

Climate Change

PPE Capstone

Economics

Emissions of greenhouse gas cause an *externality*. This leads to an *inefficiency*: it would be possible to make some people better off without making anyone worse off. *Solution*: Force people to pay the full cost of their activities.

1. *Carbon Tax*. We set a tax on emissions equal to the social cost of carbon.
2. *Cap and Trade*. For each country a cap is set on its total annual emissions. Each country divides its own cap among its economic agents by allocating to them emission permits. These permits can be traded on a "carbon market".

It is technically possible to eliminate the inefficiency without making anyone worse off:

Efficiency without sacrifice: We force emitters to reduce their emissions but compensate them for it.

Discussion Question: Is Broome right that refusing to settle for *Efficiency without sacrifice* is a strategic mistake politically?

Justice

Emissions of greenhouse gas is normally unjust. Why?

1. The harm caused by your emissions is something you *do*.
2. The harm is *serious*.
3. The harm is *not accidental*.
4. The harm is *uncompensated* for.
5. The emissions (normally) *benefit you*.
6. The harms are not *reciprocated*.
7. It is *preventable*; we could easily reduce our emissions.

Conclusion: When rich people emit greenhouse gas without compensating the people who are harmed, they act unjustly.

Future Generation(s)

Who is harmed by our emissions? Present people are. But what about future generations?

People emit greenhouse gas even when the benefit they get from doing so is less than the cost of doing so because *they* aren't the ones who are paying the costs.

There is no agreement among economists, however, about what that cost is.

We drive down emissions by progressively tightening the cap.

$Efficiency\ with\ sacrifice > Efficiency\ without\ sacrifice > Business\ as\ usual.$

Broome thinks that we have duties of *justice* and duties of *goodness*. What's the difference?

1. *The Compensation Argument.* Our emissions harm future generations, but we are also benefitting future generations in many ways (by adding to the stock of material resources, the stock of human knowledge, etc.). These benefits serve as compensation for the harm of the emissions.
2. *The Non-Identity Problem.* Reducing our emissions changes the identities of the future generations. We don't treat someone unjustly by doing something such that, had we not done, they wouldn't have existed anyway.

Are these arguments convincing?

Individuals (duty of justice) vs Governments (duties of goodness)

Fairness

Cap and Trade forces us to make sacrifices. How should those sacrifices be distributed? What is a fair division of the emission permits?

General Rule of Fairness: When some good is to be divided among people who need or want it, each person should receive a share that is proportional to the claim she has to the good.

Should it be divided equally? Should the remaining part of the resource be divided? Or should we divide the entire resource, noting who has already used what? What about future generations?

What Should You Do?

Each of us is under a duty of justice not to cause the emission of greenhouse gas without compensating the people who are harmed as a result.

How can this be accomplished?

Carbon Offsetting: A means of ensuring that, for every unit of greenhouse gas you cause to be added to the atmosphere, you also cause a unit to be subtracted from it.

Is this a fine way to satisfy your duty of justice?

1. Aren't there better ways to affect the climate?
2. Is offsetting morally dubious?
3. Will it delay progress on climate change?

We all have a duty to have a *zero carbon footprint*. This is not a duty of goodness, but a duty of *justice*.