

**Dorset Strategic Partnership
Community Strategy for Dorset¹ (CSD) Light Touch Review: April 2010.**

Making the case for a new approach to delivering sustainable well-being, including a response to 'peak oil', together with the evidence base (see over).

1. The CSD is about delivering sustainable well-being², and a reduction in CO2 emissions³.
2. From an economic standpoint the CSD aims to deliver these through economic growth^{4,5}.
3. This approach to delivery begs three questions:
 - a) Does economic growth deliver increased well-being?
 - b) Is economic growth sustainable within environmental limits?
 - c) Could the current economic assumptions deliver the required CO2 reductions?The model of economic growth being offered to satisfy these requirements is termed Ecological Modernisation⁶ – the free market operating within a policy framework, delivering sustainability through efficiencies and innovation.
4. In answer to these three questions:
 - a) Above a minimum level an increase in affluence does not result in increased well-being⁷;
 - b) The second law of thermodynamics says this is not possible⁸; common sense tells us we cannot continue to increasingly consume finite resources⁹;
 - c) Past experience shows that within the current paradigm of economic growth we are unlikely to do better than maintain levels of CO2 emissions^{10,11}.We know that what does deliver a reduction in CO2 is recession (ie negative growth)¹².
5. The CSD and Local Area Agreement call for economic growth, but there are few statements as to the mechanism for achieving reductions in CO2 and improvements in well-being. On the contrary it has been pointed out that we do not capture the necessary information for us to make such statements¹³. The desired outcome is assumed implicit in the economic paradigm and to question this is considered provocative. There are additional criticisms of Ecological Modernisation regarding its failure to address inequality and consumption that would indicate it is unlikely to deliver the desired outcomes¹⁴.
6. The evidence indicates that we need to consider delivering sustainable well-being in some way other than adherence to the growth economy. We need also to understand the relevance 'peak oil' might have to this work.
7. The concept of 'peak oil' has been expressed as the point at which demand will first approach and then exceed production capacity, resulting in:
 - a) instability in the market, and volatile prices, hindering investment¹⁵ and economic growth;
 - b) civil unrest as a result of price rises and fuel poverty¹⁶, and a reduction in the sense of well-being;
 - c) a shift to coal as fuel for generating power¹⁷, accompanied by an increase in CO2, possibly mitigated by carbon capture and storage.The advent of peak oil is likely to have completely opposite effects to those the CSD is seeking.
8. Peak oil might occur within the timeframe of the CSD^{18,19} though not all agree.
9. In conclusion, the CSD should be revised to seize this opportunity to create a more equitable, sustainable and resilient society. This will require consideration of the means to achieve well-being and CO2 reduction. The preface to the revised Strategy should call for this work to take place, and task the Economic Theme Group with delivering it.

¹ Shaping our Future: The Community Strategy for Dorset 2007 – 2016. In revision for the second time, which will extend the plan to cover the period to 2020.

² Ibid pg 5. The vision is – “A living thriving Dorset where everyone has a part to play in creating a better quality of life”.

³ Ibid pg 33. The Strategy refers to the government’s goal to cut carbon dioxide emissions by 60% (now 80%) by 2050, but makes no quantified commitment to CO2 reduction itself.

⁴ Ibid pg 21. ‘The...Strategy...is to secure economic growth within environmental limits’.

⁵ DSP DEP Action Plan 2008 – 2011. Objective: sustainable economic development leading to a low carbon economy.

⁶ This term, first defined by sociologist Joseph Huber in 1982, assumes that already existing political, economic and social institutions can deal adequately with environmental problems, by being instrumental to growth and international competitiveness.

⁷ In 2006, 35,000 people in Europe completed a survey of life satisfaction and consumption. There were two main conclusions: well-being has little to do with consumption, and the absolute level of consumption is far too high, requiring about 3 planets to be sustained. See Thompson et al (2007) ‘The European Happy Planet Index: An Index of carbon efficiency and well-being in the EU’. See also Esterlin R (1974), ‘Does economic growth improve the human lot?’.

⁸ Put simply, the 2nd law states: ‘all energy leads to disorder’. Localised human-created order will result in large quantities of disorder in the surrounding environment. It has been suggested that up to 85% of the resources used in manufacture are discarded, and that what we see as the ‘product’ represents the remainder.

