

# CLIMATE CHANGE

*Rich Living*

**A ROCHA**  
AOTEAROA NZ



**Acknowledgements:**



The Rich Living project was initiated through a seed grant from Tearfund New Zealand. Tearfund's mission is to encourage New Zealanders to act for justice to relieve poverty among the world's most vulnerable people.



Thanks also to our long-term partner Fusion Print.

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**Published by A Rocha Aotearoa New Zealand**

A Rocha Aotearoa New Zealand

PO Box 24118

Royal Oak

Auckland 1345

New Zealand

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ISBN 978-0-473-40411-6 (Softcover), 978-0-473-40728-5 (PDF)

Revised edition 2020, 2022

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# *Rich Living:*

Sustainability as integral to lives of faith



Welcome to '*Climate Change*', the first in the Rich Living series of study booklets produced by A Rocha Aotearoa New Zealand. Other titles available in the Rich Living series are: *Water, Food, Waste and Transport*. Designed for individual study or small groups, each booklet consists of four studies incorporating information, Scripture reading, discussion questions and practical activities. It is our hope that this material will assist you and your community to reflect on how you live and offer practical steps to make sustainability integral to your lives of faith.

The Rich Living series is one of the resources offered by A Rocha Aotearoa New Zealand as part of the Eco Church NZ project - [www.ecochurch.org.nz](http://www.ecochurch.org.nz). Through the Eco Church NZ project, our goal is to support church communities across Aotearoa New Zealand to actively care for God's earth as an integral part of their mission. Our role is to resource, empower and build relationships among all those wanting to integrate creation care and sustainability into the life of the church in Aotearoa New Zealand. We work alongside eco church



kaihāpai (advocates), church leaders, environmental leaders, rangatahi and tamariki, denominational bodies and other organisations – with the common goal to see church communities across Aotearoa NZ take practical action while growing a new generation of kaitiaki and environmental leaders.

We passionately believe that Christian faith communities have the potential to offer glimpses of authentic ‘rich living’ – living in sustainable ways that cares for the long-term wellbeing of our broader communities and neighbours – both human and nature. We’re glad you have joined us!

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**ECO CHURCH NZ**  
AN A ROCHA AOTEAROA NZ PROJECT



# Study 1 – The Changing History of Climate

*“Climate change, quite simply, is the issue of the twenty-first century. It is not one issue among many, but, like the canary in the mine, it is warning us that the way we are living on our planet is causing us to head for disaster. We must change. All of the other issues we care about – social justice, peace, prosperity, freedom – cannot occur unless our planet is healthy. It is the unifying issue of our time.”*

Sallie McFague, *A New Climate for Theology: God, the World, and Global Warming* (Fortress Press, 2008)



## Preparation Activity

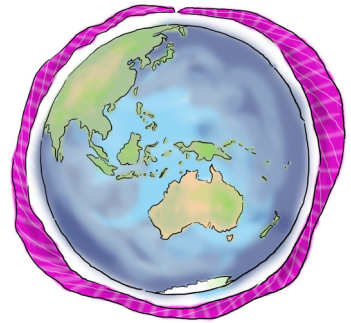
- Walk outside and sit down in a quiet natural setting away from distractions.
- Close your eyes and as you slow your breathing down, focus on your breath.
- After a few minutes of breathing slowly become aware of your surroundings. With your eyes still closed, become attentive to what you can hear.
- Take note of the temperature – is it warm, hot, dry, humid?
- Are you perspiring? Cold? Can you feel a breeze?
- Is the ground dry and hard? Damp? Soft and spongy? Wet?
- Open your eyes & observe your surroundings:
  - Look carefully at the plants around you. Is the foliage dense? Scattered?
  - How many different colours can you see?
  - How many different species can you observe (birds, insects, plants)?
- Become aware of your own life (your slow, rhythmic breath) and the ‘miracle of life’ taking place all around you.



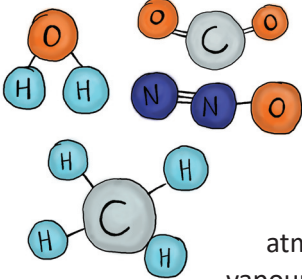
## What's Cooking?

Climate change is not new. Modern science tells us the Earth is 4.5 billion years old and during this time the climate has constantly been changing. During the last 650,000 years there have been seven major global ice-ages. The end of the last ice-age (12,000-7,000 years ago) and the resultant retreat of glaciers allowed homo sapiens to migrate and populate the continents. The emergence of a stable climate (what we now consider our present-day climate) provided the conditions for the establishment of human societies with settled agriculture – and thus the emergence of 'modern' civilisation.

