

My Daily Telegraph article on the green revolution as I sent them

The Telegraph amended this and added a headline without my consent. The vast ambition of the net zero policies envisages most people switching their heating to electricity, their travel to bicycles and electric cars, and their diets to vegetarian options. It certainly needs the wholesale conversion of electricity generation from coal, oil and gas to renewables, and a solution to what to do when the sun does not shine and the wind does not blow. We need to ask are consumers ready for changes of this magnitude?

So far governments have concentrated on doing what should be the easier bits of the change over. They have considerable influence and control over energy markets and have increased their interventions in them. They have ordered more renewables and pressed for closures of coal based generation. They have used subsidies, tax breaks, windfall taxes, regulations, managed prices and bans to tip electricity generation more strongly towards wind and solar power away from fossil fuel. They have got support or acquiescence from the industry to this pathway. Industry actively promotes renewable power as a good. At home it is forced to roll out smart meters to an increasingly sceptical group of consumers who have resisted them so far. It has come forward with many new windfarms and solar arrays.

Even this transition in the UK has hit some buffers. More renewables means more grid to handle the great variability of output and to transfer the power from offshore and from the north to onshore and in the south where most of the customers are. The industry is behind on increasing grid capacity, and plans for it are delayed by planning processes that reveal the opposition to pylons in local landscapes. It is all more cost for consumers and taxpayers.

The digital revolution sweeps on because people like its products and services. We have seen a near universal adoption of mobile phones. The majority have signed up readily to the internet, have liked downloading entertainment of their choice when they want it, have turned to social media and on line meetings to keep in touch with friends and family, have undertaken many a google search, let their photos and memos be stored on an Amazon web server and usually use Microsoft software. A handful of leading US companies have swept the globe with their new products and services without government subsidy, tax break or exhortation.

So far the green revolution has not fired the same enthusiasms. Battery electric cars are still a hard sell. Heat pumps with a £7500 subsidy do not fly off the shelves. Whilst many people do say global warming is a problem and something should be done about it, few think it sufficient of a problem that they need to change their travel, heating and diet. There are determined

minorities on both sides of the argument. One group say it is essential people are made to change to stop the rise in temperatures. They want tougher tax rises, more restrictions on drivers and bans on fossil fuels. One group says it is all nonsense, with a variable climate affected by many things in addition to human carbon dioxide. They do not want the government interfering and think adaptation much cheaper than prevention if temperatures do rise. The majority in the middle would like policy to be gently pointing in a less carbon direction, but not in a way which would worsen their living standards and put up their costs.

The all electric battery car is mainly bought by fleet buyers who benefit from a tax break and have to show their shareholders they are taking net zero seriously. Hertz car rentals has recently announced it bought too many electric cars and is unable to rent them all out, so it is selling some of its fleet. In the UK most individual car buyers think battery cars too dear, worry about their range and how you would be able to recharge them. Some think it would be better to develop synthetic fuels which can already be produced in small quantities. These work in conventional engines and be supplied through existing filling stations.

The heat pump is an even more difficult sell. If like many you have an older house you first need to spend a lot with disruptive works to properly insulate the whole building. You then face an installation and supply cost of around £15,000 before subsidy with more works. You may need to put in bigger pipes and radiators to get it hot enough. Whilst the heat pump does cut the amount of energy needed to heat the home, given the much higher cost of electricity per unit of energy the running costs can still come out higher than a gas boiler.

Some think it better to keep a modern gas boiler and change the gas fuel used to fire it. Increasing volumes of hydrogen or its derivatives made from renewable electricity and water could be fed into the gas supply as the power becomes available. There is little point people buying a heat pump system all the time we depend on gas fired power stations for the extra demand. Why burn the gas in a remote power station, losing energy in transmission, when you could burn it at home?

More people are turning to vegetarian diets but no political party is going to ban meat or impose a special meat tax anytime soon. When the Dutch tried to cut back animal numbers on local farms as part of a net zero strategy there was a political earthquake with a new Farmers party and the Wilders party helping evict the government that did it. The best way to wean people off methane intensive animal products is by producing better alternatives.

The world cannot get to net zero without major changes of consumer behaviour. The digital revolution shows people are willing to make big changes in the way they work, enjoy entertainment and talk to each other if you produce great new products and services.

The Green revolution designed by global civil servants and forced upon us by governments still has to find the iconic products that would fire the imaginations of families. People do not want a landscape covered in pylons, a car that cannot make it easily to the next working charging point and a heating system that is a lot dearer than the one they have got. They do not want to be stuck in more traffic jams as highways authorities make it ever more difficult to get about in a van or car. More do now worry about what happens to everything electric when the wind does not blow and when evening darkness has closed down the solar.