

Food for Thought Article - 'Christ and COP26'.



Introduction:

COP 26 (Conference of the Parties) is the 26th United Nations Climate Change Conference and will be held in the Global Green City of Glasgow between 31st October and 12th November 2021. It is the largest (about 25,000 attendees) and probably the most important conference on climate change ever to be held.

This summit will be attended by representatives from the 197 countries that signed the United Nations Framework Convention on Climate Change (UNFCCC) – a treaty that came into force in 1994.

Some notable 'apologies for absence' include China's President Xi Jinping, Russia's President Putin, Brazil's President Bolsonaro, Mexico's President Obrador, South Africa's President Ramaphosa, and the Japanese Prime Minister Kishida. Some famous faces who will be there include Prince Charles and the Duchess of Cornwall, Barak Obama, Sir David Attenborough, activist Greta Thunberg and UN Secretary General Antonio Guterres.

In this article, I want to begin by looking at the goals of the COP26 conference and some of our own government's commitments to climate change policy here in the UK and ask, 'Are these goals realistic?', 'Is radical sustainable change possible in a consumerist society built on a market economy?', 'What are some of the blockages in making progress towards the goals?'

I will give some personal examples of how we are all faced, almost every day, with making 'green decisions' and then move on to consider some of the science of greenhouse gases and one of the new technologies, carbon capture and storage. I will then seek to address the important question of 'What does the Bible say about these issues?', grouping my response around 3 words: Creation – Covenant – Cross. Finally, I will consider some of the different responses we may make, as Christians, to climate change and the issues it raises.

COP26 Goals and UK Government Policy Commitments.

COP26 has 4 main stated goals: -

1. To secure global net zero carbon emissions by 2050. To achieve this will require the phasing out of using fossil fuels i.e. gas, oil and coal; curtailing deforestation and planting more trees; speeding up the switch to electric vehicles; encouraging investment in renewables.
2. Adapt to protect communities and natural habitats. To achieve this we will need to protect and restore ecosystems, build defences and have weather warning systems and resilient infrastructure.
3. Mobilise finance. Making these changes is going to be costly.
4. Work together to deliver on these goals. Collaboration between governments, businesses and civil society is essential.

These goals build on the 'Paris Agreement', a legally binding international treaty which was adopted by 196 parties at COP21 in Paris in December 2015. The main goal here was to limit global warming to below 2 deg. centigrade, relative to pre-industrial times i.e. since 1800, and preferably below 1.5 deg. centigrade, by the end of this century. However, the average temperature of the earth has already increased by 1.2 deg. centigrade since pre-industrial times.

Here in the UK, our government has made some firm commitments in terms of climate change policy. These include: -

- Reducing carbon emissions by a massive 78% on 1990 levels by 2035
- Phasing out new diesel and petrol vehicles by 2030
- Achieving, as a nation, net zero carbon emissions by 2050
- Creating 440,000 new 'green' jobs
- Making available £90 billion for new green investment.

But in order to turn a dream or vision into reality, we have first to make it real enough to believe in, otherwise it just remains a fantasy. So, are all these goals, national and global, realistic? Does the reality match the rhetoric?

Purely in terms of our own government's pledges, Andy Lester from Arocha (www.arocha.org.uk) doesn't think so. He writes: "Although the UK Government's words are greener than ever, the planned action to deliver the policies needed to divert climate catastrophe remains inadequate. The mood music is still not being met by anything like the level of action that will be required to meet the 78% reduction target or indeed net zero by 2050."

In his budget speech on 27/10/21, UK Chancellor of the Exchequer Rishi Sunak (who spoke for more than an hour), didn't mention the climate crisis at all. And his most eye-watering announcement, from an environmental point of view, was the halving of air passenger duty on short haul flights. This policy decision contributes to the fact that if a delegate wanted to travel from London to Glasgow for the COP26 conference, it would cost them £107 to travel by train but only £37 to travel by the more polluting aircraft.

But in order to assess the validity of all goals, it seems to me we have initially to consider 2 things: Firstly, conflicting interests related to environmental and ecological issues and secondly, conflicting opinions about climate change.

Conflicting Interests Related to Environmental/Ecological Issues.

I begin with a local example. I never thought I would grieve and be sad about the loss of a tree, but I have been recently. The giant oak tree which was just 75 metres from our home has been cut down. I have walked past it for 43 years admiring its wonderful canopy in all the different seasons, enjoying the birds nesting in it, the squirrels leaping from its branches, the acorns dropping in the autumn. But no more.



Whenever I saw it, I even took regular spiritual sustenance from this Bible verse: "You will be called an oak of righteousness, a planting of the Lord for the display of his splendour." (Isaiah 61:3b). The Lord, via the oak tree, gave me strength.

The tree was in its prime, about 100 years old, and it took a team of tree-fellers 3 days to cut it down, chop it up, and take it away. (See picture)

‘Why?’ I hear you ask.

