Litigation Demands for Climate Science

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Sarewitz and Pielke

"It is precisely those engaged in defining the demand function for science who are most likely to benefit from its outcomes."

Mapping Supply and Demand

- Will help to match science to particular users
- May enhance usefulness to those identified as users
- Overall usefulness will demand on the inclusiveness of the supply and demand functions

Identify Users Inclusively

- Identifying stakeholders privileges some uses
- Some uses may be hard to identify in advance
- Responding to particular users
 Makes science more useful to them
 Does not necessarily achieve best balance

Courts as Climate Science Consumers

May not be taken into consideration
Difficult to anticipate demands
Depends on needs of litigants
Many different legal theories

Potentially Significant Effects

Law and other policy
Public understanding of climate issues
Government, corporate, and individual behavior
Climate science

- Credibility
- Salience
- Legitimacy

Use of Science in Litigation

Will use best available science
Battle of the experts
Role of uncertainty
New information opens new litigation opportunities

Massachusetts v. U.S. Environmental Protection Agency

Issue:

Whether the Clean Air Act gives EPA the authority to regulate greenhouse gas emissions from motor vehicles, and, if so, whether EPA should regulate such emissions.

Massachusetts v. U.S. Environmental Protection Agency

Science needed:

- General science linking greenhouse gas emission to climate change
- Likely effects of climate change on public health and welfare

Massachusetts v. U.S. Environmental Protection Agency

Significance of outcome:

- Authority of U.S. government to regulate greenhouse gas emissions under current law
- Whether EPA can and should take action now, or must wait for clearer direction from Congress

Friends of the Earth v. Watson

Issue:

 Whether federal agencies must consider climate effects when conducting environmental reviews under the National Environmental Policy Act

Friends of the Earth v. Watson

Science needed:

 General understanding of the link between human activities and climate change

Friends of the Earth v. Watson

Significance of outcome:

- Makes climate a routine component of environmental reviews
- Likely to extend to all U.S. federal agencies

Connecticut v. American Electric Power Company, Inc.

Issue:

Whether major power companies constitute a public nuisance under U.S. tort law

Connecticut v. American Electric Power Company, Inc.

Science needed:

- Link between power plant emissions and effects on human welfare, including health, economic, and other values
- Attribution of climate change to specific causes, both natural and human
- Indication that change in power plant emissions can make a difference

Connecticut v. American Electric Power Company, Inc.

Significance of outcome:
 Highlights impacts
 Establishes responsibility
 Allocates costs

Inuit Circumpolar Conference

Issue:

Whether the United States has violated the rights of the Inuit people affected by global climate change

Inuit Circumpolar Conference

Science needed:

- Link between climate change and observed environmental effects, such as melting of permafrost and sea ice
- Relative attribution of climate change to specific causes, both natural and human
- Specific harm suffered by Inuit resulting from climate change
- Link to actions by the United States

Inuit Circumpolar Conference

 Significance of outcome
 Links climate change to real human problems
 Considers ethical issues such as responsibility of nations to people beyond their borders
 Identification of winners and losers in climate

Identification of winners and losers in climate change

Conclusions

Define users of climate science as broadly as possible

- Consider the significance of the uses by particular stakeholders
- Include climate litigation as an important user of climate science