Climate Change

~ Can I make a difference?

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The reality of climate change

Climate change represents a failure in our care of Creation; its implications for people and for other life on earth are profound.

Care for Creation is at the heart of the Eco-Congregation movement. "The earth is the Lord's, and all that is in it, the world, and all who live in it," declares the psalmist (Psalm24:1). It is God's Creation, not ours to do with as we please.

We are called to be partners with the rest of Creation and co-partners in the ongoing creative and renewing activity of God. In caring for what God has created, we care for ourselves and care for each other, and especially for the poor and vulnerable. In God's providence and wisdom our flourishing is dependent on the flourishing of Creation.

As we have come to understand that through our deeds we are changing the climate, so we have come to realise that our care for Creation has been deeply flawed. The degradation of eco-systems worldwide will add to the growing imbalances, affecting all living species on earth, not just humans.

Climate change is already having an impact both here and overseas. Christians need to be concerned about this and take steps to respond – both as churches and as individuals. It's true that there has been naturally-occurring climate change in the past; the difference now is that it is happening too quickly for animal, plant, fish and insect life to adapt.

Hardly a day passes without some climate-related story hitting the headlines – the polar ice is melting, rainforests are disappearing, the world's coral reefs are dying. Hundreds of millions of people are already affected by droughts, floods, water scarcity, sea-level rise and desertification while the frequency and size of extreme weather events, including storms, cyclones, hurricanes and flooding continues to worsen.

According to the fifth assessment report of the **United Nations Intergovernmental Panel on Climate Change** (IPCC), <u>Climate Change 2014: Impacts</u>, <u>Adaptation and Vulnerability</u>, warming of the climate system is "unequivocal" and, since the 1950s, many of the observed changes are quite simply unprecedented. The atmosphere and oceans have warmed, the amounts of snow and ice have diminished, sea level has risen, and the concentration of greenhouse gases has increased.

Each of the last three decades has been successively warmer at the Earth's surface than any preceding decade since at least 1850. The atmospheric concentrations of carbon dioxide (CO2), methane and nitrous oxide have increased to levels unprecedented in at least the last 800,000 years. CO2 concentrations have increased by 40% since pre-industrial times. The ocean has absorbed about 30% of the emitted anthropogenic carbon dioxide, causing ocean acidification.

Climate change is set to inflict "severe, widespread and irreversible impacts" on people and the natural world, including food shortages and violent conflicts, unless carbon emissions are cut sharply and



rapidly. However, the report also states that ways to avoid dangerous global warming are both available and affordable.

"When our land is submerging slowly but visibly, any ideological debate on ecological issues is only a luxury of the privileged communities."

~ Rev Tafue Molu Lusama, Pacific Eklasia Kelisian, Tuvalu

The causes of climate change

Climate change has occurred many times in geological history, including ice ages and extremes of heat. The vast majority of scientific opinion states that the changes we are witnessing now are different because they can be linked unequivocally to human activities and, in particular, to the burning of fossil fuels such as coal, oil and gas. All such hydrocarbon fuels emit carbon dioxide (CO₂) when burnt and, over the past century, this has resulted in billions of tonnes of carbon dioxide being released into the atmosphere.

In consequence, the amount of CO₂ in the atmosphere has risen from under 300 parts per million (ppm) 100 years ago to over 400ppm today. When CO2 levels breached 400ppm in 2013, the highest level in at least three million years, this represented an astonishing 30% increase in the amount of this potent heat-trapping gas in the atmosphere in just 50 years.

Prior to the latest IPCC assessment, scientists were 90% agreed that humans were behind global warming but, following the research for the 2014 Climate Change report, they are now 95% certain: "Human influence has been detected in warming of the atmosphere and the ocean, in changes in the global water cycle, in reductions in snow and ice, in global mean sea-level rise, and in changes in some climate extremes It is *extremely* likely that human influence has been the dominant cause of the observed warming since the mid-20th century."

The impact of climate change

According to the IPCC's 2014 Climate Change report, the effects of climate change are already occurring on all continents and across the oceans. The observed impacts have already affected agriculture, human health, eco-systems on land and in the oceans, water supplies and some people's livelihoods. The striking feature is that the observed impacts are occurring from the tropics to the poles, from small islands to large continents, and from the wealthiest countries to the poorest.

If we continue to emit greenhouse gases at current rates, the accumulation of carbon in the atmosphere could mean that within as little as two to three decades, the world will face nearly inevitable warming of more than two degrees Celsius, which governments around the world have pledged not to do. Depending on how much governments control carbon emissions, global temperatures are likely to increase by anything between 0.3 degrees Celsius to 4.8 degrees Celsius by the end of the century. This will result in rising sea levels, heatwaves, droughts and more extreme weather.

Decreasing oxygen levels in the ocean caused by climate change and nitrogen run-off, combined with other chemical pollution and "rampant over-fishing", are undermining the ability of the oceans to fulfil their role as Earth's "buffer". If CO₂ levels continue to rise, there will be "extremely serious consequences for ocean life" and, in turn, food and coastal protection. That is according to the latest report from the **International Programme on the State of the Ocean**, carried out in collaboration with the **International Union for the Conservation of Nature**. It would lead to the extinction of species and the disappearance of Arctic summer sea ice by about 2037.



"The overwhelming evidence of human-caused climate change documents both current impacts with significant costs and extraordinary future risks to society and natural systems.

"The scientific community has convened conferences, published reports, spoken out at forums and proclaimed, through statements by virtually every national scientific academy and relevant major scientific organization that climate change puts the wellbeing of people of all nations at risk.

"How we respond to this unprecedented challenge could be the defining paradigm of the rest of this century."

Alex Hill ~ former Met Office chief advisor for Scotland and Northern Ireland.

Alex led a workshop on *Weather Matters* at ECI's inaugural conference in 2012. You can see his slideshow presentation <u>here.</u> In **Ireland** in recent years, both north and south of the border, we have experienced milder winters and warmer summers as well as torrential rain, flooding and higher than usual sea-levels causing coastal destruction; these may well represent the first major effects of climate change closer to home. Farmers suffered a fodder shortage crisis in 2013 and delayed access to pasture in 2014. The IPCC's fifth assessment report suggests that we are likely to experience more intense rain (with an associated increase in flooding) and longer dry periods in the future. The repairs are hugely costly for the government and are largely unbudgeted for.

The Environmental Protection Agency (EPA) published <u>five reports</u> in September 2013 showing the impact climate change is already having on Ireland and outlining the likely future effects on rivers, plants and animals as well as key sectors such as water services.

Examining vulnerability to climate change in Ireland, Dr John Coll of NUI Maynooth identified a number of key sectors considered more at risk: biodiversity, fisheries, water resources, forestry and agriculture.

A study led by Dr Conor Murphy of NUI Maynooth found that there had been an increase in the size of flooding events, particularly since the late 1990s, with an increase in river flows during spring and a "clear signal of change" in summer flows.