It was because, originally, a few houses had been built too close to it and the tree’s roots were starting to cause subsidence in those properties which were just about 15 metres away. I can understand their concerns. But the demise of the tree has caused anger and sadness among other neighbours. One neighbour told me she had wept many tears over it; another told me she had asked for a piece of it to turn into a coffee table.

But if I and my neighbours were so affected by the loss of one tree, how must God feel when he witnesses the worldwide de-forestation of 10 million hectares every year, an area more than twice the size of Denmark?

Another example of conflicting interests, this time national.

Up in west Cumbria they have been thinking of opening a mine, whose seams will reach out under the Irish Sea, to extract ‘coking-coal’. In this day and age, of course, that would be anathema; so the decision has been deferred (at least until COP26 is over).

‘Coking-coal’ is used as a reducing agent in blast furnaces in the production of iron and steel. The ‘coking coal’ has to come from somewhere, so why not use local supplies rather than transporting it from abroad. If we want steel, to build cars, wind farms, railway lines, bridges etc., we will need ‘coking-coal’.

Here again, there is a conflict of interests. Just think of the wealth and employment that opening the mine would bring to the local population.

Of course, hydrogen has been suggested as an alternative reducing agent to ‘coking-coal’, (and as a means of heating our homes), but hydrogen is expensive and not easy to produce.

And let’s consider the international question. When the rich countries of the west have used fossil fuels to power their own ‘industrial revolutions’ and generate wealth in their capitalist, consumerist societies, is it fair to ask countries like China and India not to use their fossil fuel resources to do the same? Maybe China and India don’t think it is.

It is not that long ago that China was opening 5 new coal-powered electricity generating stations every week, and they are still opening one per week now. India has also said that coal will be the mainstay of their power generation for decades to come.

Meanwhile other countries, like Australia (big exporters of coal), Saudi Arabia (sitting on huge oil fields) and Japan (wondering if nuclear power is a good option for them after some bad experiences), are questioning whether it is necessary to set such immediate (and unrealistic?) goals for reducing carbon emissions. Saudi Arabia has said it will commit to zero carbon emissions by 2060 but has no intention of reducing oil exports.

Conflicting Opinions about Climate Change.

Some scientists believe that global warming, climate change, the climate emergency, is entirely due to our human activity ('anthropogenic warming'), especially the burning of fossil fuels. This has increased the concentration of carbon dioxide (CO₂) in our atmosphere from around 278 parts per million (the pre-industrial level at the end of the 18th century) to what it is today, 419 parts per million.

It is estimated that over the entire industrial era, some 2.3 trillion tonnes of CO₂ have been released into the atmosphere.

There is no doubt in my mind that, probably for the first time, human activity is now influencing our weather in a way previously not possible. And I also believe that what shapes the climate is far more complex than any one theoretical framework.

Changes in our weather patterns, which have always been part of life on earth, are also a function of the orbit and spin of the earth, movement of the oceans, volcanic activity, and especially the interaction between the earth and the sun i.e. solar activity and radiation.

The sun imparts more energy to the earth in 2 minutes than human beings generate in a whole year! It is a big player in determining the temperature of the earth and our weather.

It seems to me that the attraction in saying that climate change is **all** down to human activity, is that because **we** have caused it, **we** can put it right. The future of the planet is in our hands; the only way to save the planet is 'decarbonise the world's economies', we are told.

But how much confidence/faith in science should we have? Should we believe, like Sir Paul Nurse, that 'only science can save us and protect our planet for future generations' or do we agree with Winston Churchill when he said, 'Scientists should be on tap, but not on top'.

And even if the climate scientists are correct and we agree with Sir David Attenborough that, 'What happens next depends on each one of us', can capitalist/consumerist economies change and become sustainable? Will people be prepared to make the radical lifestyle changes that will be necessary? Will ecological considerations now trump economic ones?

For generations, priorities have been Profit – People – Planet, can this order now be reversed?

Coldplay, Cars, Heat Pumps, Renewables and Plastics: Is Radical, Sustainable Change Possible?

The band, Coldplay, start their world tour next March in Costa Rica. They have already done 6 world tours but this one is different; they have tried to make it as sustainable as possible. There is a kinetic dance floor so that when the fans jump up and down, they will be generating electricity to power the show! Some people will be pedalling for all they are worth on bicycles, to the same end. A rechargeable battery will be used and 1 tree will be planted for every ticket sold (possibly 4 million trees).



Here in Britain, we do love our cars ~ all 32 million of them! But once petrol and diesel are phased out, it is estimated that we will need an extra 30 gigawatts of electricity to power our new electric cars.

And then there is the question of the metals needed to make the car batteries. Cobalt, lithium and nickel are currently the metals of choice, but cobalt is particularly toxic. At the moment, 65% of cobalt comes from the Democratic Republic of Congo where it is causing considerable health problems for the miners and their families, including deformities in new-born babies.

