Ethics &
Global Climate Change
ENV 100 Guest Lecture

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Agenda

A brief introduction to climate change

Ethics & Climate Change:

Why is climate change an ethical issue?

What are some of the specific ethical issues that arise when trying to decide on appropriate climate policy?
The Greenhouse Effect

Some of the infrared radiation passes through the atmosphere but most is absorbed and re-emitted in all directions by greenhouse gas molecules and clouds. The effect of this is to warm the Earth’s surface and the lower atmosphere.

Solar radiation powers the climate system.

Some solar radiation is reflected by the Earth and the atmosphere.

About half the solar radiation is absorbed by the Earth’s surface and warms it.

Infrared radiation is emitted from the Earth’s surface.
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IPCC AR4, Synthesis Report, Figure 3.2
Why is Climate Change an Ethical Issue?
A Perfect Moral Storm: 
The Ethical Tragedy of Climate Change

Stephen Gardiner, Ph.D.
The Global Challenge

• Causes and Effects of CC are spatially diffuse

  – Emissions all over the world cause CC

  – People will be differentially affected all over the world
The Intergenerational Challenge

- Causes and Effects of CC are temporally diffuse
  - Effects of CC caused by centuries of emissions
    - We will harmfully affect future generations (not ourselves)
The Ecological Challenge

- Climate change will affect animals and nonhuman nature (plants, ecosystems, etc.)
The Theoretical Challenge

• Scientific uncertainty & risk
• International justice
• Intergenerational ethics
• Environmental ethics
“The sense of the analogy is then that climate change appears to be a perfect moral storm because it involves the convergence of a number of factors that threaten our ability to behave ethically.”
Moral Corruption
What are some of the specific ethical issues that arise when trying to decide on appropriate climate policy?
The Allocation of Emissions

• What rates of GHG emissions should be allowed?

• Who should be allowed to emit how GHGs and at what rates?
  – Developed vs. Developing Countries
  – Poor vs. Rich Individuals
Unavoided Impacts

• Who should Pay for Adaptation?

• What, if any, compensation is owed to those who suffer from climate impacts?
  – Who pays for this?
Individual Responsibility

• Are individuals responsible for their climate-affecting behaviors (e.g., GHG emissions)?
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Geoengineering

• Should we research geoengineering strategies?

• Who should decide to implement geoengineering?
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