['The Digital and Green Revolutions Compared'](#)

John Redwood's Lecture, All Souls College, Oxford: 'The Digital and Green Revolutions Compared'
Friday 8th March 2024
11:00 — 12:30
All Soul College, Old Library, Oxford

1. The Green and Digital revolutions
   • Green. Top down, set out by governments and large corporations
   • Advanced by subsidies, tax breaks for green products and regulation, higher tax and bans for products thought to be generating CO2
   • Digital. Popular, bottom up, fuelled by an innovative industry launching popular new products. Spreads quickly without laws, taxes and subsidies.

2. The extent of product adoption

Digital

Mobile phones
8.58 bn (more that the world's population)
Laptops and desktops
3.8 bn
Internet users
5 bn
Facebook users
3 bn

Green

Battery Electric cars
18 million
Heat Pumps
177 million

Rail 7% of travel (by distance) and 1% of journeys

Free smart meters
57% take up

3. The electrical revolution
• 20% of world energy is currently electric
• Fossil fuels dominate
• Most vehicles run on petrol or diesel
• Most heating systems run on gas, solid fuel or oil
• Most energy intensive industry burns gas or coal

4. To decarbonise energy
• The world needs to switch most of the 80% currently burning fossil fuel to electrical options
• The electricity generators need to switch their large generation from fossil fuels to renewables or nuclear
• Renewable power would need to increase by at least tenfold
• There would need to be substantial battery storage, pump storage and other means of handling weather induced falls in supply

5. Why don't more people buy EV's?
• Too dear
• Range too restricted
• Shortage of recharging points
• Length of time to recharge
• Fear of new taxes on EV's
• Insurance and repairs issues

6. Why don't more people install heat pumps?
• High cost of installation
• Need for major rebuild of older home to raise insulation standard
• High running costs in cold weather

7. Why do more people not go by train?
• Tickets can be dear
• Trains often do not go to where you want to go
• The times available may not suit your busy day
• It is difficult handling luggage or heavy shopping on a train
• Most train journeys also need journeys to and from stations that can be dear and complex without a car
• Once you own a car you find it convenient to use.
• The car goes when you want directly from your home and returns when you want. It can get to practically every place in the country.

8. Why do so many people refuse a "free "smart meter?
• They suspect it will be used against them to charge high prices at times of high demand or to cut off power when system is struggling
• They fear it will go wrong as some have leading to wrong bills
• They do not want the disruption to their home from installation
• They think it wasteful and not green to throw out a working meter they already have

9. Why do people oppose planning permissions for grids, pylons, turbines and solar farms.
• They find these green needs intrusive on the landscape
• They do not want the disruptive works in their area
• They do not want more farmland taken away from local food growing
• They do not want the noise of turbines

10. What do people like about digital?
• Online shopping offers more choice and price competition and saves the journey to High Street
• Downloaded entertainment allows you to choose when you watch a film and gives you much more choice of viewing
• Social media allows chat on the move wherever your contacts are
• AI helps you problem solve
• Google searches let you find out instantly what you need to know
• Zoom, Teams etc allows you hold remote meetings

11. What do people like about digital?
• The business model of many of the digital companies is customer friendly.
• There is often a free offer for a basic service paid for by adverts and or business users e,g, free Google searches, free AI, free social media platforms
• There is often a subscription option as with Amazon Prime, download and software regular payments
• Mobile phones can be provided as part of a rental/ service package
• A lot of charging is to business rather than directly to business customers.

12. Covid lockdowns accelerated digital
• Many people who were wary or unwilling to use digital had to get up to speed to buy online and communicate with friends and family
• Online solutions to shopping took off for many as a good alternative to physical presence in shops
• People wanted more in home entertainment to absorb the hours of house detention
• Digital products to allow person to person conference calls and get togethers took off.

13. Why do some fear AI?
• Some see AI as a big threat to employment
• Some see it as a threat to academic standards, exams and teaching
• Some see it as favouring big government that will be able to control and manipulate people more
• Some worry that it could help false information spread, it could increase cyberattacks and could be used as weapons by criminals and delinquent states
• Its invention cannot be cancelled so we need to manage it

14. The good news about AI
• The co-pilot model means a firm can achieve higher productivity and more worthwhile jobs by using the AI to do the drudge work quickly and accurately
• There will be more jobs in technology as an offset to fewer clerical and repetitious jobs as with the factory autmoati9n phase of development

15. What role does Government play?
• It regulates it after the event
• It seeks to increase its tax take from successful digital companies
• It slowly adopts it for its own service