Another study led by Dr Alison Donnelly of Trinity College Dublin shows that the warmer Irish climate has already led to a change in the seasonal cycle of a range of plant and animal species. Because not all species are responding to the rise in temperature at the same rate there is potential for a mismatch in the timing of interdependent species to occur.

In an overarching study, Emeritus Prof John Sweeney of NUI Maynooth provided recommendations on how key sectors and vulnerable areas could increase their resilience to climate change through adaptation. These include the water sector, coastal zones and housing. Projected increases in rainfall will lead to rising water tables and an increased pollution risk for groundwater. Planning and building regulations need to be informed by such analysis of climate change trends and projections.



'We must find new ways to live within our planet's bounds'

We must recognise the earth's ecological limits and use our ingenuity to live within our planet's bounds. That was the

view expressed by sustainabi ity, energy and climate change consultant **Gavin Harte** at an Eco-Congregation Ireland event in Kilkenny in April 2013.

Saying that climate change was a fact that had to be faced up to, he referred to Kubler-Ross's five stages of dealing with grief - denial, anger, fear, bargaining, and acceptance – and reckoned that many people today were stuck at one of the earlier stages when it came to climate change.

"Dealing with bad news is a critical part of the move towards a low carbon society," he said. "Ultimately, acceptance is the only place that we are going to be able to deal with the challenges unsustainable living is bringing us."

He said we must accept our need to change our C02 habits. "Each of us, whether we like to admit it or not, has a carbon dioxide bubble we carry around with us in every decision we make every day. The average Irish person has a carbon bubble of 17,000 tons per annum; when you compare that to the average citizen of this planet carrying around 5,500 tons, we're clearly not doing our fair share in sharing the atmosphere's ability to absorb C02.

"How we travel, what kind of diet we choose, how we communicate, how we build our houses - they all add up to 17,000 tons Science is saying that 17,000 tons, in fact, is not a sustainable level for the climate to take and that by 2050 we need to bring that down to between one and two tons.

"That is an enormous challenge and it requires a transition to a low-carbon society. It's a whole new way of looking at the world and this is where the churches have a role to play Jesus said, 'Forgive them for they know not what they do', and maybe that was the case in Christ's crucifixion but it's certainly not the case when it comes to us knowing about the destruction we are causing to the planetary system. Ignorance is not an excuse the need for change has never been more urgent."

Click <u>here</u> to read more.

Ireland's greenhouse gas emissions profile is unique within the EU in that **emissions from** agriculture comprise almost 30% of total emissions.

It is not yet clear how significant reductions in agricultural emissions can be achieved without changing production levels. However, this is an area of global research and innovation. A possible solution would be increased recognition of the value of carbon sinks – natural or artificial reservoirs that accumulate and store carbon. Forests, bogs and oceans are natural carbon sinks.

According to Dr Stephen Flood of NUI

losses of up to €2 billion per annum if climate change is allowed to continue unchecked. His research,



we can lobby and we can help others whose lives are

impoverished." ~ environmentalist and broadcaster

Éanna Ní Lamhna speaking at a Balally Parish Environ-

"We are clever, intelligent people—we can make a difference we can tread more lightly on the earth ...

'We can make some efforts to make the world a better place:

ment Group event in 2012 Maynooth, Ireland's agriculture sector will face



which was commissioned by Stop Climate Chaos and published in October 2013, shows that if current levels of climate change continue, winter rainfall will increase by up to 17% by the 2080s, while summer rainfall will decrease by up to 25%, with the largest reductions in the southern and eastern coastal areas. These changes will result in more variable weather, including incidents of drought, flooding, heavy rainfall and extreme temperatures - which will, in turn, lead to changes in the range and prevalence of agricultural pests and diseases, increased stress factors for animals, changes in water availability and crop yields, and difficulties in providing sufficient resources for animals during certain periods.

This surely means that **Ireland** must act now to respond to climate change in a proactive manner and to ensure our agriculture sector continues to thrive in coming years. Potential adaptation actions include increasing crop diversity and varieties, altering planting and harvesting dates, planning for and implementing water supply management strategies, and supporting research to identify crops that can grow more

successfully in the next 10 to 20 years, taking into account the expected changes in climate and growing seasons.

A **robust climate law** with clearly identified targets for emissions reductions is also essential and Eco-Congregation Ireland, as a member of Stop Climate Chaos, has been lobbying for this.

The good news is that demand for new climate solutions brings with it new economic opportunities in the form of green growth and job creation.

"It is our profound conviction

that the future of the human family depends also on how we safeguard – both prudently and compassionately, with justice and fairness – the gift of creation that our Creator has entrusted to us. Therefore, we acknowledge in repentance the wrongful mistreatment of our planet, which is tantamount to sin before the eyes of God. We reaffirm our responsibility and obligation to foster a sense of humility and moderation so that all may feel the need to respect creation and to safeguard it with care. Together, we pledge our commitment to raising awareness about the stewardship of creation; we appeal to all people of goodwill to consider ways of living less wastefully and more frugally, manifesting less greed and more generosity for the protection of God's world and the benefit of His people."

~ Pope Francis and the Ecumenical Patriarch Bartholomew in a joint declaration in Jerusalem on 25th May 2014

Climate change in developing countries

Climate change already causes over 150,000 deaths every year, according to the World Health Organisation. Two-thirds of families in sub-Saharan Africa must grow their own food to survive but climate change is already making droughts longer and more frequent, putting the livelihoods of these family farmers at grave risk.

Overseas development agencies are already witnessing how dramatic changes in climate patterns are challenging the lives of the most **vulnerable people** in the world. The impact of climate change in developing countries is undermining poor people's ability to survive. Either too much rain is washing soil and seeds away or crops are wilting due to drought. Rising seas will put an estimated 70 million Africans' lives at risk of flooding by 2080, displacing the people least responsible for climate change.

Climate change is exacerbating cycles of poverty. Hard won development gains over the years are being rapidly eroded as people are forced to survive as best they can through increasingly desperate coping mechanisms that include the sale of assets and migration. Research estimates that by 2050 there could be up to 150 million climate refugees caused by food migration.

While rich countries continue to consume and use energy levels far beyond what is fair and sustainable, the greatest impact is being felt by the poorest people who are least able to cope.



Climate change and climate justice are at the apex of development work, according to Trócaire Director **Éamonn Meehan.**

"If you take the issues of peace and conflict,

poverty, people's ability to produce food, people's ability to access water, people's ability to have a decent life, the pressure on people to migrate away from their particularly rural areas – the issue of climate change, we call it climate justice, is at the apex of those issues."

Speaking at the launch of the Irish Catholic Bishops' pastoral, The Cry of the Earth, and its accompanying parish resource, GLAS, in October 2014, Mr Meehan explained that if climate change is about what is happening to the planet, climate justice is about what is happening to the people.

"For us, this is an issue which is rooted in our mandate and our vision of a just world. It is very much rooted in the issue of the dignity of each and every human being and therefore of the common good."

It is the poorest people who are on the frontline of climate change: their livelihoods are often dependent on subsistence agriculture, while the places in which some of them live are vulnerable to drought, high winds or rising sea levels. A changing climate adds further risk and unpredictability to lives that are already lived on the edge.

