

# The Social Cost of Carbon: Wrong Question, Bad Answers

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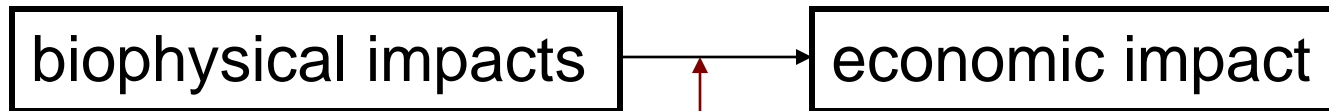
# SCC: The Implicit Logic



climate science



ecology, geology



economic valuation



# Uncertainty and Forecasting

Sources of uncertainty:

- biophysical feedback mechanisms (climate)

- physical system responses

- biological system responses

Forecast impacts encompass uncertainty

But there will also be impacts we cannot forecast

# Forecasted Impacts: The Limits to Valuation

- Misuse of monetary values: they are not measures of well-being
- Role of context: individual consumption (willingness to pay) versus social valuation (political support)
- Evidence from behavioral economics: “predictably irrational”
- Lost in translation: some noneconomic values will not survive monetization
- Fuzzy numbers: the role of heroic assumptions in monetization

# Further Implications of the Limits to Valuation

## Discounting:

appropriate where costs or benefits are equivalent to money and therefore fungible through time

inappropriate where costs or benefits are not equivalent to money and therefore not fungible

alternative to discounting: a time profile of costs and benefits

Dorman's Law: The sum of a well-measured number and a poorly-measured number is a poorly-measured number.

Adding guesstimates from valuation exercises detracts from the value of what we can measure with precision.

# Non-Forecasted Impacts

What are they?

climate feedback mechanisms we do not anticipate  
complex ecological responses

Why do they matter?

we can't put a value on what we can't anticipate  
but we know that they become more likely as the climate  
diverges from geologically and biologically recent  
experience

What can we do about them?

be precautionary: avoid climate scenarios that are this  
divergent

# What Remains for Economics?

Climate targets can't be based on economic analysis alone. Once a target is set, economics offers cost-effectiveness analysis.

We also need to anticipate the economic impacts of policy.

Net economic cost or benefit: the economic costs of policy minus the economic benefits,

where “economic” refers to **goods or services that have actual prices.**

This analysis should be disaggregated so that specific stakeholders can anticipate economic impacts.