And then there are Heat Pumps to heat our homes. They run on electricity, are expensive and quite disruptive to install, do not produce as much heat as a gas boiler i.e. they run at a lower temperature, they work better with the dry cold air of Scandinavian countries rather than the humid cold air in this country, and if the houses are not well insulated, folks will be sitting in the cold!

Converting any form of energy into electrical power is basically wasteful and inefficient. If we are going to need more electricity we will have to get used to this basic scientific fact.

Nuclear power stations are only around 35% efficient, and of course the main environmental and ecological issue is what to do with the spent, radioactive fuel rods. Many years ago I used to work in a nuclear power station, and even then we were talking about how to dispose of the contaminated rods.

Some of the wackier suggestions at the time were to bury them in the Arctic sea ice (good job that option wasn't adopted otherwise they would now be floating to the surface as the ice melts), or even to fire them off into space!

Most of them are now entombed in the earth, possibly somewhere near you!

Wind turbines are also only about 35% efficient and with regard to solar panels, they only convert about 13% of solar energy into useful electricity. And the problem with these 'renewables' is that they aren't very 'dependable'. If the wind doesn't blow and the sun don't shine their output is drastically reduced.

Producing more electricity is never going to be environmentally friendly, no matter how it is generated. Meanwhile the big question remains: "Will it be possible for us to reduce our dependency on electricity?"

And then there is the issue of plastic. The soft drinks industry produces 470 billion single use plastic bottles worldwide every year. The Coca Cola company alone sold 112 billion plastic bottles of their drink in 2020 and made a profit of \$20 billion.



I remember many years ago being in Mozambique, one of the poorest countries in the world, and being amazed by the huge Coca Cola lorries carrying glass bottles of their fizzy drink. And then they changed the packaging to PET plastic.

Producing a plastic bottle is much more energy efficient and cheaper than producing a glass one. Making glass bottles requires a lot of energy. I saw a glass bottle factory in this country recently and their fuel bill was £60,000 per week!

Glass has to be heated to around 1500 deg. centigrade before it can be shaped into a bottle; a plastic bottle can be shaped at 170 deg. centigrade. Handling and transportation costs are also cheaper with plastic as they don't weigh so much or break so easily.

The answer to the single use plastic problem is to stop their production at source and I can't see that happening. Recycling is unlikely to solve this problem; there are simply too many bottles, not enough recycling plants, and recycled plastic is more expensive to buy than 'virgin' plastic.

From Eggs to Dentistry and Fridge Freezers - We Are All Involved.

There is now nowhere any of us can hide from an awareness of the environmental consequences of the daily decisions we make. Everywhere we travel, the food we eat, the clothes we wear (you can now buy trainers that are compostable!), the appliances we buy etc., all come with moral considerations concerning the environmental impact of the choices we make. Here are three recent personal examples.

Firstly, the supermarket has told us that if we buy a certain box of eggs, it will help to plant trees!

Secondly, I was in discussion with my dentist concerning whether I wanted to replace a filling with amalgam or with a white resin filler. This too is an environmental issue, for dental amalgam is made from 50% liquid mercury and a powdered alloy of silver, tin and copper. 'Green dentistry' is moving away from using amalgam (in fact it has been banned in some countries because of the toxicity of mercury) in favour of using composite white fillings, which are a blend of plastics and fillers such as silica and dimethylglyoxime.

As I was having this conversation with my dentist (admittedly my jaw was frozen and I wasn't sure what gibberish and spital might be coming out of my mouth!) I was aware again of how environmental issues and considerations are everywhere.

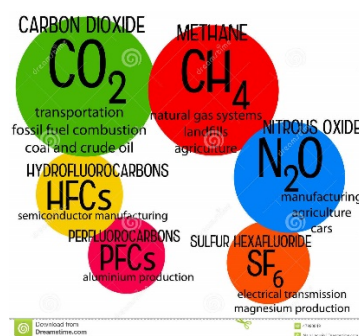
And there is always a financial consideration; an amalgam filling would have cost me £55 but you will be pleased to know I opted for the white filling and paid £105.

The third example of having to consider environmental issues was when our fridge freezer packed up after 11 years of service. I must admit we never even considered the option of whether it might be repairable, the number one consideration being to buy the appliance that used the least electricity to run. This saving is partly due to the 'space age' insulation which makes the whole appliance smaller. We also paid to have the old one 'recycled'.

So it is, that as we live life day by day, we are all making decisions with environmental factors in mind and which have environmental consequences for ourselves, our communities, and the planet.

Greenhouse Gases (GHG's)

There is no doubt that GHG's released into the atmosphere form a 'blanket' which holds in heat from the sun. Our planet is currently warming up, and at a fast rate.



74% of GHG's is carbon dioxide (CO₂), 17% is methane (CH₄), 6% is nitrous oxide (N₂O), and 3% is hydrofluorocarbons and other fluorinated gases. Each year, it is estimated that 36,000 million tonnes of CO₂ is released into the atmosphere with the major polluters being China (28%), USA 14%, E.U (7.5%), India (6%), Indonesia (5%), Russia (3%), Japan (2%).