While we in rich nations possess the financial resources, technology and expertise to adapt to a changing climate, those in developing nations do not. They are least able to adapt. So climate change is also an issue of **justice**.



"The whole point of justice consists precisely in our providing for others through humanity what we provide for our family through affection."

Lactantius ~ a fourth century North African theologian

What is our response to climate change?

If we want to create a **just world**, we need to begin with ourselves and look at how we relate to all other living things. What we have done in the past, what we do today and what we will do in the future has an impact beyond ourselves.

Climate change is a global problem requiring a global solution. Northern Ireland and the Republic of Ireland must play their part in addressing the impacts that climate change poses. Deep reductions in **greenhouse gas emissions** and significant scaling up of support for adaptation and **low carbon development** are critical and urgent in order to tackle climate change.

If everyone on earth created carbon emissions on the scale of the Irish, we would need three planets to survive.

The IPCC says that large scale changes in the global energy mix are required, combined with deep and fast emissions cuts. Limiting the impacts of climate change will involve phasing out fossil fuels by 2100 and growing the use of **renewable energies** from its current 30% share to 80% of the power sector by 2050.

At the moment rich countries are not even taking the actions needed to meet a lower target of keeping global warming below 2 degrees, despite the fact they have pledged to do so on many occasions. If they allow global temperatures to rise over 1.5C, global leaders, especially in the rich world, must accept that they are contributing to a human and ecological disaster.

Millions of lives will be lost, billions of people's livelihoods threatened and the balance of nature disrupted beyond repair. The world would become a less safe and stable place.

Rich countries must take their responsibility seriously and lead the response now by cutting their emissions by 40% by 2020 and by providing funds to help developing countries adapt to climate impacts and develop cleanly.

The challenge to curb the problem is immense and the next few years are crucial to limiting the worst impacts of climate change. We all need to take responsibility; it's not just a problem for someone else to sort out. We need to take action now.

We need to be attentive to the wounds of the earth and be willing to work for the healing of the whole of God's Creation. We must take full responsibility for our actions and treat the earth, and all living things that dwell on it, with respect.



'Faith-based communities can play a pivotal role in bringing about climate justice'

That was the view expressed by **Mary Robinson**, who was guest speaker at an ecumenical prayer service ECI organised with Trócaire and Christian Aid in Christ Church Cathedral, Dublin, in December 2009.

"Climate change is already causing suffering around the world due to the effects of weather changes and 'rogue' weather events on food and water availability, sea level rise, health, and the destruction of livelihoods and infrastructure," she said.

"Climate change impacts significantly undermine the enjoyment of human rights, and these impacts will only increase. We must tackle the problem through a 'climate justice' approach that distributes the burdens of reducing emissions equitably, and prioritise the needs of those who are most vulnerable."

She said that the old Irish proverb, "I scaith a chéile a mhaireann na daoine" (People live in each other's shadows) applies to our world from now on. "We have to change from a 'them and us' ... we need 'them' as much as they need 'us'. It is a respectful move. We need a huge commitment to adaptation."

To see more of what Mary Robinson said, click <u>here</u>. To find out about the Mary Robinson Climate Justice Foundation, click <u>here</u>.

In a paper titled 'Rethinking the Relationships Between Humankind and Nature in Tackling Global Climate Change' Prof John Sweeney asks, "Do we have an ethical responsibility to leave the earth for future generations in at least as good a state as we inherited it from our forefathers? By not us (or anyone else in acting on climate change now we reduce options for those who come after us and bequeath them damaged goods. This is why sustainable development needs to move from a nebulous concept to a reality in decision-maker's minds.



"As one of the world's top greenhouse gas polluters on a per capita basis, Ireland has a responsibility to play its part in addressing the problem. Thus far it has failed to do so, and the radical measures necessary are not forthcoming. The political will to make the necessary policy changes in how

Irish society is organised is not yet evident. 'Business as Usual' has characterised Irish greenhouse gas emissions growth over recent years and globally it appears that we are committed to a likely increase of 3 degrees Celsius as atmospheric con- President, Methodist Church in Ireland 2014 centrations double, probably towards the latter half

"When Jesus told Zachaeus that He'd come to seek and to save what was lost, I don't think Zachae-Jericho for that matter) really understood what He was talking about.

"All of Zachaeus" relationships were put right - with God and others - and that was part of what Jesus saved that day. But Jesus is about saving everything that was lost at the



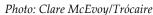
Fall. That included the very ground Zachaeus stood on and which had been cursed and lost.

"So the Lord calls all His followers to care for our lost world which He loves and saves. Following Him, play your part."

~ Rev Peter Murray,

of the present century. Such an increase is beyond the value of 2 degrees Celsius deemed by the EU as constituting 'dangerous climate change'. This is where the next big crunch comes. At this point the climate system may become dangerously unstable with non-linear increases in impacts, especially in the poorer parts of the world

"In tackling the problem of climate change clearly a revision of our deeply ingrained attitudes towards the natural world is required. The anthropocentric view of the natural world has blinded humanity to the





obvious fact that far from being above nature we are as dependent on it today as the Neanderthals, though the relationship is more complex. Scientific advances have given us answers to fundamental questions of earth functioning. But these often come in an ethical and religious vacuum. Perhaps the non-anthropocentric view of humankind as humble components of a natural web, as espoused by Francis of Assissi, offers an alternative perspective. Humans as stewards of the earth is perhaps the ideology which needs to be inculcated in all of us if we are to have success in tackling the environmental problems facing us, especially that of climate change."

"Praised be my Lord for our sister water, which is very serviceable to us, and humble, and precious, and clean." ~ St Francis of Assisi

Climate change – a theological response

Eco-Congregation Ireland (ECI) believes it is imperative that churches speak out on climate change and recover a good theology of Creation as a necessary motivation for action. To this effect, we regularly organise events with high profile eco-theologians and have called on church leaders on a number of occasions to take on a leadership role on this critical issue.

In February 2014 Quaker ecologist and broadcaster **Dr Alastair McIntosh**, who is Research Fellow at the School of Divinity, University of Edinburgh and former Director of the Centre for Human Ecology in Glasgow, spoke at an event ECI cohosted with Fitzroy Presbyterian Caring for Creation Group in Belfast. Alastair, whose books include *Hell and High Water: Climate Change, Hope and the Human Condition*, called on churches in Ireland to take action against climate change. Making reference to Ezekiel 47:12 and Revelations 22:2, he said, "The task before us is to be participants in the healing of the nations, of the earth and of our churches. These tasks are all one."



"Climate change is real, it is happening, it is dangerous and it requires something that goes beyond ordinary political and economic redress," he said. "It involves nothing less than a spiritual engagement, and my suggestion tonight is that spiritual engagement is not just for the healing of the nations, but also for the healing of the churches I believe that the issues constellated around climate change – war, poverty, all of these things in our time – are a spiritual stimulus to wake us up.

