

What might a Zero Carbon Britain mean for a typical family in terms of everyday lifestyle choices?

By Peter Harper



Life will be different in 2030 anyway, whether we decarbonise or not. The choice is between planned and orderly changes designed to limit climate change, or unplanned emergency measures in reaction to unpredictable and escalating climate effects. If we consider a 'Business as usual 2030' scenario, resulting in no global climate agreements, then we can expect increasingly severe weather events with massive associated human and economic costs. While some adaptation measures are inevitable, if we *do* decarbonise rapidly and manage to avoid the worst of uncontrolled climate change, lifestyle impacts will be relatively moderate in comparison.

In the scenario we have simply stated the outcomes chosen to achieve physical sustainability in terms of greenhouse gas emissions. We have not specified how the changes might be driven. However, it would almost certainly be a combination of prices and regulations, leading to a different pattern of choices. An example of this kind of regulation is the Clean

Air Act of 1956 that simply banned many polluting practices. The result was a switch to other fuels for house heating and industrial processes and a huge improvement in air quality (Giussani, 1994). An example of a price change is the Land Fill tax, rising from £8 in 1996 to £80 in 2014, leading to an explosion of recycling and composting processes and a marked change in household behaviour regarding waste (EEA, 2013)

The lessons here are that behaviour can change substantially and relatively painlessly in all parts of the economy, driven by legislation or slowly changing prices over a number of years. To a large extent the 'price landscape' is rather arbitrary and we tend to adapt to it. The taxes our Government places on a litre of petrol for example would make Americans wince, but in the UK 'that's what it costs'. If all this tax were transformed into a carbon tax it would be equivalent to about £320 per tonne CO₂, considered unthinkable in policy circles, but here we are paying it already.

In ZCB there are likely be to substantial changes of prices, many of them driven by energy or carbon taxes. But to compensate other 'carbon-blind' taxes (such as income tax, VAT) could be reduced, so the total amount of tax would be similar to today. Such taxes would drive different choices and often bring collateral benefits. For example an escalating tax on carbon-fuels would promote a progressive switch to electric and other low-carbon vehicles. It would also increase car-sharing, reducing the number of vehicles and congestion caused by parked cars. It would increase walking and cycling as well, leading to greater fitness and other health benefits. There would also be a greater tendency to live nearer where you work.

There are a few clear changes that would require larger shifts in behaviour. The first one is that long-haul flying would be much more expensive, so on average people are likely to alter their choices regarding holidays abroad and would have to consider surface transport like high speed trains. From today's perspective this might seem drastic, but it would be similar to the situation in the 1970s, or the difference between households that fly a lot and those who hardly fly at all. In other words, after a decade or so we have adapted and it becomes the new cultural norm.

Another example would be a reduction in the amount of red meat we eat. Most livestock products would become gradually more expensive, particularly beef and highly processed foods, while other foods are likely to be cheaper. The result will be a slow shift in dietary choices, but this would have some positives, for example, a significant reduction in diet-related illness. The average mix of food commodities in the ZCB scenario were deliberately chosen to be much closer to the ideal recommended for good health. There would probably be a vigorous growth in novel and nutritious foods and a strong role for the food industry, whose emissions would be virtually eliminated if the energy system is decarbonised. This could have especially important implications for 'meat substitutes', which would become the much cheaper option.

Consumer goods of most kinds would also be more expensive, and the result will be an increasing preference for high quality long-lasting goods, product-service systems, refurbishment and repairs, less clutter and more jobs (Braungart and McDonough 2002). There would also be an increased incentive to explore non-consumer based lifestyle options such as getting outdoors or sports.

In order to avoid energy prices causing hardship for poorer households, it is possible to provide a basic energy tariff very cheaply up to a particular level as a citizen's right, after which the normal tariff applies for a while, and beyond that it becomes much more expensive. For example, perhaps a household's first 1000kWh of electricity would cost (say) 7p a unit, the second 1000kWh 14p, and all after that 25p. This principle of 'inverted tariffs' – the opposite of the way bills normally work – is one that could be applied in many different spheres.

It will doubtless be argued that such a practice would 'distort the markets', and it would need government intervention to make it happen. But something of the kind will be needed to reconcile decarbonisation with social justice, and tariffs can be designed to incentivise both efficiency and frugality (Thumim, 2007).

Zero-Carbon Britain cannot be achieved by life-style change alone. Neither can it be achieved without any changes in lifestyles at all. In the transition to Zero Carbon Britain there will be a wide range of cultural options. Most households would probably prefer to keep lifestyle changes to a minimum and pay any extra costs and taxes simply by working harder to earn more, or forgoing excessive luxuries. Other households might prefer to 're-tool' themselves to make life simpler and cheaper, working harder in different ways.

Overall, if backed by clear endorsement from Government and civic leaders, the changes will be easily coped with and largely positive. And in the process we may discover rich sense of collective purpose we have been craving for a very long time.

About the author:

Peter Harper is semi-retired from CAT, having worked here for 30 years. He was a pioneer of the alternative technology movement – coining the term in 1972 – and is still very much a part of it. While at CAT he combined writing, teaching and research in many fields, including horticulture, waste treatment, carbon accounting, sustainable development and environmental history. Since 2007 he has worked with the Zero Carbon Britain project, focusing on the large-scale infrastructural changes required for rapid decarbonisation.

References

- Braungart, M. and W. McDonough. (2002). *Cradle to Cradle*. North Point Press.
- EEA (2013) *Managing municipal solid waste - a review of achievements in 32 European countries*. European Environment Agency
- Giussani, V. (1994). *The UK Clean Air Act 1956: An Empirical Investigation*. CSERGE Working Paper GEC 94-20.
- Thumim, J. (2007). *Energy Tariffs for Sustainability*. Centre for Sustainable Energy/WWF.