10 countries produce 70% of global GHG emissions.

By far the most CO₂ (32%) is produced by burning fossil fuels (coal, gas and oil) used to generate electricity and provide heat. Transportation ~ road, rail, air, and shipping ~ accounts for 14% of CO₂ production followed by manufacturing and construction 13% and agriculture 10%.

A warmer planet has more overall energy and warmer air is able to hold more water. With greater evaporation rates from our seas and oceans more rain will fall but not in a predictable pattern. Some places will experience floods whilst other parts of the planet will see droughts.

Greater contrasts between air temperatures also give rise to stronger winds so the frequency and intensity of tornadoes, hurricanes and typhoons is likely to increase.

The earth is unique in our solar system in that it is able to hold water in 3 phases, solid (ice), liquid (water) and vapour/gas (clouds). This requires a delicate balance which can be upset. At the moment the ice is melting and the water is warming. This will give rise to increased sea levels which will have serious consequences, especially for low lying countries and islands.

Carbon Capture & Storage.

There are many new technologies which are being worked on at the present time to counter the GHG problem and I will briefly assess just this one ~ carbon capture and storage.

It's worth pointing out that in November 2015 Chancellor George Osborne ended the Government's £1 billion support for carbon capture technology ~ it was going to be too expensive. At this time, Professor Stuart Haszeldine of Edinburgh University, a geologist and an expert on carbon capture, described this decision as a 'betrayal'. The present government now thinks this technology may have a part to play.

The proposed plant will be built in Scotland and will remove one million tonnes of CO₂ from the air every year - the same amount taken up by 40 million trees.

But it's a complex process. It's called Direct Air Capture (DAC) and requires fans which suck in air which is then exposed to a liquid mixture that binds the CO₂. The liquid is then turned into calcium carbonate pellets which are heated to 900 deg. centigrade and which then turn into CO₂ gas and calcium oxide. The extracted CO₂ gas would then have to be stored underground.

36,000 of these plants would need to be built around the world to deal with the amount of CO₂ we are currently putting into the atmosphere and this would require considerable storage space.

I suppose the question is: 'If we believe that technology has got us into this predicament, do we believe technology can get us out of it?'

What Does the Bible Say?

It is at this point that I want to turn to my Biblical understanding of what God says about all this, for, as Christians, we will certainly have a unique and distinctive viewpoint. What follows are things we are unlikely to hear at COP26 which will provide an exclusively human-centred approach to the issues but not a Divine one.

I have grouped my answer around 3 words, **Creation, Covenant, and Cross.**

Creation.

1. Everything belongs to God.

He created it, owns it, sustains it and controls it. 'In the beginning God created the heavens and the earth.' (Gen.1:1)

'The heavens declare the glory of God; the skies proclaim the work of his hands.' (Ps. 19:1)

'How many are your works O Lord! In wisdom you made them all; the earth is full of your creatures.' (Ps. 104:24)

'The earth is the Lord's, and everything in it, the world, and all who live in it.' (Ps. 24:1)

'Every animal of the forest is mine, and the cattle on a thousand hills. I know every bird in the mountains, and the creatures of the field are mine.' (Ps. 50:10&11))

God is the creator, the owner, the one who sustains and controls the world and all that is in it. This, I believe, is the starting point for all of our witnessing, especially to Gentile unbelievers (Jews and Muslims already believe that God/Allah is the creator).

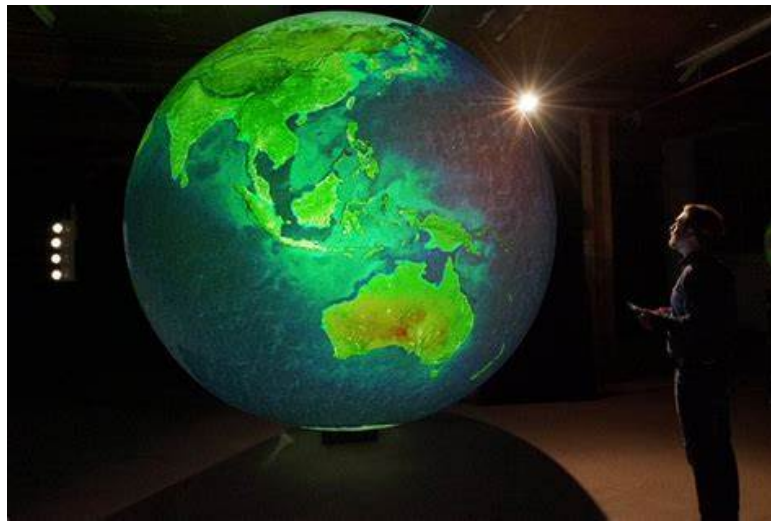
2. Human beings have delegated responsibilities given by God and are accountable to Him.