"To be an eco-congregation is about far more than just natural environment in a narrow sense. To be an eco-congregation is to be involved in the 'ekos' – the same Greek word that gives us 'ecology', that gives us 'ecumenical', that give us 'economics' - and it means 'the household'. And it doesn't mean 'the household' in a small domestic sense, or even in the sense of the whole world: it means our positioning in the household of the whole of Creation, our positioning in the cosmos."

See <u>here</u> to find out more about what he said.

Speaking at an ECI event in Kilkenny in April 2013, Columban eco-theologian, Fr Seán McDonagh SSC, whose books include <u>Climate Change: The Challenge To Us All</u>, said there was "a huge chasm between humankind and the natural world" and it was essential we heal that division if we are going to live in a more sustainable, less destructive way on this planet. He said environmental care must be deeply ingrained in us and that it must come across in our articulation of who we are in terms of our theology. "It must be deeply embedded in our prayer lives," he said. "We should not just be praying for ourselves and for the human community but for the whole of creation."



He said the churches needed to develop a real sense of how to lead people in the future, given that expectations now were to live better materially generation after generation. People were going to have to be helped to understand the necessity for – and become familiar with – diminishment right across the board. "Religions, not just churches, are going to have to help people make the enormous journey to begin to accept that things will not always be better in the future," he said. Click here to read more.



Eco-Congregation Ireland chairperson, **Ven Andrew Orr**, described the latest IPCC report as a "wake-up call" to governments, corporations, churches and all of us to do what we can to limit destructive greenhouse gas emissions. He said: "The churches should be taking a lead in modelling best practice among their congregations, and encouraging parishioners to put pressure on companies and our governments to take immediate and effective action to tackle climate disruption."

Over 140 people attended Eco-Congregation Ireland's inaugural conference in Dromantine Retreat and Conference Centre in September 2012. During the event—Ireland's first inter-church conference on the environment - five eminent speakers addressed the theme 'God's Creation – Our Responsibility?'

In the opening address, 'Is the Bible Green? Reading Scripture Ecologically', Prof David Horrell, Professor of New Testament Studies at the University of Exeter, suggested that, while the Bible did not offer a blueprint for creation or environmental ethics, passages like Psalms 19 and 104 and Job 38 helped generate a positive vision of the value, beauty and ultimate worth of the whole earth.

"Our contemporary context, with its pressing environmental challenges, suggests the need for a fresh reading of the Bible,



and a reconfiguration of the Christian tradition," he said. "Instead of focusing on humanity's importance and future salvation, we might draw on certain biblical texts to stress how God has entered into covenant with the whole earth, calls the whole universe in all its diversity to praise, and promises to liberate the whole creation from suffering and decay." Click here to read more.



Prof Stephen Williams, Professor of Systematic Theology at Union Theological College, Belfast, spoke about 'The Theology of Creation', including the difficult interpretation of the word 'dominion'. He argued that if creation was good and fit for purpose, then the command to have dominion was not to do with subjugation, but rather a responsibility to nurture. He said that the basis of a theology of creation must be love. "I shall love the earth without being sure of its future. That is what should drive the Christian," he said.

"A love-centred theology is vital a theology of creation will not motivate us if it is maintained dispassionately, purely as an objective belief. The theology is certainly important: when people have no sense of responsibility for creation, but claim to be Christian, some theological argument is needed to move them to a sense of responsibility. But the passion of love must suffuse the joints of the argument. After all, that is the case with God, the object of our belief but, supremely, the subject of our love."

Click here to read more.

In her lecture, 'Listening to the Future: Listening to the Present', Dr Anne Primavesi, Fellow of the Centre for Interdisciplinary Study of Religion, Birkbeck College, University of London, talked about the challenge of making "a living, wholehearted commitment to doing what is good and right within and for the One Community of Life on Earth; a community sustained by a unified system of planetary resources.

"In this time of climate change, when economic capital needs to be spent on safeguarding the planetary resources of all life



on earth, both the funding and the effects of the militarism of the leading Christian nations are, by default, one of the greatest human threats to those resources."

She spoke about the essential role to be played by Christians in cultivating unity between all living creatures on the basis of God's indiscriminate love for them. "For an eco-congregation, such cultivation is a defining, on-going activity that consciously unifies our individual relationships with God with those of all earthly lives nourished by planetary resources: regardless of species, race, creed or power." To read more, click here.

In his talk, 'Money, Consumerism and the Spirituality of Our Times', Scottish Quaker ecologist Dr Alastair McIntosh highlighted how consumerism feeds off our insecurities, creating a sense of inadequacy and shame, which only increases our desire for more. He said the economy was no longer about satisfying needs, but about generating wants.

"Capitalism is control of the economy via capital," he said, "And whenever we move money from one account to another, or seek the lowest price for a product, we are all feeding the competitive spirit that comprises capitalism as distinct from the alternative, which would be a co-operative society of mutuality."

Click <u>here</u> to see more.



Rev Peter Owen-Jones, in his talk 'A New Humanity: The Quest for Well-being in the 21st Century', spoke about how the deep ecology movement invites us to see our humanity through our relationship with the natural world and into a vision where we are not predators, despoilers and eradicators, but nurturers and guardians where we exist in a state of communion with the environment.



The Sussex-based vicar, author and broadcaster, said we were in the "perilous position" we faced because we had not acknowledged the first truth – "the connectedness of all life" – and that we would never have peace on earth until we made peace with the natural world.

"Christianity needs urgently to embrace a bigger vision of peace on earth," he said. "Just imagine what it might be like to be a nurturer, a guardian: what manner of beings might we become, celebrating all life, carrying one life, and living in a manner where we recognise one life carrying all life. That is the revolution we need: to awaken to that reflection of ourselves as nurturers and guardians, to be conscious that our well-being is intricately linked to the well-being of all life on this beautiful planet that we share." Click here to read more.

The scripts of the five ECI inaugural conference talks can be downloaded here.

We were delighted that the European Christian Environmental Network, Churches Together in Britain and Ireland, the Catholic Bishops' Conference of England and Wales, A Rocha, Operation Noah, Christian Ecology Link and Eco-Congregation Scotland were all represented at the conference.

During the event delegates planted six trees as a means of off-setting carbon emissions emitted by participants travelling to the conference.



"Caring for our beautiful world and restoring harmony with earth systems is an obvious way for us to show our love for our Creator."

~ Ellen Teague,

'Becoming a Green Christian'

'Care of the environment is an outworking of the cosmic covenant'

Sustainable development goes hand in hand with the obligations forced on us by climate change. The alleviation of poverty, an equitable distribution of the rich resources of God's earth, environmental conservation, and fair and just adaptation to climate change are inseparably woven together

That was the view expressed by **Bishop David Atkinson**, former Bishop of Thetford, who spoke at a seminar Eco-Congregation Ireland co-hosted with the Irish School of Ecumenics in March 2010.

"The task climate change forces on us is not simply about reducing emissions, crucially important though that is. It is also about seeking a global consensus on a fair way of adapting as a planet to climate change."

