5 keys to a safe-climate future

Climate policy is characterised by the habituation of low expectations and a culture of failure. There is an urgent need to understand global warming and the tipping points for dangerous impacts that we have *already crossed* as a *sustainability emergency*, that takes us beyond the politics of failure-inducing compromise. We are now in a race between climate tipping points and political tipping points.

Numbers in brackets are page references to "Climate Code Red".

1. Our goal is a safe-climate future – we have no right to bargain away species or human lives

- No species has the right to consciously determine what proportion of all other species on earth should become extinct — as the compromise 2 and 3-degree temperature rise targets do. Lacking the collective will to act in a sustainable manner is no excuse (37-42).
- Humans have created the looming catastrophe of global warming (21-23) and we have the capacity and duty to undo the damage and act in a sustainable manner, to cool the earth back to the safe-climate zone (38-39).

2. We are facing rapid warming impacts: the danger is immediate, not just in the future

- Serious climate-change impacts are already happening, both more rapidly and at lower global temperature increases than projected (22-23). As the USA's most eminent climate scientist, James Hansen, told 15,000 of his colleagues at a conference in December 2007, significant "climate tipping" points have already been passed (8) (note 1 below). These include large ice sheet disintegration, significant sea level rises of up to 5 metres this century (9-10) and devastating species loss (17). The Arctic will soon be free of summer sea-ice (2-4) and the Greenland ice sheet is in imminent danger (5-7).
- Temperature increases of 2 degrees are effectively already in the system (5), unless we act dramatically to cut emissions towards zero as quickly as humanly possible. Humanity will no longer have the power to reverse the processes we have set in motion if we pass the "point of no return" (27).
- The IPCC reports are dangerously conservative (1-2, 18-19). A temperature cap of 2–2.4°C, as proposed within the United Nations framework, would take the planet's climate beyond the temperature range of the last million years and into catastrophe (28-31).

3. For a safe climate future, we must take action now to stop emissions and to cool the earth

- The tipping points for large ice sheet and species loss were crossed when we exceeded 300-350 ppm of carbon dioxide in the atmosphere, a point passed decades ago (26-28).

- It is no longer a case of how much more we can "safely" emit, but whether we can quickly enough stop emissions and produce a cooling (54, 58) before we hit tipping points and positive feedbacks — such as carbon sink failure and permafrost loss (14-16) — that will take the trajectory of the earth's climate system beyond any hope of human restoration (12-14).
- Hansen notes that we either begin to roll back not only the carbon emissions but also the absolute amount in the atmosphere, or else we're going to get big impacts (note 1).

4. Plan a large-scale transition to a post-carbon economy and society
- We face a multi-factor sustainability crisis and systemic breakdown (44-46).
- The obstacles to implementing climate solutions are political and social in character, not technological or economic (53-58)
- Speed is of the essence (39-40) in constructing a post-carbon economy as quickly as humanly possible (67-68).
- An imaginary, large-scale programme (59) comparable in scope to the "war economy" or the transformation of the Asian "tiger" economies is required (62, 65).

5. Recognise a climate and sustainability emergency, because we need to move at a pace far beyond business and politics as usual
- These imperatives are incompatible with the "realities" of "politics as usual" and "business as usual". Our conventional mode of politics is short-term, adversarial and incremental, fearful of deep, quick change and simply incapable of managing the transition at the necessary speed. The climate crisis will not respond to incremental modification of the business-as-usual model. Climate policy is characterised by the habituation of low expectations and a culture of failure (47-53, 59-62).
- There is an urgent need to re-conceive the issue we face as a *sustainability emergency*, that takes us beyond the politics of failure-inducing compromise (63-66).
- Even moderate goals (25-40% below 1990 by 2020) now require immoderate rates of change only achievable by shifting to an emergency footing (62).
- As Ian Dunlop, the former fossil fuel industry executive and CEO of the Institute of Directors writes: "The stark fact is that we face a global sustainability emergency. But it is impossible to design realistic solutions unless we first understand and accept the size of the problem. "Climate Code Red" is a sober, balanced analysis of this challenge, unadorned by political spin, proposing a realistic framework to tackle the emergency. It should be essential reading for all political and corporate leaders, but particularly for the community. If we are to have a reasonable chance of maintaining a habitable planet, placing our efforts on an emergency footing is long overdue. We only play this game once; a trial run is not an option.' (74)

Note 1: For a survey of James Hansen's recent comments, see:

Beck, A. (2007) "Carbon cuts a must to halt warming — US scientists", Reuters, 13 December 2007, www.reuters.com/article/latestCrisis/idUSN13267425

Borenstein, S. (2007) "Arctic sea ice gone in summer within five years?", Associated Press, 12 December 2007, news.nationalgeographic.com/news/pf/33860636.html

Inman, M. (2007) "Global warming "tipping points" reached, scientist says", National Geographic News, 14 December 2007, news.nationalgeographic.com/news/2007/12/071214-tipping-points.html