Spratt, D. & Sutton, P. Climate Code Red: the Case for Emergency Action, Scribe, Melbourne, 2008

This book has three main sections. Part 1 covers similar ground to Lynas' work *Six Degrees* and summarises the scientific evidence for disastrous global warming, including the 'feedback processes' that look likely to accelerate it. Part 2 looks at the actions necessary, including eliminating all CO2 emissions, recognising a global emergency and putting in place a plan for dealing with it. This includes acknowledging and working toward what the authors call a 'safe climate zone' – which is something they do not see in official responses anywhere. The core of the book, however, is in part 3 where they set out a variety of strategies and potential solutions to these unprecedented threats. They basically argue that the entire human economy needs to be re-directed away from business-as-usual operations toward actively dealing with the climate emergency. Three specific steps are:

- reducing greenhouse gas emissions to zero;
- removing excess CO2 from the atmosphere; and
- taking steps to cool the earth by direct means.

They examine some of the most currently discussed options such as 'clean coal', biofuels and carbon trading, acknowledging that none of these are sufficient on their own. Of much greater value are strategies that bring renewables to the forefront, deep economic transformation and the intense use of 'biochar' sequestration – a way of taking enormous amounts of carbon out of circulation by drawing it down into soils. According to research that they cite, this method could mean that 'all historical emissions could be reversed in 70 years'.

To their credit the authors do not merely address the 'external' aspects of the issue, they also refer to some of the human and social dimensions that have thus-far received all-too-little attention. These include some of the psychological dimensions of denial and not-knowing, political hurdles and, overall, society's long-standing lack of investment in effective foresight. In fact this is one of the underlying themes of the book. They note that it is vital to focus on other issues besides climate change and then add the following:

Since the beginning of the industrial revolution, we have failed to build and maintain a system that has enabled modern society to ensure its own sustainability and that of other living species. Now we have a sustainability crisis with a multitude of serious symptoms. An effective governance system would anticipate and prevent threats to sustainability, and would also have the capacity to restore the Earth and society to its safe zone as soon as possible. (p. 151)

The main advances that the authors provide in this book are, first, that we are indeed living in a global emergency, second, that, apart from a few scientists, few are taking this seriously, third that there is now a sound basis to require a wholesale change of direction

in the global economy and finally, their review of some of the means for making that transition happen.

Inevitably, therefore, there are a number of related concerns that require a lot more work before the kind of systemic change that they seek stands any real chance of occurring. There are also some key omissions that I will mention first. It is rather odd that, when looking for sources of social and cultural support for the changes they advocate they, like so many others, largely overlook the very active role of advanced futures / foresight enquiry and action. While they clearly see that for political leaders and others to have any hope of leading in the 'right' direction, and such leaders need widespread grassroots support, no mention is made here of what may best be called the 'futures in education' work that has been carried out around the world – but never widely adopted – for several decades. Specifically these Australian writers overlook the work of the Australian Foresight Institute (AFI) and its continuing work on social foresight. If ever there was a substantive body of thinking and practice that supported the authors' case it is this. Widespread investment in both of these areas would go a long way to providing the social means for carrying out many of their recommendations.

There are also some important areas that should be included in any related future work. One of these concerns the role of 'integral thinking' – a perspective that brings much greater clarity to crucial differences between the structural domains (individual/collective and interior/exterior) that are centrally involved in this and any other global issue. The other area that they overlook and that demands much more rigorous and focused attention is the role of what I call the 'spoilers' within the global system. That is, those social entities that actively block, or work against, any effective action or response to the great global issues of our time. This is not merely a theoretical issue. The authors go to great pains to outline some of the social innovations that they feel are required (such as eco taxes and rationing). Yet such strategies will continue to be marginalised – and perhaps insupportable - while the US and other countries devote so many billions of dollars to military uses that contradict everything these writers stand for. Similarly, no mention is made of the malign web of international criminal organisations and the 'shadow economy' that they run. Nor, finally, is any mention made of what might be called 'aggro states' (currently Russia, for example) or the dismal list of failed or failing states in Africa and other parts of the world.

In some ways factors and actors of these kinds provide some of the most difficult challenges because they are amenable neither to reason nor to democratic influence. Rather, they reflect some of the more unfortunate aspects of human psychology and being that are, to an extent, shared by us all. Thus, when attempting to diagnose and resolve global issues the 'interior personal' and 'interior cultural' domains require at least equal attention. So, while some mention is made of them here, this, in my view, is where the next focus of urgent work is required.