of the uncertainties, value-loadings, and commitments that characterize contemporary policy-related science" ~ Silvio Funtawicz and Jerry Ravetz

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

#### REMINDER: Thursday, FEBRUARY 9







THE WORD "SUSTAINABLE" IS UNSUSTAINABLE.

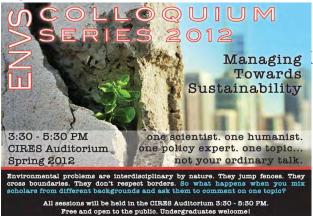
http://xkcd.com/1007/

#### REMINDER: Thursday, FEBRUARY 9





### assignment #1 due at start of class



today @ 330pm, CIRES Auditorium!
PRODUCING WILDLIFE: MANAGING A CONSERVATION RESERVE IN
INDIA DURING THE ANTHROPOCENE

hy Paul Robbins School of Geography and Development University of Arizona