Bishop Atkinson, who is author of <u>Renewing the Face of the Earth – a theological and pastoral response to climate change</u>, said a commitment to the God who is "on the side of the poor" made it imperative for Christians to consider the needs of the poorest countries of the world as well as the poor on the margins in their own communities. "As climate change mostly affects the poor and needy of the world, the obligation to care grows on the nations which have enough," he said.



The bishop said that behind the covenants God made with different people in the Bible was "a deeper and more wide-ranging covenant", which was described by Isaiah in terms of a "covenant of peace", a covenant that God made with the whole of the created order (Isaiah 54:10). "It is saying that all creatures receive their life from the hand of God, and that there is an interdependence between humanity and the rest of the created order," he said.

"We humans need proper engagement with the natural order for our mutual well-being. The human covenants which we make with one another, which are intended to reflect God's covenant with his people, are all in the context of a covenant of God's commitment to the earth. Covenant, then, is the inner meaning of creation. At crea-

tion's heart is ... the personal commitment of God to the well-being of God's earth."

Bishop Atkinson said that the vision of the whole creation renewed in Christ was the basis for Christian hope and the fulfilment of the covenant of peace. Isaiah spoke about a coming "new heaven and new earth" in which there would be joy, justice and ecological harmony.

"Climate change is a forceful reminder that the work of technology is not enough; humanity and the whole earth need a rhythm of worship, rest and refreshment, and need the spiritual dimensions to life and to choices signalled by the Sabbath." Click <u>here</u> to read more.

"We have it in our power to destroy the life chances of millions on our planet by the unrestrained emission of greenhouse gases and other agents and we have the power to change our habits so that the earth and its peoples and its biodiversity are delivered from the unbridled greed and arrogance of mankind," he says. "Let us resolve to change and let us seek from God the moral courage to make our resolutions into lived reality. Let us re-commit to being responsible stewards of the earth God gave us to care for."

~ **Most Rev Alan Harper**, former Church of Ireland Archbishop of Armagh, endorsing a <u>Climate Change Day of Prayer</u> on 4th October 2009



'We need to rediscover the Spirit of God as the source of all life'

In order to save the planet, we need to connect with the Spirit of God. That was the view expressed by **Dr Dermot Lane**, President of the Mater Dei Institute, at an ecumenical prayer service for the UN climate summit in December 2011 organised by Eco-Congregation Ireland, Three Rock Churches' Environment Group and Balally Environment Group in Dublin.

"We will never save the planet ... we will never heal our broken world, unless and until we connect with the Spirit of God given in creation and revealed in Christ. It is largely the neglect of the Spirit, the removal of the Holy Spirit from life, the evacuation of the Spirit out of creation that has taken place over the years, that has landed us in the current environmental crisis."



Dr Lane went on to say that, rather than an anthropocentric worldview, or even a bio-centric one, what was needed was "a theocentric universe" and "a rediscovering of the Spirit of God as the source of life, as the dynamism driving the evolution of life, and as the power holding everything together and sustaining life on earth."

"Until we recover some of the spirit of the pre-Enlightenment economy, rooted in nature and anchored in the earth, unless we can get in touch with the wisdom inherent in the rhythm of creation, it is unlikely that the current economic crisis will be resolved," he said.

Dr Lane said we needed to realise that the current economic crisis was largely the outcome of a market-driven capitalism that had "little regard for the rhythm of na-

ture, unaware of the limited resources of the earth, unmindful of the integrity of creation".

He said there needed to be a radical restructuring of international economic systems that included reference to the primary economy of the earth's eco systems and natural resources. "The reason why structural reform of the modern economies is so necessary is because market-driven capitalism is premised on the principle of growth, of unlimited growth, and we know as environmentalists that there are limits to growth, and there are limits to growth because there are limits to the resources of the earth," he said.

Click here to read more.

"We need to reflect on the need to live in more sustainable ways and for a renewed theology of creation."

'But ask the animals, and they will teach you,
Or the birds of the air, and they will tell you;
Or speak to the earth, and it will teach you,
Or let the fish of the sea inform you.
Which of all these does not know
That the hand of the Lord has done this?
In God's hand is the life of every creature
And the breath of all humankind.' ~ Job 12: 7-10



'The more we are in touch with the Creator Spirit, the more we will respect the earth'

The more we are in touch with the Creator Spirit, the greater the respect and reverence we will have for the life of the earth. This was the view expressed by Eco-Congregation Ireland's Roman Catholic representative, **Catherine Brennan SSL**, when she spoke at a <u>Creation Time</u> service in St Finian's Lutheran Church, Dublin, in 2010.

Sr Catherine said that within Hebrew scriptures, there was a close link between the Creator Spirit of God and the life of Creation, and indeed the life of every being. "It is the same Spirit that spins the globe today, that holds Creation together, that gives life to each one of us, and that sustains us in existence (ongoing creation) and sustains the whole web of life," she said.

"The more we move away from the Spirit of God, the less respect we will have for the integrity of Creation. The more we are in touch with the Spirit, the greater the respect and reverence we will have for the life of the earth which is held together by the breath of God - that is, by the Creator Spirit of God."

Sr Catherine said the mechanisation of nature in the name of modernity had given us a kind of permission to exploit the earth, to disregard the Spirit-filled

integrity of God's Creation, and even at times to be indifferent to the presence of the life-giving Spirit in each one of us.



The reality of climate change was forcing us to rediscover "who we are" and "who God is". "In terms of who we are, we must recover our affinity with nature," she said. "We must discover that we are not the lords and masters of the earth, but rather we are a part of nature and that we have a deep spiritual bond and kinship with nature. 'We need to live as siblings with beast and flower' (Denise Levertov).

"The biodiversity crisis is forcing us to rediscover who God is. In the light of these brief reflections, God is first and foremost Spirit ("ruach") that is the Holy Spirit brooding over Creation and hatching, like a mother hen, giving birth and continually renewing the face of the earth.

"Leonardo Boff, the liberation theologian, puts it rather beautifully when he quotes an ancient poet: 'The Spirit sleeps in the stone, dreams in the flower and becomes awake in humanity.'"

"The churches are called at this time firstly to recover a good theology of Creation as a necessary motivation for action. Secondly, to promote Sabbath rest for enjoying creation and letting creation rest. Thirdly, a conversion of heart leading to changed life styles."

Click here to read more.

"We are in the process of losing the beauty and wonder of a gracious world designed in some manner as the place where the meeting of the divine and the human can be achieved in its full expression, a place suitable for the divine indwelling. Will we have the energy and the will to restore this world?" ~ Thomas Berry,

'The Christian Future and the Fate of Earth'



How do I contribute to climate change?

We all contribute to climate change in many ways, including heating buildings, using electrical appliances such as televisions and computers, and by using carbon-guzzling methods of transport, like cars and aeroplanes. Almost everything we buy has a carbon footprint: food, clothes and all the many consumer goods that fill supermarket shelves. Processed goods embody the energy used in their production and delivery (this is called embodied energy).