'The highest heavens belong to the Lord, but the earth he has given to man.' (Ps. 115:16)

'You made him [humankind] ruler over the works of your hands; you put everything under his feet; all flocks and herds and the beasts of the field, the birds of the air, and the fish of the sea, all that swim the paths of the seas.' (Ps. 8:6-8)

Sadly, some people have seen verses like this as a *carte blanche* for human beings to exploit and abuse creation; viewing humans as rulers and masters of all they survey.

But this is not the case; the earth is a sacred place where we are given responsibility by God to manage, organise, cultivate, care for, and serve the whole biosphere. Indeed it can be argued that we are created in the image and likeness of God *so that* we may fulfil this mandate; this is our primary purpose, alongside our worship of God.



“Then God said, ‘Let us make man in our image, in our likeness, and let them rule (‘radah’) over the fish of the sea and the birds of the air, over the livestock, over all the earth, and over all the creatures that move along the ground.’ So God created man in his own image, in the image of God he created him; male and female he created them. God blessed them and said to them, “Be fruitful and increase in number (i.e. populate the earth); fill the earth and subdue it (‘kabash’ = to occupy/take possession of). Rule over the fish of the sea and the birds of the air and over every living creature that moves on the ground.’ (Gen. 1:26-28).

So it is that we exercise rule/dominion over every living creature on behalf of God, not instead of God.

Notice how green is the first colour mentioned in the Bible (Gen. 1:30). The Bible has green credentials!

In Genesis chapter 2 we see that the earth is a garden waiting to be tended. ‘There was no man to work the ground’ (Gen. 2:5), so ‘the Lord took the man and put him in the Garden of Eden to work it and take care of it.’ (Gen. 2:15)

It seems to me that some Christians have a tendency to renounce earth completely in favour of heaven. This I believe is a big error. The 19th century hymn writer Thomas Taylor wrote in one of his hymns: "Heaven is my home; earth is a desert drear".

But the emphasis in the Bible is on the earth rather than heaven. 'Earth' is mentioned 863 times and 'heaven' 494 times, though they are often linked and are spoken of in the same breath.

Earth as the 'Footstool' of God.

We will look later on at the 'earthing of heaven' and the 'heavening of earth', but for now I just want to mention two verses – Isaiah 66:1&2: -

'This is what the Lord says: "**Heaven** is my throne and the **earth** is my footstool. Where is the house you will build for me? Where will my resting place be? Has not my hand made all these things, and so they came into being?" declares the Lord.'

We could regard a 'footstool' as being something rather inferior, something to just put your feet up on after you get home from a hard day!

But no! The earth is God's footstool, a touching place where his presence is to be found. We respect and cherish the earth precisely because it is God's footstool, his resting place.

Indeed, it is at his footstool that we are to worship Him: "Exalt the Lord our God and worship at his footstool; he is holy." (Ps.99:5) "Let us go to his dwelling-place; let us worship at his footstool." (Ps. 132:7)

And Jesus combines beautifully heaven and earth when he said: "Do not swear at all: either by heaven, for it is God's throne; or by the earth, for it is his footstool" (Mt. 5:34&35), and also in the prayer he taught us: "Father, may 'your will be done on earth, as it is in heaven.'" (Mt. 6:10)

The words of this hymn by George Condor (1874) more biblically reflect the linking of heaven and earth:

"All things praise you, Lord most high, heaven and earth and sea and sky,
All were for your glory made that your greatness thus displayed,
Should all worship bring to you, so we praise you, Lord, anew."

3. Creation and Christ.

As Christians, we are called to see who Christ is in relation to creation.

First of all, he is **before** creation (priority). “He is **before** all things” (Col. 1:17) and as Jesus himself said to God his Father, “You loved me **before** the creation of the world.” (Jn. 17:24).

Secondly, Christ is **over** creation (supremacy). “He is the firstborn **over** all creation.

Thirdly, all things were created **by** him (agency). “For **by** him all things were created.” (Col. 1:16).

Fourthly, all things were created **through** him (mediator). “**Through** him [Jesus the Word] all things were made.” (Jn. 1:3). It was **through** Jesus, the Son, that God ‘made the universe’ (Heb. 1:2).

Fifthly, all things hold together **in** him (unity). “**In** him all things hold together.” (Col. 1:17)

Finally, all things were created **for** him (purpose). God has appointed Jesus as ‘**heir of all things**’ (Heb. 1:2); “all things were created by him and **for** him (Col. 1:16).

So creation does not exist primarily for you and me (or any of the delegates at COP26), but for Christ, who is both separate from and supreme over creation and, at the same time, is fully involved with and integral to creation. This gives us a Christ-centred approach to environmental and ecological matters as opposed to a purely human-centred approach.

In view of who Jesus is in relation to creation, we would expect him to be ‘Lord of creation’; and this is exactly what we find in the gospels.