Life on Earth exists because our planet is like a giant greenhouse. Heat from the Sun passes through the atmosphere and warms the surface of the Earth. This heat is radiated back towards space but is trapped by the greenhouse gases within the Earth's atmosphere, which, like a



giant thermal blanket, keeps the Earth at a temperature conducive for life. Without these gases, the average temperature on earth would be  $-18^{\circ}\text{C}$ . Too cold for life as we know it.



There are several greenhouse gases within our atmosphere which trap this escaping heat – water vapour ( $\text{H}_2\text{O}$ ), nitrous oxide ( $\text{N}_2\text{O}$ ), carbon dioxide ( $\text{CO}_2$ ) and methane ( $\text{CH}_4$ ). Changes to the chemical composition of our atmosphere over the last 150 years means more and more heat is being trapped under the blanket.



## What's Causing These Changes?

While greenhouse gases are a naturally occurring phenomenon, since the dawn of the industrial revolution in the 19th century the levels of carbon dioxide, methane and other heat-capturing gases being emitted into the atmosphere have risen exponentially.



Over the last 150 years the atmospheric carbon dioxide levels have risen from 280 parts per million to 400 parts per million. Even more alarming is the rise of levels of methane in the atmosphere. Methane captures 29 times more heat per unit than carbon dioxide and methane levels have now risen 250% from their pre-industrial

rates! Changes to the greenhouse gases in our atmosphere trap more heat thus leading to global warming. And significantly, as our planet warms so the climate begins to change.



The burning of fossil fuels (coal, oil and gas) is



the energy for our modern way of life. The technology to extract and utilise the energy of the sun which is stored in these organic materials laid down millennia ago has fundamentally changed the nature of human civilisation. The shift from rural populations and mainly local

economies to our present-day reality of vast cities and the swift transfer of goods traded across the globe is a direct result of our access to cheap energy in the form of fossil fuels.



At the dawn of the 21st century, the standards of living for many of the Earth's human inhabitants – availability of food, ease of movement, life expectancy, health and well-being, and available leisure time – are unparalleled in human history. *And yet, we now know that this improvement in standard of living, propelled by fossil fuels, is directly linked to the changing climate of the planet.*



## What Does This Mean For The Climate?

Some of the brightest minds and most powerful computers work on calculating what global warming will mean for the climate. The complexity of climate means that the consequences of increasing atmospheric greenhouse gases are difficult to predict. Nevertheless, climate scientists are already noticing significant changes in the Earth's climate that confirm the predictions of their models.

They hypothesize that in the future:

- The Earth will become warmer overall. (While some parts of the world may welcome warmer temperatures, others may not.)
- Warmer conditions will lead to more evaporation and rainfall overall but this will vary among regions. Some areas of the world will become wetter, some areas will become significantly drier.
- Extreme events such as floods and droughts will become more frequent and more severe.
- The increase in temperature brought about by the greenhouse effect will warm our oceans and melt the vast ice-sheets of the Earth's polar regions thus increasing sea level. As ocean water expands as it warms, this will contribute to further sea level rise.



### Reflect & Discuss

- What is your view on the science of global-warming /climate change?  
Do you know other people who take the opposite view to you?  
Why do you think some people are sceptical?  
What material have you/they read?  
What material or information have you/they avoided?
- What do you think is the incentive or motivation for some to sow seeds of doubt regarding global-warming/climate change?
- How would you feel if you were a Christian climate scientist whose honest endeavour and serious scientific research was ignored or ridiculed by other Christians?

## Science & Scepticism

Science is a discipline in which divergence of thought is normal, as competing hypothesis and theories are developed to help explain what one is observing and then tested. Although climate scientists continue to debate details, there is an overwhelming consensus on the fundamentals. 97% agree that climate change is taking place and see this change as largely attributable to human activity. Indeed, some scientists have suggested that it would be appropriate to call our current period of geological history the Anthropocene. It is the behaviour of humans (*anthropos*) over the last few millennia – deforestation, the driving of species to extinction, and now climate change – which is the key factor in the shaping the very nature of the world.