⁹ As John Stuart Mill put it in 1848, ‘It must always have been seen, more or less distinctly, by political economists, that the increase of wealth is not boundless: that at the end of what they term the progressive state lies the stationary state, that all progress in wealth is but a postponement of this, and that each step in advance is but an approach to it’. In his *Principles of Economy Book IV*.

¹⁰ The relationship between economic growth and CO2 emissions has two components: the *energy efficiency of production*, and the *carbon efficiency of energy*. The overall impact is the product of the two. In the latter half of the 20th century the *energy efficiency of production* has improved by an average 1.2% pa; so far this century it has averaged .4% pa. The *carbon efficiency of energy* is linked to big oil – the dash for gas in the 90’s resulted in an overall increase in efficiency ie fall in CO2 per unit of energy. This century the CO2 per unit of energy has been rising (by .38% pa) as a result of the move away from gas / nuclear generation towards coal (see also reference 17 below). Peak oil (and the related peak gas) is implicit in this, not only because the gas price is linked to oil, but also because as the supply gap opens up there is evidence it is being filled by coal, not only in the UK but also for example in China where, depending on which report you believe they a completing one or perhaps two new coal fired generating plants a week. The conclusion is that the market will do no better than maintain levels of CO2, and under the influence of peak oil will fall well short of that. NB this is a conservative analysis as it does not include shipping or air traffic. The author of this note is indebted to the NEF publication ‘Growth isn’t Possible’ (2010) for this analysis and much of the information on which this note is based.

¹¹ Dieter Helm, in his Tanner Lecture of Feb 2009, pointed out that Britain rejoices in reducing its production of greenhouse gases by around 15% since 1990. This impressive feat was achieved in part by exporting our production abroad. When the figure is recalculated to reflect our consumption, the 15% carbon reduction turns out to be matched by a 19% increase in carbon consumption over the same period. ‘Britain’s performance on a production basis is exemplary ... but on a consumption basis it has been terrible’. These figures reflect the steady decline in manufacturing in the UK.

¹² The Stern Review examined historical precedents of reductions in carbon emissions and found that reductions of greater than 1% pa ‘have been associated only with economic recession or upheaval’. He points to the collapse of the former Soviet Union economy which brought about annual emission reductions of over 5% for a decade. We are likely to see a similar effect in the UK following the recent recession. For comparison, the global economy will need to lower its carbon intensity by 2.7% pa on average to stay within 500ppm CO2 with 3% growth, a target suggested by the IPCC (ref NEF ibid pg 66).

¹³ The Stiglitz Commission reporting on the Measurement of Economic Performance and Social Progress, Feb 2008, found that whereas we have well developed measures for economic growth, inflation, unemployment etc, they are questionable as measures of societal well-being and sustainability. To manage these latter we need to develop a new set of metrics.

¹⁴ John Barry, Director of the Institute of Governance, Public Policy and Social Research at Queen’s University Belfast, points out that ecological modernisation fails to address the reduction in inequality and consumption, both considered to be necessary to foster a sense of well-being. See Barry, J. (2007) ‘Towards a model of green political economy: from ecological modernisation to economic security’, Int. J. Green Economics, Vol 1, Nos. 3,4, pp.446-464.

¹⁵ The Industry Task Force on Peak Oil and Energy Security, reporting in ‘The Oil-Crunch – a wake-up call for the UK Economy’ February 2010 found that oil shortages, insecurity of supply and price volatility will destabilise economic, political and social activity, potentially by 2015.

¹⁶ In September 2000 a group of road hauliers blockaded British oil refineries in protest at the rise in fuel and oil price. This very quickly led to disruption in food delivery, panic buying, and the coining of the phrase ‘only nine meals away from anarchy’. This phrase has now become part of the lexicon and is used come to convey the lack of resilience that characterises modern day society.

¹⁷ In June 2009 the Building Research Establishment on behalf of DECC published the draft SAP 2009 methodology for assessing the energy efficiency of new buildings. This methodology is to be used by Architects and others when calculating the carbon footprint of new buildings in accordance with Building Regulations. As a result of the previous increase in gas price and a switch to coal for power generation, the CO2 emissions per kWh of electricity to be assumed by Architects were revised upwards by 40% (from .42 to .59 kg/kWh).

¹⁸ The International Energy Agency in their 2008 Medium Term Oil Market Report stated that ‘there will be a narrowing of spare capacity to minimum levels by 2013’.

¹⁹ ‘US military joins peak oil doom-mongers to warn of world energy crisis by 2015’, an article by Terry Macalister in the Guardian newspaper of 120410.