From Grandparents against Climate Change Sent on Fri 28th Aug 20 to all 650 MPs

1. Where are we now with the control of global emissions?

Carbon Dioxide emissions have been <u>increasing</u> since the beginning of the Industrial Revolution. In the early '90s, countries began to come together to develop a strategy to control and reduce the emissions of CO_2 and other Greenhouse Gas (GHG) emissions.

Following the 1992 Earth Summit in Rio, the United Nations Framework Convention on Climate Change (<u>UNFCCC</u>) was agreed and entered into force in 1994. It's aim was to stabilise GHG concentrations in the atmosphere at a level that would prevent 'dangerous <u>anthropogenic interference</u> with the <u>climate system</u>'. The framework has almost universal membership with 197 countries having ratified the treaty. The members are called parties to the convention and generally meet every year as a conference of the parties or COP.

At COP3 held in Kyoto in 1997, the <u>Kyoto Protocol</u> was adopted which came into force in 2005 with 192 signatories. Bill Clinton had signed the protocol for the US but Congress refused to ratify it. It committed industrialised countries to limit GHG emissions in line with agreed targets and adopt policies and strategies for mitigation and to report periodically.

In 2009 the UN climate change conference in Copenhagen (COP15) was intended to develop strategies to follow Kyoto, but it ended in disarray and it wasn't until 2015 in Paris (COP21) that a new global agreement was achieved. The Paris Agreement was signed in 2016 and has the goal of ensuring any increase in global average temperature is kept to well below 2°C above pre-industrial levels; its aim is to limit the increase to 1.5°C, since this would substantially reduce the risks and effects of climate change. In 2017, Donald Trump withdrew the US from the agreement.

After 30 years of international efforts to reduce global emissions where are we?

Annual global CO₂ emissions from 1751 to 1990, a period of 240 years, were about 803 Gt CO₂ From 1991- 2019, while the world planned on reducing emissions, they were about 70tal CO₂ emissions since the beginning of the industrial revolution ~270 years 1648 Gt CO₂

Over half of all global CO₂ emissions from 1750-2019 were added in the last 28 years

Annual global emissions in 2000 were $\underline{24.6 \text{ Gt CO}_2}$ Annual global emissions in 2019 were $\underline{36.9 \text{ Gt CO}_2}$

Annual CO₂ emissions have increased by 50% in the past 19 years

<u>Carbon budgets</u> to limit future temperature increases are calculated on the basis that the degree of future warming can be calculated from the total CO_2 emissions already in the atmosphere and the future annual emissions permissible. Due to the complexity of the system, the calculated budget is sensitive to the method used.

Limiting the increase in global warming to 1.5°C gives a carbon budget which is estimated to be 2250 Gt CO₂. If global emissions to 2019 are about 1650 Gt CO₂, this leaves us a budget of 600 Gt CO₂.

Current levels of emissions therefore indicate we have optimistically 15/16 years left at current rates before we exceed 1.5°C

<u>The Emissions Gap Report</u> is published annually by the United Nations Environment Program (UNEP) to assess global progress in reducing emissions to hold any temperature increase to below 2°C.

The recent report, published last November, finds that even if all unconditional <u>Nationally Determined</u> <u>Contributions</u> (NDCs) under the Paris Agreement are implemented, we are still on course for a 3.2°C temperature rise.

The report gives us some stark choices: either set in motion the radical transformations we need NOW or our children and grandchildren face the consequences of a planet radically altered by climate change and the actions of our generation.

Time is running out; failure to act has already lead to average global temperatures increasing by more than <u>1°</u> C since 1880. Two-thirds of the warming has occurred since 1975.

We hope we have not lost you yet. The following 9 emails aim to fill in some background and what some of the issues are. We hope they will persuade you to ACT NOW, on behalf of our grandchildren.