## The Climate Crisis - "Governments are failing to act"

## Written by Rick Thompson

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On September 3<sup>rd</sup>, the guest speaker at an online meeting of the AEJ British Section was the eminent UK climate scientist, Prof. Sir Robert Watson, joining via Zoom from Washington. Professor Watson was the Chair of the UN Intergovernmental Panel on Climate Change (1997 – 2002) and is Emeritus Professor at the Tyndall Centre for climate research at the University of East Anglia. He is currently leading a major international assessment of the links between Climate Change, Biodiversity Loss, Land Degradation and Food and Water Security, and how they will affect human well being.

He spoke frankly and passionately about the "crisis" of human-induced climate change. He said governments are not reacting; young people are rightly concerned; greenhouse gases are increasing despite the Paris Agreement; all the hottest years on record have been in this century. The threats to human life include drier weather in arid areas threatening water and food security, more floods in wet regions and rising sea levels threatening coastal communities. Conditions will get worse if nations do not adhere to the Paris goal of keeping the increase in global temperature to less than 2° Celsius compared with pre-industrial levels. Prof. Watson pointed out that the world had already reached 1° warmer and we are "currently on a pathway to between 3° and 4° by the end of the century, which would lead to a 1 metre rise in sea levels." He said greenhouse gas emissions need to be cut by 50% within the next 10 years to halt this trend, but he doubted if there is sufficient political will and leadership to achieve this.

He argued that pledges made in Paris were inadequate. "The pledges need to be seriously strengthened very quickly, and some countries such as Russia and Saudi Arabia haven't even made any pledges." He noted that he Presidents of the USA and Brazil were still suggesting that Climate Change is just a hoax or is not important.

Some more optimistic news was that the EU was broadly meeting its targets, the cost of renewable energy has fallen significantly, and new technologies were coming on stream – notably electric cars. Nonetheless action to combat climate change was far too slow. He said, "An unprecedented scale of transformation is needed, requiring collective international action," and urged political and business leaders to see the challenge as economic not just environmental. Prof. Watson believed the Covid-19 emergency might provide an opportunity for change. Could we learn from it? The UK would be hosting the COP26 Climate Change Conference in Glasgow late next year. Could the government work with the EU and others to forge a meaningful agenda for action? He was concerned that Covid -19, Brexit and the recession would dominate political thinking, and was not overly optimistic that the UK would seize the opportunity.

Answering questions, Prof. Watson said there was no question that a 3°- 4° rise in temperatures would raise sea levels, seriously affecting Pacific and Tropical nations, but also having impacts everywhere, including Eastern England. More heavy rain would be a problem in the UK, and more heatwaves would have serious health impacts. He argued that the more we 'mitigate' Climate Change through reducing emissions, the less we will have to send on 'adaptation' – coping with the impacts.

He said the so-called 'tipping-points' or thresholds for global heating were of serious concern. These could produce vicious circles accelerating the rise in temperatures. Melting ice sheets reflected back less light and heat; already the Greenland and Antarctic ice sheets were melting faster than predicted. Melting permafrost would release huge quantities of methane, one of the most powerful greenhouse gases. These effects would not happen overnight, but over a long period, perhaps even hundreds of years, could lead to global warming mankind would be unable to stop.

Asked if he thought the EU should put more pressure on Poland to reduce its dependence on coal – by linking fossil fuel reductions to the Covid recovery package, Prof. Watson said there was certainly an opportunity now to use financial leverage to phase out coal as soon as possible. Poland was not doing as it should in this regard. EU finance should be used to push for sustainable energy.

One questioner asked why governments are being so slow to change, when the science has been clear for years. Prof. Watson said that we have wasted the last 30 years, certainly since a persuasive report was published in 1992. Unfortunately there were powerful vested interests influencing policy makers, notably in the USA. And fossil fuels had been relatively cheap. He believed subsidies on fossil fuel and carbon-fuelled transport should be reduced so that they are priced realistically. He was not particularly optimistic about this, but noted that parts of the private sector are starting to take Climate Change seriously, along with some US cities and states.

His top priorities for national action on climate change were:

- 1. Stop using coal a.s.a.p.
- 2. Invest in renewable energy
- 3. Promote energy efficiency
- 4. Stimulate a switch to electric cars (battery technology; recharging points)
- 5. Improve non-carbon mass transportation
- 6. Introduce stronger building codes on energy efficiency
- 7. Appliances should have stricter efficiency standards
- 8. Agriculture needs to be persuaded to change its methods.

In response to other questions, Prof. Watson said China is critical to global action. He said it is now the biggest emitter of greenhouse gases (though not per capita; that is still the USA). "Without China we haven't a hope in hell of solving this challenge."

The International Biodiversity Conference in China and the COP Climate Change conference in Glasgow, both scheduled for next year, should have much more collaboration, with a matching work programme to ensure action in one sector does not have unforeseen consequences in another.

Nuclear fusion to replace fossil fuel energy would be welcome but is probably many years away. In the meantime we "must keep plugging away at reducing emissions."

The EU should use both the carrot and the stick to encourage action by member states, for example in low carbon, energy efficient buildings and vehicles.

The consequences for the environment of Donald Trump being re-elected would be "disastrous for the USA and the rest of the world. His behaviour is reprehensible."

He said environmental action particularly by young people, is important, but must not be so disruptive that it alienates large numbers of people. He was glad that younger generations are making their voices heard, but young people and others who are concerned about climate change must use their vote. Climate change, science and politics are inextricably combined."