

PROPOSED SUBJECTS FOR RESEARCH/DISCUSSION

Some Technical Terms and History

1. What is Climate Change Cycle?
2. What is Global Warming?
3. How do scientists know this? What is EGRIP?
4. What is Global Warming and where does the phrase come from?
5. What is the Greenhouse Effect? Is it entirely negative?
6. How much Warmer could we expect to see?
7. Some recent U.K. examples?

International Bodies – What are they and What do they Do?

1. IPCC
2. UN FCCC
3. COP

UK Government Actions – Past and Present

1. 1956 Clean Air Act – background and what did it address?
2. 19.08.20 Environment Bill – what did it address?

Some Proposed Supply Side Solutions

1. Carbon Capture and Storage – what is it? How does it work? Will it work? Elon Musk Challenge
2. Geothermal – what is it? Where does the heat energy come from? Any successful examples internationally?

3. Heat Pumps – what are they and how do they work? How effective are they?
4. Solar Panels – How do they work? How efficient?
5. Our Food – the effect that our choice has on Global Warming?
6. Hydrogen – How is it produced? Is it safe? What applications could it be used for to reduce Global Warming?
7. Wind Turbines – How efficient? How costly? How costly? Different types?
8. Energy Storage – How does it work? How efficient?
9. Fusion Energy – How likely to succeed? Timescale? Safety? How long for waste to deteriorate?
10. Electricity Interconnectors – what do they do? How important?
11. Hydro-Electric, Tidal barrage? Efficiency? Cost?

Role of Government?

Role of Business?

Some Proposed Demand Side Solutions

Transport

Local Transport – Walking, Cycling, Buses, Local Trains, Cars/taxis.

1. Electric vehicles – compare EV with ICE: initial cost, road tax, servicing costs, fuel costs, range, how many refueling/recharging places in UK?
2. Hydrogen powered vehicles – advantages/disadvantages?
3. **A Thought** - In 20 years will we still be buying cars to sit on the drive or at work, doing nothing, or will we be renting them daily, monthly, annually?

Intercity Transport –

1. Electricity power
2. Hydrogen power
3. Commercial Vehicles and Trains/Buses

International Transport/Freight

1. Aircraft – Hydrogen? Electricity? Hybrid?
2. Ships – Hydrogen? Sails?

Lifestyle Changes and Covid 19

1. Working from home – advantages/disadvantages?
2. Less travel – advantages/disadvantages
3. More use of IT Communications
4. Shopping online advantages/disadvantages?
5. Our food and diet – what are the effects of our diet? What changes can We make to reduce Greenhouse Gases?
6. Covid has suggested better building design for Offices and Hospitals which are more fuel efficient and less infectious.

Could these become permanent changes which will help with Climate Catastrophe?