## <u>Comparing the digital and green</u> <u>revolutions</u>

The digital and green revolutions compared

In recent years the world has been swept by a massive wave of digital investment. Most people have come to own a smartphone, pad, desktop or laptop computer. Many have switched their entertainment from standard national tv channels to downloaded films from subscription services. Many now get what news they want from websites and social media in place of newspapers and tv news. More education and training is now done remotely on computer. Families keep in touch with on line meetings instead of a phone call. Many people communicate with friends and family on social media instead of letters and face to face to face meetings. Businesses are automating more and more processes, taking advantage of the enormous processing and storage power of electronic systems. Much shopping has gone on line. Phone apps can be used for getting a cab, following a map, booking a meal, ordering a service. All this happened with no special taxes, no bans and legal requirements, no public subsidy. Businesses innovated, showing how they could offer a much wider range of service over the web and people piled in to get more of it. The high price of some mobile phones and the subscription sums for broadband, software and download services was no barrier to many taking advantage. Covid lockdowns accelerated the movement. Those people who were not sure how to use the technology, or thought they did not like it, or who thought it a bit dear were tempted into adopting it as it offered the obvious way of staying in touch and placing orders for goods and services. Young people who adopted it more readily as a whole helped teach Granny who made the effort to stay in touch with her grandchildren.

Meanwhile the green revolution is a top down revolution. Its main proponents are governments, large companies, universities and experts. They want people to swap the petrol car for an electric vehicle. They want families to rip out the gas boiler and put in a heat pump. They want people to give up most of their meat eating and go vegetarian. They want to discourage car and airline travel, promoting walking and cycling. So far the response has been on a modest scale. Many people think electric cars are too dear, worry about their range and about how easy it will be to recharge them. They stick with their diesel and petrol models for the time being. Very few people put in a heat pump, finding them dear and the work involved very disruptive about the house. We have still to find the Mini or Beetle car of the electric car revolution that sells in millions at an affordable price to delighted buyers. We have not yet seen the electric heating package that people want enough to make the commitment of time and money to the work. Some are now trying more vegetarian food, but meat and dairy eating habits are well inbred in national traditions and mothers' menus.

Governments understand enough of market principles to try to use market mechanisms to promote their revolution. They offer subsidies to cut the price of electric vehicles. They are still offering a tax free period on the power to fuel them, unlike the high taxes on motor fuels for internal combustion engined vehicles. They are imposing higher taxes on older fossil fuel vehicles using certain routes or banning them altogether from some urban settings. They are imposing carbon taxes to switch business away from fossil fuels through an adapted price mechanism. The main problem with all of this is that because it is not done worldwide by all countries the market can shift activity around to places where there is less restriction and less tax on fossil fuel technologies. Individuals can stick with old boilers and cars if they do like the performance and price of the new alternative.

To get success in the market the new idea has to be one or more of better, faster, cheaper. On line shopping was often cheaper and certainly faster than in store. Web calls gave you pictures the phone did not offer whilst sparing you the journey needed to meet in person. Downloaded entertainment allowed you to choose what you wanted to watch rather than relying on pre planned schedules on tv. Getting news off the web allowed you to be your own editor, free from the political distortions of conventional news channels. People were prepared to pay for these improvements or got some of them free thanks to adverts. So far most people do not see the heat pump as better than the gas boiler, and know it is a lot dearer. They do not want to trade in a car with 500 miles of range based on a five minute filling stop for a car that may have less than half the range and uncertainties over how to find a charger when out, and requiring substantial time for a full recharge. They certainly do not pay a premium for that.