

Barriers to a Low-Carbon Society - Summary
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The current situation is that climate change is proceeding at the pessimistic end of the IPCC-predicted range. Carbon emissions are accelerating and the targets to constrain global warming within 2-3° require CO₂ emissions to peak within the next 10 years. So we need a major change and fast, not just adjustments at the edges!

Yet the current growth drivers are powerful. These are population, per capita emissions in developing countries and failure to reduce carbon intensity in developed countries. There are pernicious secondary effects. As wealth increases there are direct effects on emissions (more energy consumed) and indirect effects via lifestyle (e.g. increased meat = increased deforestation). Some “solutions” (e.g. biofuels) may make matters worse.

Will consumers lead the way by becoming green? No way! Green choices are limited by the market’s ability to present significant choices. Those trying to consume sustainability are outnumbered by those who claim to be ‘green’ but do not act, and by those who are not even concerned. While we see green themes in advertising, innovations which are more carbon efficient are offset by those which add to emissions. People may be starting to accept that there may be implication for lifestyle but resist anything other than trivial measures. Politicians are not prepared to challenge this.

The current situation is a product of our economic system; yet we have not yet engaged the system in solving the problem. Energy companies prefer to challenge the science rather than invest in finding a solution. Coal companies expect the government to pay for research into clean coal. With carbon, the polluter pays principle is evaded. The Keidanren opposes emission reduction targets even though Japan’s Innovation 25 initiative identified sustainable industries as having the double dividend of environment protection and economic benefit. National policies abound with examples where individual infrastructure decisions take priority over national strategy on emissions.

So moving to low carbon is like pushing water uphill. It will have little effect until the slope changes and helps it to go downhill. Environmental protection is still a cost or a duty. It needs to be made a profit centre and the only way to do this is by having a universal and unavoidable carbon price. Then consumers will start to have more realistic choices and green choices will be rewarded. However, consumers will not in the short term accept constraints to their lifestyle by foregoing their air trips, their cars, or even their patio heaters. So while a carbon price may help it will not move to a low carbon society fast enough. The only area which can be targeted to achieve large reductions is energy production, which must be decarbonised as a matter of urgency. In particular, coal must be decarbonised - effective technology must be developed with an urgency equivalent to the Manhattan project. Those investing in coal must expect to convert to CCS well within the lifetime of the plant or pay high costs. Zero carbon electricity must receive appropriate credit for its lack of carbon emissions including nuclear.

If we can decarbonise the energy supply, then it gives more time for the slower acting processes of innovation in products, marketing and consumer tastes towards a lower carbon footprint.

Finally the 32% of emissions which come from land use/change cannot be ignored in a low-carbon society. These emissions are driven by some political 'no-go' areas - population growth, dietary changes, demand for timber, food and now biofuels. Tackling deforestation requires reduction of these growth drivers. Costs of reducing deforestation need to be transferred to the activities driving deforestation and the principle of sustainable use needs to become the essential precondition for development activities by the international organs such as the World Bank, as well as for international trade under WTO rules.

In short it is much easier to visualise what a low carbon society might look like than to get started on the long road to achieving it. That requires some 'inconvenient truths', so let's give the summit a realistic assessment of the difficulties and avoid false hopes and benign remedies which we know will be inadequate.