Remember when Jesus was crossing the Sea of Galilee with his disciples and they were caught in a ‘furious storm’. Matthew records what the cause of the ‘storm’ was. It was some kind of earthquake, a seismic shift. He uses the word ‘seismos’ rather than the usual word for storm ‘lailaps’.

But whatever the cause of the violent wind and waves and the water swamping the boat, a word from the Lord of creation was all that was needed to quieten things down. The disciples were amazed! (Mt. 8:23-27)

Matthew also records for us that when Jesus died, 'the earth was shaken' (another seismic shift), and when Jesus was raised from the dead 'there was a violent earthquake'. (Mt. 27:51 and 28:2)

What was happening to Jesus had repercussions in creation.

As Christians, it is all of these revealed truths together, that must inform our views of, and our attitudes towards, environmental and ecological matters.

4. Creation in bondage and in mourning.

If you are a gardener or a farmer, or anyone else who works the land, you will be aware of the myriad of weeds, pests and diseases that seek to undermine your good work! Add to this the general threat in creation from volcanoes, earthquakes, hurricanes, floods, droughts etc. and we can see why Paul says the creation is currently 'subjected to frustration', is 'groaning in the pains of childbirth', and is 'in bondage to decay'. (Rms. 8:20-22)

The earth is now cursed by human sinfulness and bears all the marks of mismanagement, exploitation and abuse.

Here is just one example. Between 1962 and 1971 the entire rural land of Vietnam, and neighbouring areas, were sprayed, by the USA, with a herbicide called Agent Orange (it wasn't orange but was stored in orange drums). 49 million litres of the liquid were sprayed over 2.6 million acres of land. All vegetation: plants, crops, trees, died within days, not even to mention the effect on people. The purpose was to eliminate forest cover and crops for North Vietnamese and Vietcong troops.

It is interesting that when God gave instructions to the Israelites about what to do when they went to war, he told them not to harm the trees, other than some that they may use in siege works. (Deut. 20:19&20)

There is no doubt in my mind that in terms of all the environmental disasters and catastrophes that we are now experiencing on the earth, we are reaping what we have sown. Human beings are responsible. There are many examples of where we have used our technology to conquer and destroy nature.

Throughout the Bible there is a causal link between human sin and dire ecological consequences.

“How long will the land lie parched and the grass in every field be withered? Because those who live in it are wicked, the animals and birds have perished”. (Jer. 12:4)

“I looked at the earth, and it was formless and empty (‘tohu vabohu’ as in Gen. 1:2 ‘formless and empty/void’); and at the heavens and their light was gone. I looked at the mountains, and they were quaking; and the hills were swaying. I looked and there were no people; every bird in the sky had flown away. I looked, and the fruitful land was a desert; all its towns lay in ruins before the Lord, before his fierce anger.” (Jer. 4:23-26)

“There is no faithfulness, no love, no acknowledgment of God in the land. There is only cursing, lying and murder, stealing and adultery; they break all bounds and bloodshed follows bloodshed. **Because of this the land mourns**, and all who live in it waste away; the beasts of the field and the birds of the air and the fish of the sea are dying.” (Hosea 4:1-3)

As well as there being a cause-and-effect relationship between sin and environmental devastation (we sow what we reap), the Bible also makes it clear that God controls the weather and sometimes intervenes meteorologically to bring judgment. Although it seems that today human beings are **influencing** the weather, only God **controls** it.

He did this, for example, when he ‘drove the sea back with a strong east wind and turned it into dry land’ so that his people could cross the Red Sea and escape from the Egyptians. (Ex. 14:21). Another example: In the time of Elijah there was neither dew nor rain in Israel for three and a half years because most of God’s people were worshipping foreign gods.

There is no doubt that In the Bible, God uses plagues to send strong messages to all people. In 2018-20 there were plagues of locusts in Oman, East Africa, Yemen, Iran and Saudi Arabia, the likes of which hadn’t been seen before. Locusts can eat as much food in a single day as would be consumed by 35,000 people. The locusts brought famine and starvation to millions of people.

How many locusts there are is weather dependent (and another factor in this outbreak was that insecticide and aerial spraying was hampered by the lockdowns caused by the coronavirus pandemic). What we saw was a reminder of what the prophet Joel had seen: “What the chewing locust left, the gobbling locust ate; what the gobbling locust left, the munching locust ate; what the munching locust left, the chomping locust ate.” (Joel 1:4 – The Message)

So, in summarising this section about Creation, we notice that all creation belongs to God; God has delegated responsibilities for creation to human beings; creation was made by, through and for Christ; and the whole of creation is now in bondage and mourns.

We move now from 'Creation' to 'Covenant'.

Covenant.

The first covenant God made is key, I believe, to our understanding of the importance and significance of the earth and all of its inhabitants.

