

## ***Policy and Politics: A summary of the rest of the book***

1. Avoiding dangerous climate change requires rapid energy decarbonisation. (Hansen et al. 2008)

2. Tackling climate change is an inherently difficult problem because the collective interests of the world as a whole are perceived to differ from the narrow self-interest of key actors. This is also referred to as the 'Tragedy of the Commons'(after Hardin 1968). Each country has an incentive to defect from the co-operative solution. A key method to solve the tragedy of the commons is to reformulate the problem in ways that avoid it. Any model is an abstraction of reality, a broader or narrower or different model of reality may include different features.(Hess 2007)

3. Later in the book I will deal with in detail with issues of political feasibility. We must avoid collective political '*Akrasia*'(Aristotle 1995; Book II, Chapter III, 1261b) or 'moral incontinence': sincerely wanting to do something and actually doing something else. The policies to achieve rapid decarbonisation would only be adopted by key actors such as nation-states, business and voters if they are to be perceived to be in these groups (broad) interests.<sup>1</sup>

4. The degree to which actions are perceived to be positive to key actors depends on:  
a) whether the net benefits (financial and other) that accrue to the actors are in fact positive.  
b) the terms in which the policy is expressed and how it is communicated.

5. An important cross-cutting criterion for net benefits for key actors makers is whether a policy increases the wealth of the participant (Dasgupta 2001). The real net benefit to key participants depend both on the design of the policy and the technologies used.

The different classes of participants defined above need to be considered separately:

6a. Nation States: The economic benefits to a country depend upon the benefits to the economy as a whole, to co-benefits such as security of supply. The international interests of nation states are

6b. Companies: The key characteristic of the economy is that it is currently carbon intensive. The structure of the economy can, however, change.

6c. Voters: Any policy changes would create winners and losers

7. Carbon Pricing. Carbon pricing is defined as an additional cost on fossil fuels or the pollution they produce, in addition to their extraction cost (Stern 2006, Chapter 14, p309). Carbon pricing can take the form of a carbon tax or a cap-and-trade scheme.

8. Political Constraints on carbon pricing. There are constraints on how high the price of carbon can be and equivalently, how rapidly emissions can be reduced. This is related to the existing costs and benefits of activity according to the structure of the economy. However, the fact that a (small) tax on carbon is resisted, is only a product of the existing structure of the economy. The structure of the economy can be changed, by decarbonising the energy system.

9. Decarbonising the energy system will require large scale investment in carbon free energy (primarily electricity) generation technologies. Investment is a product of Expectations of future electricity and carbon prices & Uncertainty and risk in those projections.

In order to encourage large scale deployment, one possible option is the use of Electricity and Carbon Price guarantees (Ismer & Neuhoff 2006).

10. By making significant and well-designed policy changes now, we may even be able to create net economic benefits, but we need a widely adopted economic model that takes the behaviour of people and institutions into account.

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<sup>1</sup> See chapter 8