

From: [redacted]  
To: [redacted]  
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Subject: [redacted]  
Date: 30 September 2021 11:29:28  
Attachments: [redacted]  
Importance: High

From: [redacted]  
Sent: 30 September 2021 11:29  
To: [redacted]  
Subject: Sizewell C Application

To the Planning Inspectorate

If Sizewell C were to be built it will be a completely irresponsible decision. The build will be adding to catastrophic and irreversible climate change, along with disposing of nuclear waste. How can this be seen as acceptable? Please act now and listen to the scientists. Please refuse Sizewell C and do not allow the government to say 'they have learned from their mistakes', both now and in the future, when it will be too late and irreversible.

Please would you read the following article:

Climate change and impacts accelerate

Published

16 September 2021  
Press Release Number:  
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16

COVID-19 caused only a temporary reduction in carbon emissions  
World is off track to meet Paris Agreement climate targets



16 September 2021 (WMO) - COVID-19 did not slow the relentless advance of climate change. There is no sign that we are growing back greener, as carbon dioxide emissions are rapidly recovering after a temporary blip due to the economic slowdown and are nowhere close to reduction targets. Greenhouse gas concentrations in the atmosphere continue at record levels, committing the planet to dangerous future warming, according to a new multi-agency report. Rising global temperatures are fueling devastating extreme weather throughout the world, with spiralling impacts on economies and societies. Billions of work hours have been lost through heat alone. The average global temperature for the past five years was among the highest on record. There is an increasing likelihood that temperatures will temporarily breach the threshold of 1.5°C Celsius above the pre-industrial era in the next five years, the report said.

The scale of recent changes across the climate system as a whole are unprecedented over many centuries to many thousands of years. Even with ambitious action to slow greenhouse gas emissions, sea levels will continue to rise and threaten low-lying islands and coastal populations throughout the world, according to the report.

"This is a critical year for climate action. This report by the United Nations and global scientific partner organizations provides a holistic assessment of the most recent climate science. The result is an alarming appraisal of just how far off course we are," said UN Secretary-General António Guterres.

"We are still significantly off-schedule to meet the goals of the Paris Agreement. This year has seen fossil fuel emissions bounce back, greenhouse gas concentrations continuing to rise and severe human-enhanced weather events that have affected health, lives and livelihoods on every continent. Unless there are immediate, rapid and large-scale reductions in greenhouse gas emissions, limiting warming to 1.5°C will be impossible, with catastrophic consequences for people and the planet on which we depend," he said in the foreword.

[redacted] for the release of the report at a press conference given by WMO Secretary-General Prof. Petteri Taalas.

The United in Science 2021 report, the third in a series, is coordinated by the World Meteorological Organization (WMO), with input from the UN Environment Programme (UNEP), the World Health Organization (WHO), the Intergovernmental Panel on Climate Change (IPCC), the Global Carbon Project (GCP), the World Climate Research Programme (WCRP) and the Met Office (UK). It presents the very latest scientific data and findings related to climate change to inform global policy and action.

"Throughout the pandemic we have heard that we must build back better to set humanity on a more sustainable path and to avoid the worst impacts of climate change on society and economies. This report shows that so far in 2021 we are not going in the right direction," said Prof. Taalas.

#### Key Points

##### Greenhouse Gas Concentration in the Atmosphere (WMO Global Atmosphere Watch)

- Concentrations of the major greenhouse gases – carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) continued to increase in 2020 and the first half of 2021.
- Overall emissions reductions in 2020 likely reduced the annual increase of the atmospheric concentrations of long-lived greenhouse gases, but this effect was too small to be distinguished from natural variability.
- Reducing atmospheric methane (CH<sub>4</sub>) in the short term could support the achievement of the Paris Agreement. This does not reduce the need for strong, rapid and sustained reductions in CO<sub>2</sub> and other greenhouse gases

##### Global Greenhouse Gas Emissions and Budgets (Global Carbon Project)

- Fossil CO<sub>2</sub> emissions – coal, oil, gas and cement – peaked at 36.64 GtCO<sub>2</sub> (5.6%) in 2020 due to the COVID-19 pandemic.
- Based on preliminary estimates, global emissions in the power and industry sectors were already at the same level or higher in January-July 2021 than in the same period in 2019, before the pandemic, while emissions from road transport remained about 5% lower. Excluding aviation and sea transport, global emissions were at about the same levels as in 2019, averaged across those 7 months.
- Recent emissions trends of N<sub>2</sub>O, the third most important greenhouse gas intense socioeconomic pathways used to explore future climate change.