All this contributes to our carbon footprint. Yet few individuals know their carbon footprint and few congregations know the carbon footprint of their church buildings.

For most of us, one of the largest contributions to climate change we make is in our direct use of energy. Monitoring, managing and reducing energy consumption is therefore an important practical action churches and individuals can take to reduce their carbon footprint.

How can I reduce carbon consumption?

Measure the carbon footprint of your church and home

Working out your direct emissions is the easiest way to start and the largest portion of this probably comes from heating and lighting of buildings. We recommend that, as a congregation, you begin by working out how much energy you use in your church buildings. This will get you started and, while it's only part of your carbon footprint, once you have done this together you will be in a strong position to work out the carbon footprint of your homes and travel and begin to take action to reduce your footprint.



Monitor your energy use. First, work out how much energy you used last year. This is easily done, using your fuel bills, which will tell you how many units of energy you have used. Each unit of electricity is one kilowatt hour: this is the standard unit used to calculate energy

have used. Each unit of electricity is one kilowatt hour: this is the standard unit used to calculate energy consumption. For every kilowatt hour of electricity just over half a kilogram of carbon dioxide is released into the atmosphere from power stations. Gas is measured in cubic metres and for each cubic metre approximately 2kg of carbon dioxide is released into the atmosphere. Your gas bill should also give you the amount of gas in kilowatt hours.

Once you have this information, it is simple enough to work out your carbon footprint. You can do this online at www.change.ie or https://www.quaker.org.uk/extras/climateimpact/index.html.

Make a commitment to reduce your carbon footprint by 5% a year.

By committing to reduce your carbon footprint by 5% a year at church and at home, you will be making a difference! Especially if you encourage others to do the same! 5% is a realistic and achievable target.

Working out the footprint of your church buildings is the first step in the process – it provides a baseline against which your church, and members of your congregation, can measure changes in the future. The important thing about the footprint exercise is that it shows the areas where changes can be most effective. If heating accounts for the largest part of the footprint of your church, it is more likely that you'll be able to make significant savings there than in other areas, although smaller, easier savings are also likely to be available at lower cost in relation to lighting and other electricity use.

How can we reduce the carbon footprint of our church buildings?

Read your meters - Don't take energy for granted and don't wait for a nasty shock when you get your energy bills. Take responsibility collectively in your congregation for your energy use and *read your meters every month*. This will give you a full record of your energy consumption through the year and the management information you need to measure progress.

Engage the whole congregation - Energy management is not just the responsibility of the property manager: it is everybody's responsibility. Put up a notice in a prominent place to show the church's carbon footprint and the latest monthly meter readings. Ensure this information is a regular item on the agenda of any relevant committee. *Set yourself a challenge of reducing this each year by 5%.*

Seek advice on how to take action – Heating is likely to be the biggest part of your carbon footprint so this is probably the area you should pay greatest attention to. But we also know that churches are often old or historic buildings that require special attention. Other steps you can take include getting the boiler regularly serviced (and possibly upgrading to an energy-efficient boiler), insulating hot water pipes, installing draught-proofing and switching to energy-efficient lights.

On discovering that its churches and cathedrals were responsible for about 222,000 tonnes of carbon dioxide a year, the Church of England set up a *Shrinking the Foot-print* initiative in an effort to reduce these emissions. Its website has some useful tips, including reducing heating and lighting. See here.

How can I reduce my carbon footprint at home?

Reducing the carbon footprint of your church buildings is just the beginning. Energy used in a large church could have a carbon footprint of 100 tonnes but each household in the congregation may well have a carbon footprint of over 10 tonnes. On this basis, a congregation of just 100 people would have at least 10 times the carbon footprint of the church buildings; so the collective footprint of a congregation will almost always be far larger than the footprint of their church buildings.

Together a congregation can make a big difference by reducing energy use at home, in travel and in shopping.

Twenty-five per cent of total CO₂ emissions comes from our homes, so our actions can have important implications. By reducing our energy consumption, we can help take responsibility for global warming.

Another large component in your carbon footprint is likely to be travel, particularly if you drive a car. Every litre of petrol or diesel used in a car engine contributes over 2kg of CO₂ to the atmosphere. By recording how much fuel you use you can work out how much your car is contributing to your overall carbon footprint, using <u>this calculator</u>.

Car travel is the largest source of transport-related carbon dioxide emissions in Ireland but other sources are also important, especially air travel. A number of airlines provide online calculators to enable you to calculate the emissions from your air travel. You can offset your emissions with <u>Climate Stewards</u>.

Travel by train or bus also produces emissions but these are typically much lower per mile travelled than trips made by car or plane.

Everywhere we look there is a way to save energy without affecting the quality of our lives. Whether it be a change of habit or a home improvement project, sustainable living is good not only for the planet, but also for our health and well-being. Often it helps save money too!

Take action!

When you know the carbon footprint of your home and car travel, can you make a commitment to reduce this by 5% this year and go on to reduce your emissions by 5% each year thereafter? It might be easier than you think. Reducing unnecessary consumption is the key. By not travelling when you don't need to,

or by cutting back a little on the things you buy or use, you can start making inroads to your carbon footprint.

In the home:

If you have a loft, check the insulation: is it 270mm thick?

If you have cavity walls, install cavity wall insulation

If you have a hot water tank, fit an insulating jacket at least 75mm thick

Consider external wall insulation – a huge job but highly effective!

On the move:

If you drive a car, do you have the most fuel-efficient car for your needs? It is estimated that buying the most fuel-efficient car in its class could reduce emissions by 24% and save three months' worth of fuel a year.

Can you find an alternative to using a car or share a journey for some of your trips? An average car commuter drives 12 miles a day; reducing this by half could save 400kg CO₂ a year or 170 litres of fuel.

Smarter driving could reduce your fuel consumption by 8% a year. See here for tips.

Out shopping:

When purchasing white goods look for the energy label or energy-saving recommended logo.

Producing, processing and transporting food may be responsible for up to a third of your carbon footprint, yet the average Irish household throws out €700 worth of food each year. How do you manage your food shopping?

How do you shop for clothes? Do you plan your wardrobe carefully, avoiding excess? Do you buy from second-hand shops? And do you pass on your old unwanted clothing to charities?

We all have the power to significantly reduce our footprint by making low-carbon choices. In our interconnected world, the lifestyle we lead, the energy we consume, the pollution we cause and the waste we discard has an effect on our neighbours both near and far.

There are many ways to reduce energy use and to lead a more eco-friendly lifestyle. We would encourage you to print out the eco tips at the end of this resource and pin them somewhere visible in your kitchen to encourage you and your family to make changes in your everyday lives. We would also suggest you print some copies to share with others in your church/workplace/library/community centre. You could also print one tip each week in your church newsletter!

'Forget about making poverty history; climate change will make poverty permanent.'

~ Nazmul Chowdury, a Christian Aid partner

"What climate change is telling us loud and clear is that the days of radical individualism and its consumer culture are over; it is time to return to the roots of religion and the roots of life:

we are, all of us, in this together."

Sallie McFague. A New Climate for Theology.

