



Is this what the Suburb could look like?

Global Warming

The problem is that Earth's current warming trend is happening during a relatively cool orbital phase, and is happening much faster than usual.

MARIE-CHRISTINE O'CALLAGHAN

We all expect the temperature to change during the course of a year with cold winters and warm summers, but, just as the weather changes during a human year, it also changes through geological times. The Earth's climate, in the last 650,000 years, has seen seven cycles of glacial advance and retreat. The end of the last ice age, about 11,700 years ago, marked

the beginning of the modern climate era and of human civilisation.

Global temperature changes are responsible for these alternating heating and cooling cycles of the Earth's temperature. There are physical causes for these alterations such as changes in solar energy and sunspot activity which will raise global temperature. Variations in what is known as the Milankovitch cycles, which are caused by changes in the shape of the Earth's orbit around the

sun, the tilt of the Earth's rotation axis, and the wobble of our axis, will also affect temperatures. Volcanic eruptions which release large quantities of volcanic dust in the atmosphere lead to a lowering of global temperatures. Changes in oceanic circulation such as the periodic warming (El Nino) and cooling (La Nina) of areas of the tropical Pacific Ocean will also have global consequences.

The problem is that Earth's current warming trend is happening during a relatively cool orbital phase, and is happening much faster than usual.

A lot has been written about the Greenhouse Effect. This process occurs when gases in the Earth's atmosphere trap the Sun's heat and make the Earth much warmer than it would be without an atmosphere. Most of the naturally occurring gases in the atmosphere are nitrogen and oxygen, they cannot absorb heat and contribute to the Greenhouse Effect which makes the Earth a

comfortable place to live in.

A growing population and economic developments have led to a net increase in the release of certain gases such as carbon dioxide (through the burning of fossil fuels, and the loss of forests) nitrous oxide (from nitrogen fertilisers and car exhausts), CFCs (a by-product of polystyrene packaging) and methane (from landfill sites and both ends of cattle). Together they have caused an enhanced Greenhouse Effect which has resulted in increased temperatures and extreme weather events such as the recent devastating flood that caused so much damage in the Suburb.

The IPCC's (The Intergovernmental Panel on Climate Change) Special Report advocated various pathways to stabilise global warming at 2.7 degrees Fahrenheit (1.5 degrees Celsius). These solutions all require unprecedented efforts to cut fossil-fuel use in half in less than 15 years and eliminate their use almost entirely

in 30 years. This means no home, business, or industry heated by gas or oil; no vehicles powered by diesel or gasoline; all coal and gas power plants closed; the petrochemical industry converted wholesale to green chemistry; and heavy industry like steel and aluminium production either using carbon-free energy sources or employing technology to capture CO2 emissions and permanently store it.

The recent United Nations Climate Change conference (CoP 26) ended with the heads of State and government expressing a keen awareness of the severity of the climate crisis and a renewed resolve to do the work that needs to be done to address it. Alok Sharma President of CoP 26 said: "We can now say with credibility that we have kept 1.5 degrees alive. But, its pulse is weak and it will only survive if we keep our promises and translate commitment into rapid action." More details on CoP 26 below.

Good CoP, Bad CoP? Great CoP!

"Hearing no objections, it is so decided." And with these words at 7:41 PM on 13th November 2021, an emotional Alok Sharma, President of CoP26 gavelled the Glasgow Climate Pact, by unanimous consent of the 198 nations gathered there.

JONATHAN WAXMAN,
CHAIR ENCOMM

It was a triumph of multilateral diplomacy led by the UK presidency. The UNFCCC, United Nations Framework Convention on Climate Change, was convened first at the earth summit in Rio in 1992. Since then the parties to the framework have met annually at CoP (Conference of Parties) with various ups and downs on its storied journey, from the largely failed Kyoto protocol to the awful Copenhagen conference of 2009. Divisions in local and global politics, different agendas as between developed and developing nations, a well funded climate change science denial PR effort funded covertly by fossil fuel interests, all converged to slow action to tackle climate change. During those years of delay, greenhouse gases have continued to accumulate in

our atmosphere at a growing rate, warming the earth.

But at CoP19 in Paris in 2015, there was a significant change for the better. Nations signed up to an agreement to keep climate change 'well below 2 degrees of warming'. It achieved this by removing coercive limits on GHG emissions, replacing them by a system of voluntary commitments from individual nations (NDC's).

Since that time countries accounting for more than 80% of global emissions have signed up to Net Zero pledges to eliminate all greenhouse gas emissions by a fixed date. The UK in 2019 legislated to reach Net Zero by 2050. The US has pledged likewise. China – which only started industrialising and using fossil fuels in the last 30-40 years – has pledged to reach Net Zero by 2060. India, a poor and populous country, pledged at Glasgow to reach Net Zero by 2070.

At Copenhagen in 2009 we were probably on track for 4-5C of warming by 2100. After Paris in 2015, commitments made pursuant to that agreement brought the likely trajectory down to 2.5-3C. Additional commitments made at Glasgow have further reduced the likely range of warming to 2 - 2.5C, assuming that commitments made are kept.

And as Alok Sharma said after bringing down the gavel: "History has been made here in Glasgow. And we now need to ensure that the next chapter charts the success of the commitments we have solemnly made together. What we can say with credibility is that we have kept 1.5 degrees within reach. But its pulse is weak."

There is much work to do here, in the UK and in Hampstead Garden Suburb, to ensure we reach our Net Zero goals. But we are ready to do that work. Much rests on it...



BRILL OWEN
CHARTERED ARCHITECTS

We are able to offer a complete service from conception to completion helping you to create a unique home that fulfils your needs

Contact us for a free no obligation consultation on

0208 349 0037

Or email at
architects@brillowen.co.uk

View our recent work at
www.brillowen.co.uk

We are Chartered Architects based in North London specialising in refurbishments, extensions and new build houses and flats within conservation areas and to listed buildings.



Air Pollution (continued from front page)

question is, what can we do so that we're not unnecessarily adding to air pollution, either directly or indirectly?

Here are some suggestions from the Royal College of Paediatrics and Child Health:

- Choose to walk or cycle short journeys instead of taking the car. Not only will this reduce emissions, but air pollution is frequently higher inside a vehicle than outside it. Active travel also has the added benefits of improving

mental and physical health through increased physical activity.

- Use public transport for longer journeys or where active travel is not feasible for other reasons. When walking or cycling, choose quieter 'back streets' rather than main roads and walk on the side of the pavement furthest away from traffic.
- When driving is the only option, try not to leave the car 'idling' when stopped in traffic or when stationary for other reasons.

- Use electric vehicles rather than diesel and petrol vehicles where this is a viable choice.
- Use air pollution forecasts to monitor levels of pollution and choose activities accordingly, such as reducing outdoor exercise when levels are high.

I know my kids will continue to ask me some big questions, and I will always do my best to answer them. I hope, with action from us all, their questions won't be prompted by air pollution.