In the context of God's judgement of human sin, God makes a covenant with Noah, his extended family, with all of his descendants after him (this must include you and me), and with 'every living creature on earth'. This is breathtaking in its scope! (See Gen. 6:17-22; Gen. 9:1-17)

Not only is the covenant all inclusive, but it is also everlasting; an 'everlasting covenant between God and all living creatures of every kind on the earth' (Gen. 9:16)

The promise in the covenant is that 'as long as the earth endures, seedtime and harvest, cold and heat, summer and winter, day and night will never cease' and that never again will God destroy all living creatures by flooding the whole earth. (Gen. 8:21 & 22)

The earth today is a rich storehouse of food. The only obstacle in the way of everyone being able to consume what they need, is injustice.

Indeed, 'climate justice' is a phrase we often hear in this debate on the environment. It is generally recognised that the poorer countries of the world will suffer more than the richer ones as a result of climate change. This was acknowledged at a previous COP conference when developed countries promised to deliver \$100 billion a year in climate finance to help developing countries cope with climate change and develop nature-based solutions to environmental problems. This was supposed to happen by 2020, but the promise, thus far, hasn't been kept.

But back to the covenant with Noah et al.

The sign of the covenant is striking: a colourful rainbow (God's love and mercy) against a background of darkness (God's judgement).

There are, however, conditions attached to the covenant. First of all, Noah had to be obedient to God in building the ark (Gen. 6:22); secondly, because all life is sacred, we are accountable to God for the shedding of all (life)blood; both animal and human. (Gen. 9:4-6)

Probably the main tragedy in society today, is that life is no longer considered to be sacred. Even the womb is a dangerous place to be. We are moving inexorably back to the violent days of Noah. This causes God immense grief and pain.

Cross.

Paul reminds us that the liberation of creation from its bondage to decay, is linked to our own redemption as children of God. The two go together; they are inseparable. (Rms. 8:19-23)

Perhaps for too long, we have emphasised our own personal salvation through the death of Christ, but have neglected to understand this in the context of the wider salvation of the whole earth, and the unification of earth and heaven.

It is through Jesus' death on the cross that we see God's ultimate plan and purpose 'to bring all things in heaven and earth together under one head, even Christ'. (Eph. 1:10)

As James Jones has said, "The consummation of the coming Kingdom is the earthing of heaven. World mission is the earthing of heaven globally. Local mission is the earthing of heaven locally".

And of course, God is committed to creating new heavens and a new earth.

However, if we believe that this current earth is expendable and can be thrown away like a discarded coffee cup, or if we have a 'theology of obliteration' which believes that this earth has no future and is headed for destruction, or if we believe that Christians will be 'raptured' and taken out of the mess on earth before it gets too bad anyway, or if our theology fails to combine the spiritual with the material, then we may not pay much attention to the environmental and ecological issues of this present earth.

But if ours is a 'theology of transformation' and the 'renewal of all things when Christ returns', then we may want to play our part in contributing now to making this earth a suitable and sustainable place for Jesus to return to. Especially if we believe that Jesus died with this in mind.

James Jones has a lovely thought that when Mary saw the risen Christ in the Garden of Golgotha and thought he was the 'gardener', she was, in one sense, correct. Jesus, the second Adam, was indeed the gardener of the new Eden.

One of the debates in Christian circles is about whether the new heaven and the new earth will come about through a process of transformation of the old, giving rise to the new, or whether there will be a total destruction of the old before the new takes its place. Will there be any continuity or not?

Peter talks about the 'destruction of the heavens by fire, and the elements will melt in the heat'. (2 Peter 3:12). Fire, however, can operate either in a destructive way, or as a process of refining and purification.

One of our scientific laws, the Law of Conservation of Mass, states that 'matter can neither be created nor destroyed', but with God, he is able to create matter 'out of nothing' ('ex nihilo'). So perhaps the new heaven and the new earth will be a combination of these two realities?

What is not in doubt is that the reconciliation to God of all things, whether on earth or in heaven, is achieved through the blood of Christ, shed on the cross.

"For God was pleased to have all his fulness dwell in him [Christ], and through him to reconcile to himself all things, whether things on earth or things in heaven, by making peace through his blood, shed on the cross." (Col. 1:19 & 20)

And another amazing revelation is that when this first heaven and earth have passed away, God himself comes to dwell with us in the new garden city of Jerusalem on the new earth. This is the ultimate reconciliation of heaven and earth ~ the 'earthing of heaven' and the 'heavening of earth'. (Rev. chapters 21 & 22)

Our Response.

We come finally to the question of how we might respond, as Christians, to climate change and the issues it raises. But first an exercise which may help you to see how much importance you attach to these issues. 2 questions: -

How worried are you about the future of the earth? Put yourself on this scale: -

0 1 2 3 4 5 6 7 8 9 10

Not worried at all

Extremely worried

To what extent do you think that we should do something about the planet's future? Put yourself on this scale: -

0	1	2	3	4	5	6	7	8	9	10
Don't bother							Absolutely imperative			

Some possible responses: -

1. Panic.

"There will be signs in the sun, moon and stars. On the earth, nations will be in anguish and perplexity at the roaring and tossing of the sea. Men will faint from terror, apprehensive of what is coming on the world, for the heavenly bodies will be shaken." (Lk.21:25&26)

Professor Joseph Stiglitz has written: "The climate emergency is our third world war. Our lives and civilisation as we know it are at stake, just as they were in the Second World War."