~ Sallie McFague, <u>A New Climate for Theology:</u> God, the World, and Global Warming

Climate change: a reason to hope

Some doomsayers say the damage is done, there is no going back. But the Christian response must be one of hope. Hope because God has created a world that God judges to be 'very good'. Hope because, in spite of repeated human failings, God has promised never to give up on His Creation. And hope because it is not too late for us to do our bit to bring about change.

We must identify solutions and take our responsibilities seriously by making changes in our own lives, encouraging others to make similar changes and by exerting pressure on our policy-makers at a local, national and international level.

The good news is that it is not too late for us to have an impact on climate change. Despite the apparent doom and gloom of its 2014 climate report, the IPCC states clearly that we can still keep global warming below the danger threshold of 2 degrees Celsius compared to pre-industrial levels if we make bold and quick decisions towards deeper and faster cuts in emissions. Co-chair of the IPCC Working Group II, Chris Field, says: "We definitely face challenges, but understanding those challenges and tackling them creatively can make climate change adaptation an important way to help build a more vibrant world in the near-term and beyond."

If we use the power of our convictions and our love and concern for creation and for our children's and grandchildren's future, we can play a pivotal role in generating the global will to shift to sustainable energy. By stewarding our land, making our churches and homes as energy-efficient as possible, and teaching everyone that comes through our doors about their responsibility to this crisis, we can make a huge difference. If enough people did this, especially those of us living in the developing world, hopefully we will avoid reaching tipping point.

'We must follow Christ's example and show compassion'

"We must follow Christ's example and show compassion. Where people are already suffering adverse effects of climate change, as in areas which have been flooded, suffered forest fires, drought or sea-level rise, we should make every effort to provide assistance in whatever way it is needed." This is the view of **Joe Furphy**, ECI's Presbyterian representative and a member of the Presbyterian Church in Ireland's Environmental Panel.

In an article published by the *Presbyterian Herald* in 2013, Joe wrote: "We should be aware of potential disasters – such as the likelihood of even a relatively small rise in sea-level causing the abandonment of thousands of homes in the Ganges delta – and make preparations to provide shelter and opportunities to restore family life and dignity. Because we in Ireland may not experience such extremes this should not be a reason to fail to assist those who do suffer

"Above all, as churches we should be leaders of concern and reason – we should be willing to accept that there are environmental and social difficulties resulting from climate change both now, but particularly in the years ahead. We should be positive in stressing the need for all in authority to follow our lead in compassion, to look beyond short-term planning, and to be fearless in taking unpopular decisions whose benefits will only be seen many years hence.

"As Christ's people, we should follow His example in showing love and concern for those who are suffering. We should be stressing the need for justice in all our activities – we should not be seen to be adversely affecting the lives of our fellows, wittingly or unwittingly, by action or inaction. We must pray for guidance as to how to proceed in the challenging task of striving to properly steward the world God has given us to inhabit and to manage to His glory."

Click <u>here</u> to read the full article.



Resources: Prayers

Creator Spirit, we thank You for this beautiful world with its amazing variety of animals and plants. May we never forget that we are stewards of Your Creation and that we hold it in trust for future generations. Help us to respect the earth's rich diversity and to share with each other and all living creatures in responsible ways.

God of love, you gave us this universe filled with your gifts. Help us to reverence all of your Creation, respecting the rights of all species, and the integrity of the elements, so that all Creation may live with you for all eternity.

Jesus, you loved the land and fields of flowers; bless farmers, gardeners and all who till and care for the soil.

Lord, give us your love for the whole of Creation. Rain down your Spirit upon our waters, and upon those responsible for decisions concerning the purity of our seas, rivers and lakes.

Christ Jesus, we pray for victims of starvation. Banish famine from our world and teach us to share.

Through scientists and scholars, new knowledge comes to light; may it further the quality of life for all peoples and all creatures in their journey to wholeness.

Your plundered earth, with its rich variety of endangered species, is crying out for healing. Help us to be instruments of that healing, O Lord, and to redeem the harm we have done to the planet.

Jesus, you taught your followers to travel lightly through life; call our consumer culture to a change of heart - to values that lead to life.

O God, we are one in you, and all that we do affects the whole; make us aware of our power to seed the world with good or ill by every thought, word and deed. The gifts of the earth are distributed unevenly, we long to lift up those in need; soften the hearts of those who place personal or national gain above the good of the whole.

Heavenly Father, we pray for the healing of our wounded world – for its replenishment and renewal – and for all those who suffer as a result of our energy-guzzling lifestyles. We pray for climate refugees who have been forced to flee their homes because of deforestation, droughts and famine, floods and rising sea levels, that You will give them courage and hope as they re-build their lives. And we pray for the leaders of the world's nations—that they will make wise decisions that will take into account the healing of creation, the protection of the poor of the world and future generations. Amen.

God of the universe,

We thank You for Your many good gifts -

For the beauty of creation and its rich and varied fruits,

For clean water and fresh air, for food and shelter, animals and plants.

Forgive us for the times we have taken the earth's resources for granted.

Transform our hearts and minds so that we would learn to care and share,

To touch the earth with gentleness and with love, respecting all living things.

We pray for all those who suffer as a result of our waste, greed and indifference

Help us to respect the rights of all people and all species

And help us to willingly share your gifts today and always. Amen.

Eco-Congregation Ireland has written many prayers for Creation Time over the years. These can be found on the <u>Churches Together in Britain and Ireland website</u>. You can also find plenty of prayers for the environment on the <u>World Council of Churches website</u>, <u>Trócaire's website</u>, <u>Christian Aid's website</u>, <u>Operation Noah's website</u> and <u>Pray and Fast for the Climate's website</u>.



Rainbow Prayer

Creator God, how deep are your designs! You made a living earth, cloud, rain and wind, And charged us with their care.

We confess that the way we live today is changing the climate, the seas and the balance of life, dispossessing the poor and future generations. Build our lives into an Ark for all Creation, and, as You promised Noah never to repeat the Flood, so make us heralds of a new rainbow covenant: choosing life for all that is at risk - for Creation, for neighbours near and far, our children and ourselves .

~ Operation Noah



Global Warming prayer

Creator God—maker and shaker of all that is, seen and unseen, You are in the expanse and depth of Creation, and in the processes that make life possible.

Yet we are distracted by the gods we make ourselves and our lives become fractured and fragmented. In our brokenness we disturb the Earth's capacity to hold us. Instead we find climate uncertainty and global injustice.

Call us back from the brink.
Help us to choose love not fear,
to change ourselves and not the planet,
to act justly for the sake of the vulnerable,
and to make a difference today
for life tomorrow

In your name—Father, Son and Spirit . Amen

~ Martyn Goss



Both these prayers have been reproduced with kind permission of <u>Operation Noah</u>. They appear in 'Between the Flood and the Rainbow' ~ an excellent study guide containing six sessions on climate change and the church

Deep peace of the running wave to you,
Deep peace of the flowing air to you,
Deep peace of the quiet earth to you,
Deep peace of the shining stars to you,
Deep peace of the Son of peace to you.
~ a traditional Celtic blessing

Creator God, You show us what love is Through the beauty of the earth And the gift of your Son.

