

Topic: Climate Change - Discussion led by Merelene Davis and Jonathan Lucas**Summary**

We were all tasked to listen to the broadcast of 5 broadcasts of 15 minutes each of the abridgement of the book entitled 'How to avoid a Climate Disaster' written by Bill Gates.

Discussion***Brief Outline of the 5 episodes***

Episode 1 concerned itself with the aim to reduce the current annual level 51 billion tonnes of CO2 emissions (and the cause of global warming) to zero by 2050.

Episode 2 concentrated on the elimination of some 31% of the CO2 emissions from the manufacturing process.

Episode 3 explored how to mitigate the 19% of emissions arising from agriculture and livestock farming.

Episode 4 examined how we can or should adapt to living in a warmer world.

Episode 5 put forward a plan for getting to zero

Reduction in energy use

Jonathan attempted to keep the discussion in line by following the sequence of the episodes in our discussion. It is essential that our use of fossil fuel for energy is drastically reduced by replacing it with renewable energy sources; i.e., wind, solar, wave and atomic. The greatest driver of our increasing need for energy is the growth in the world's population. A suggestion for enforced birth control was not well received. Elimination of illiteracy in developing nations and resultant acceleration in prosperity might result in a reduction in birth rate if previous patterns continue.

The change from fossil fuelled to electrically driven vehicles is not necessarily advantageous, considering the need for mining, including by child labour in the Congo of cobalt used in lithium batteries.

Think of this when you use your computer or smart phone; new technology uses more energy than the whole of the aviation industry. The so-called 'cloud' uses enormous earthbound hubs requiring huge amounts of cooling. It only takes 8 minutes of sunlight per day on earth to satisfy all the energy we need for that day. So there is energy available - the challenge is to find efficient ways to capture and store it for later use.

Change in agricultural methods

Agriculture is trying to solve the problem by new methods limiting the use of fertilizers. Animal feed is being adapted to produce less methane when consumed. We are all encouraged to eat less meat, more plant-based foodstuffs. In fact, meat for human consumption is now grown in laboratories in Singapore.

Influence of lobbyists on Governments' endeavours to combat climate change

There are 15,000 in the UK, 30,000 in Brussels and innumerable numbers of lobbyists throughout the world. A substantial majority of them are engaged to promote the interests of

global big business and instructed to combat measures which might harm their employer's search for profits.

Lobbyists should be encouraged to see what needs changing to bring about an evolutionary change in the approach to climate change. We should be saturated with adverts promoting the benefit of combatting the ill effects of not 'greening' our attitudes.

Is GDP the correct measure to gauge a country's health?

Mark Carney (former Governor of the Bank of England) recently reflected that whilst GDP measured the economic benefit of things being done, it did not measure the benefit of things not being done. He quoted the example of how, by not cutting down trees, we prevent deforestation, we don't destroy the natural habitat of birds and other animals. we prevent floods and fires and the build-up of greenhouse gases etc, none of which are evaluated as a counter to the value of annual production.

He also stated that there is a distinct lack of political will to tackle climate change crisis if people cannot see an immediate benefit. Young people are more altruistic but have great problems to change attitudes of people in power.

'Offset' trading

'Some industries take great pride in stating that they have bought offsets to counteract their emission of greenhouse gases. Shell recently published its net zero plan, that actually projects high oil and gas production through to 2050 and beyond, which *voila*, are magically removed with negative emissions. Critically there is far too little land to plant enough trees to counter today's emissions, and large-scale-hi-tech methods do not yet exist' (The Guardian)

Conclusion

We should investigate what we can do individually; we could buy more locally produced foodstuffs, switch the light off when you leave a room, reduce the temperature of our central heating, put on an extra cardigan and if need be wear long johns (men only). We produce over 70% of all our food requirements within the UK so let's buy that instead of imported cheaper alternatives.