##### Emissions Gap (UNEP)

- Five years after the adoption of the Paris Agreement, the emissions gap is as large as ever: global emissions need to be 15 GtCO<sub>2</sub> e lower than current unconditional Nationally Determined Contributions (NDCs) imply for a 2 °C goal, and 32 GtCO<sub>2</sub> e lower for the 1.5 °C goal.
- The COVID-19 crisis offers only a short-term reduction in global emissions. It will not significantly reduce emissions by 2030 unless countries pursue an economic recovery that incorporates strong decarbonization.
- The increasing number of countries committing to net-zero emission goals is encouraging, with about 63% of global emissions now covered by such goals. However, to remain feasible and credible, these goals urgently need to be reflected in near-term policy and in significantly more ambitious NDCs for the period to 2030.

##### Global Climate in 2017–2021 (WMO)

- The global average mean surface temperature for the period from 2017–2021 (based on data until July) is among the warmest on record, estimated at 1.06 °C to 1.26 °C above pre-industrial (1850–1900) levels.
- In every year from 2017 to 2021, the Arctic average summer minimum and average winter maximum sea-ice extent were below the 1981–2010 long term average. In September 2020, the Arctic sea-ice extent reached its second lowest minimum on record.
- 2021 recorded devastating extreme weather and climate events – a signature of human-induced climate change has been identified in the extraordinary North American extreme heat and west European floods.

##### Global Climate in 2021–2025 (WMO Global Annual to Decadal Climate Update – Met Office (UK), WCRP, WMO)

- Annual global mean near-surface temperature is likely to be at least 1 °C warmer than pre-industrial levels (defined as the 1850–1900 average) in each of the coming five years and is very likely to be within the range 0.9 °C to 1.8 °C.
- There is a 40% chance that average global temperature in one of the next five years will be at least 1.5 °C warmer than pre-industrial levels but it is very unlikely (<10%) that the 5-year mean temperature for 2021–2025 will be 1.5 °C warmer than pre-industrial levels.
- Over 2021–2025, high latitude regions and the Sahel are likely to be wetter than the recent past.

##### Highlights of the IPCC Sixth Assessment Report: The Physical Science Basis

- It is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred.
- The scale of recent changes across the climate system as a whole and the present state of many aspects of the climate system are unprecedented over many centuries to many thousands of years.
- Human-induced climate change is already increasing the frequency and intensity of many weather and climate extremes in every region across the globe.

Sea-level Rise and Coastal Impacts (World Climate Research Programme – WMO, IOC, ISC)

- Global mean sea levels rise 20 cm from 1900 to 2018 and at an accelerated rate of 3.7-6.5 mm/yr from 2006 to 2018.
- Even if emissions are reduced to limit warming to well below 2 °C, global mean sea level would likely rise by 0.3-0.6 m by 2100, and could rise 0.3-3.1 m by 2300.
- Adaptation to this residual rise will be essential – adaptation strategies are needed where they do not exist – especially in low-lying coasts, small islands, deltas and coastal cities.

Heatwaves, Wildfires, and Air Pollution: Compounding and Cascading Climate Hazards to Health (WHO/WMO)

- Rising temperatures are linked to increased heat-related mortality and work impairment, with an excess of 163 billion potential work hours lost globally in 2019 compared with those lost in 2000.
- COVID-19 infections and climate hazards such as heatwaves, wildfires and poor air quality combine to threaten human health worldwide, putting vulnerable populations at particular risk.
- COVID-19 recovery efforts should be aligned with national climate change and air quality strategies to reduce risks from compounding and cascading climate hazards, and gain health co-benefits.

"This report is clear. Time is running out. For the 2021 United Nations Climate Change Conference in Glasgow, known as COP26, to be a turning point, we need all countries to commit to net zero emissions by 2050, backed up by concrete long-term strategies, and enhanced Nationally Determined Contributions which collectively cut global emissions by 45 per cent by 2030, compared to 2010 levels," said Mr Guterres.

"We need a breakthrough on protecting people and their livelihoods, with at least half of all public climate finance committed to building resilience and helping people adapt. And we need much greater solidarity, including full delivery of the long-standing climate finance pledge to help developing countries take climate action. There is no alternative if we are to achieve a safer, more sustainable and prosperous future for all."



*The World Meteorological Organization is the United Nations System's authoritative voice  
on Weather, Climate and Water*



Thank you

Mrs D Lacey