For the love of...
Animal and plant
Mountain and forest
Sea and city
Woman and man
Friend and family
Those who live far from us
And those yet to be born

Move us to live more simply, To protect the earth And to speak up for those in need. Amen.

~ reproduced with kind permission from <u>CAFOD</u>



Care for Creation Prayer

God, our Creator,

You have given us the earth, the sky and the seas.

Show us the way to care for the earth, not just for today but for ages to come.

Let no plan or work of ours damage or destroy the beauty of your creation.

Send forth your spirit to direct us, to care for the earth and all creation. Amen.

Earth, Teach Me

Earth teach me quiet ~ as the grasses are still with new light.

Earth teach me suffering ~ as old stones suffer with memory.

Earth teach me humility ~ as blossoms are humble with beginning.

Earth teach me caring ~ as mothers nurture their young.

Earth teach me courage ~ as the tree that stands alone.

Earth teach me limitation ~ as the ant that crawls on the ground.

Earth teach me freedom ~ as the eagle that soars in the sky.

Earth teach me acceptance ~ as the leaves that die each fall.

Earth teach me renewal ~ as the seed that rises in the spring.

Earth teach me to forget myself ~ as melted snow forgets its life.

Both these prayers are reproduced with kind permission of Trócaire.

They can be found in Trócaire's <u>Up To Us—Connecting for Creation</u> resource.

Websites

Useful links for worship:

Eco-Congregation Ireland – Section 2 – Celebrating Creation

Churches Together in Britain and Ireland, Creation Time resources

European Christian Environment Network resources

World Council of Churches

Operation Noah

Pray and Fast for the Climate

Other useful resources:

<u>Trócaire</u>—climate change resources for parishes

Cry of the Earth - the Irish Catholic Bishops' pastoral reflection on climate change

GLAS—Trócaire's parish resource to accompany the Bishops' pastoral

<u>Christian Aid</u>—climate justice resources

Methodist Church in Britain—climate change and carbon reduction resources

<u>Climate change and the purposes of God: a call to the Church</u> – Operation Noah's Ash Wednesday declaration 2012

Useful tips on how to answer climate change deniers

Resources for young people:

Trócaire

ECO-UNESCO

Science of climate change:

<u>Intergovernmental Panel on Climate Change</u> (IPCC) for detailed and authoritative review reports on the causes and consequences of climate change

Met Office for detailed and well-presented information including an introduction to the science

Government:

Irish Government Department on the Environment, Community & Local Government on climate change - http://www.environ.ie/en/Environment/Atmosphere/ClimateChange/
http://www.environ.ie/en/Environment/Atmosphere/ClimateChange/
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Northern Ireland Department on the Environment on climate change - http://www.doeni.gov.uk/index/protect-the-environment/climate-change.htm

Campaigning:

<u>Stop Climate Chaos</u> is a coalition of environment, development and faith groups campaigning on climate change issues. Eco-Congregation Ireland is an active member.

Environment campaigning groups with good online resources include <u>Friends of the Earth Ireland</u> and <u>the Mary Robinson Foundation—Climate Justice</u>

Faith-based organisations active on climate change issues include <u>A Rocha</u> and <u>Operation Noah</u>

Books:

Renewing the Face of the Earth – a Theological and Pastoral Response to Climate Change by David Atkinson (Canterbury Press 2008)

Quantum Grace: Lenten Reflections on Creation and Connectedness by Judy Cannato (Ave Maria Press 2003)

Planetwise: Dare to Care for God's World by Dave Bookless (Intervarsity Press,2008)

The Singing Heart of the World: Creation, Evolution and Faith by John Feehan (Columba Press 2010)

Five Minutes to Midnight? Ireland and Climate Change by Kieran Hickey (The White Row Press 2008)

The Transition Handbook by Rob Hopkins (Chelsea Green Publishing 2008)

The Bible and the Environment by David G. Horrell (Equinox Publishing 2010)

Climate Change: the Challenge to All of Us by Seán McDonagh (Columba Press 2006)

Why are we Deaf to the Cry of the Earth? by Seán McDonagh (Veritas Publications 2001)

Ask the Beasts: Darwin & the God of Love by Elizabeth Johnson (A&C Black 2014)

A New Climate for Theology by Sallie McFague (Fortress Press 2008)

Hell and High Water: Climate Change, Hope and the Human Condition by Alastair McIntosh (Birlinn, 2008)

A Moral Climate by Michael Northcott (Darton, Longman and Todd, 2007)

Earth Prayers by Elizabeth Roberts and Elias Amidon (Harper One 2009)

Christianity, Climate Change and Sustainable Living by Nick Spencer and Robert White (Baker Publishing 2009)

Sustainability Toolkit: Becoming a Low-Carbon Sustainable Community (Quaker Books 2011)

In Celebration of Simplicity—the Joy of Living Lightly by Penelope Wilcock (Monarch Books 2009)



Eco tips

Turn your thermostat down by two degrees.

Ensure your walls, roof & water tank are well insulated.

Run dishwasher and washing machine on full load only.

Dry clothes outdoors (weather permitting)!

Shower instead of bath. Use a low-flow showerhead.

Turn off TV, computer, lights etc when not in use.

Compost fruit & veg peelings & garden waste. It's easy!

Choose energy-efficient appliances & use energy-efficient lightbulbs.

Buy recycled paper products and use both sides of paper.

Plant a tree! Or two! Or three!

Buy electricity from an energy-provider that supports renewable energy.

Walk/cycle/use public transport/carpool, where possible.

Buy locally grown food.

Even better, grow your own food!

Buy organic and Fairtrade.

Buy minimally-packaged products. Bring your own cloth shopping bag and refuse unnecessary bags over the counter.

Use a fuel-efficient car, check tyre pressure regularly and get your car regularly serviced.

Fly less often. When you do fly, offset your air travel by investing in renewable energy projects.

Choose green and ethical investments. See www.neiw.org.

Pick up a piece of litter every day.

Ask for ethical/charity gifts for Christmas/birthdays.

Support charity and eco shops and farmers' markets e.g. Oxfam

Eat less meat! It takes far more land & water & 10 times the amount of energy to produce animal than vegetable protein.

Get lobbying! Write to your local TD, MP or MLA and join in Stop Climate Chaos actions. See www.stopclimatechaosni.org/.

Buy eco-friendly cleaning materials. Most supermarkets sell a good range, including soap, washing up liquid, washing powder, toilet and general cleaners.

Better still: clean the old-fashioned way, using household basics. You can clean almost anything with lemon, baking soda and vinegar. For sparkling windows, all you need is a bottle of vinegar and some old newspapers!

Observe Earth Hour in March—http://www.earthhour.org/

Celebrate Environment Sunday on 8th June http://ecocongregationireland.com/archives/4613

Celebrate Creation Time from September 1st to October 4th. See http://www.ctbi.org.uk/295