2. Passivity.

For some of the reasons previously considered we may not wish to engage with the issues at all. Our theology may take the form of escapology, or we may believe that there is nothing we, as individuals, can do that will make a difference.

3. Protest.

Extinction Rebellion have 3 demands: -

- a. Tell the truth. Governments must tell the truth by declaring a climate and ecological emergency working with other institutions to communicate the urgency for change.
- b. Act now. Governments must act now to halt biodiversity loss and reduce greenhouse gas emissions to net zero by 2025.
- c. Go beyond politics. Governments must create and be led by the decisions of a Citizen's Assembly on climate and ecological justice.



Insulate Britain: - Is calling for a national programme to ensure homes are insulated to be low energy by 2030. Our government should fund the insulation of all social housing by 2025 and have a legally-binding national plan for a low energy and low carbon retrofit in all homes in Britain by 2030.

4. Participate.

We may choose to be fully involved, both in the debate (words) and in actions (deeds) that will address the issues. This will begin with the personal decisions we make and extend to influence our family, Church, community, nation and the world.

5. Proclaim Biblical Truth.

The Bible.

The Bible is an outdoor book, best understood outdoors, and therefore it is very relevant to these environmental/ecological issues. Whilst we are often preoccupied with buildings, the Bible emphasises that we learn about God and his ways primarily through looking at the great outdoors and experiencing him in the context of creation. Think of Moses on Mount Sinai; God speaking to Job 'out of the storm'; Jonah, on and in the sea; Saul on the Damascus road; the disciples on the Sea of Galilee; John on Patmos.

Praise.

Read psalm 148, it is a cosmic choir of praise! Everyone is invited (but not all accept the invitation): angels in the heights; everyone on earth; kings, princes, rulers (all those COP26 delegates); young men and maidens; old men and children; sea creatures and stormy winds; lightning, hail, snow and clouds; mountains, hills, fruit trees; wild animals and birds "Let them praise the name of the Lord, for his name alone is exalted; his splendour is above the earth and the heavens."

Hope.

As Christians, we are the most hopeful people on earth; not just because of what we can do, but supremely because of what God is going to do.

“The desert and the parched land will be glad; the wilderness will rejoice and blossom. Like the crocus, it will burst into bloom; it will rejoice greatly and shout for joy.” (Is. 35:1&2)

“... till the Spirit is poured upon us from on high, and the desert becomes a fertile field, and the fertile field seems like a forest. Justice will dwell in the desert and righteousness live in the fertile field.” (Is. 32:15&16)

“Then the angel showed me the river of the water of life, as clear as crystal, flowing from the throne of God and of the Lamb down the middle of the great street of the city. On each side of the river stood the tree of life bearing twelve crops of fruit, yielding its fruit every month. And the leaves of the tree are for the healing of the nations.” (Rev. 22:1&2)

“For in this hope we were saved. But hope that is seen is no hope at all. Who hopes for what he already has? But if we hope for what we do not yet have, we wait for it patiently.” (Rms. 8:24&25)

Mission.

“Go out into the world uncorrupted, a breath of fresh air in this squalid and polluted society. Provide people with a glimpse of good living and of the living God. Carry the light-giving message into the night”. (Philippians 2:14&15 - The Message)

Pray.

A prayer by Rt Rev Stephen Cottrell, Archbishop of York: -

“Creator God, you sustain the earth and direct the nations. In this time of climate crisis grant us clarity to hear the groaning of creation and the cries of the poor. Challenge us to change our lifestyles. Guide our leaders to take courageous action. Enable your Church to be a beacon of hope. Foster within us a vision of your renewed purposes in your world. Through Jesus Christ our Lord. Amen.”

George Irving – Nov. 2021.

George trained as a chemist and worked at some of the biggest power stations (coal and nuclear) in the north of England in the late 60's/early 70's. He went on to study Theology and Mission at All Nations Christian College and Person-centred counselling at Metanoia Institute in London.

Some books I would recommend: -

Jones, James '***Jesus and the Earth***' (SPCK, 2003).

Valerio, Ruth '***'L' is for Lifestyle – Christian living that doesn't cost the earth***' (IVP, 2008).

Valerio, Ruth '***Just Living: Faith & Community in an Age of Consumerism***' (Hodder & Stoughton, 2017)

Valerio, Ruth '***Saying Yes To Life***' (SPCK, 2019)

Bauckham, Richard '***Bible and Ecology***' (Darton, Longman & Todd Ltd., 2010).