During the last two decades the phenomenon of ‘climate change denial’ has developed. For a variety of reasons – economic, scientific, ideological, theological and psychological – people have dissented from the mainstream findings of climate scientists. Common to these denials are the claims either that climate change is not actually happening or that it is a purely natural phenomenon and thus is not anthropogenic (due to human behaviour). Much of what one finds in the books, blogs and speakers who express ‘climate change scepticism’ follows a similar pattern:

- relying on a small number of prominent voices (sometimes with little expertise in climate science)
- a strong emphasis on ‘outlier’ papers within scientific literature
- a selective use of evidence and often brazen disregard of other facts
- use of exaggerated claims and personal ridicule
- and an emphasis on conspiracy theories.

There is also very reliable evidence that a good deal of the funding for sceptical think-tanks and lobbyists comes from the fossil-fuel industry.



## Watch

For a graphic illustrating the role of various factors (natural processes and human behaviour) on the Earth's climate, see: <https://www.bloomberg.com/graphics/2015-whats-warming-the-world/>



## Reflect & Discuss

Think about the climate in your region.



- How would greater or less rainfall impact the 'way of life' in your region?
- What would the flow-on effects of this be? On housing? Transport? Food security?
- How will the rising of sea levels impact your community? (You might like to find maps online of how coastlines would look after different levels of sea level rise).



## Activity: Read, Reflect & Pray

- What is your favourite place in nature?  
Beside a river? On a lake? In the forest? On a mountain-top?
- What is your favourite creature?  
Why do you feel an affinity to this creature?
- Do you think that these places and creatures have a relationship with God? Describe this relationship.





## Read Psalm 104 together as a group

Use a large sheet of paper and put a dividing line down the middle:

- Is there a verse or phrase that grabs your attention and imagination?  
Which one and why?
- What does the Psalm say about the relationship between:
  - God and the mountains? Seas? Forests?
  - God and creatures?
  - God and humanity?
- What words describe the Psalmist's emotions and attitude to the world around him? (e.g. awe, wonder). Write these words on one half of the sheet of paper.



The Psalmist offers a powerful testimony to how the life of all creatures is dependent upon the provision of water, food and seasons and to the fact that it is God who has created and sustains this system.

- It is the actions of another of God's creatures (the human species) which is altering the climate and thus the dependability of water, food and timing of seasons.  
How does this make you feel?  
How do you think this makes God feel?

Write down your thoughts and emotions to this question on the other half of the sheet of paper.

Use the group reflections on each side of the paper to guide your time in prayer.



# Study 2 – What’s Changing & Why it Matters



Previously we reflected on how industrial human civilisation and in particular the burning of fossil fuels during the last 150 years is significantly changing the global climate. But why does this matter? What are some of the consequences of this changing climate?

## How Are We Vulnerable?

- Meteorologists believe that one of the results of the changing sea temperature and increased water vapour in the atmosphere will be significantly larger storms events.
- Higher temperatures and shifting climate patterns may change the areas where crops grow best and affect the make-up of natural plant communities. While some crops and other plants may respond favourably to the climate changing, in other areas, crops will fail and may no longer be able to be grown.
- 40% of the global human population lives within 100km of the ocean. Sea level rise will lead to an increase in coastal flooding, storm damage, erosion of shorelines, salt water contamination of fresh water supplies, and an increase in the salinity of estuaries. Many low-lying areas will become uninhabitable. Whole countries – as in the case of Kiribati and Tuvalu in the South Pacific – will cease to exist, disappearing under the sea.



All these changes will have significant impact on human communities. Where we live and how we live (food, clothing, housing, travel) is determined to a significant extent by our regional climate.

## Biodiversity Loss

However, the Earth is not simply our home. Scientists estimate that the Earth is also home to approximately 8-10 million other species! There are currently approximately 1.3 million species catalogued, which means that although 10,000 new species are ‘discovered’ each year, scientists believe 80% of the world’s species are still undiscovered!

We live in a world lovingly crafted by a Creator – a world of complexity, full of an abundant array of life-forms. Scientists refer to this profusion of life as *biodiversity*.

One of the worrying aspects of climate change is the impact this is having on biodiversity. Throughout Earth’s history, species have come into existence and then gone extinct, to be replaced by other emerging species. Research shows that the current rate of extinction is 100-1000 times higher than the normal background rate. This increased extinction rate is primarily caused by human activity (habitat loss, over-fishing, deforestation, pollution), and climate change exacerbates this.

Biodiversity is important for several reasons:

*All creatures and species are an expression of God’s love and creativity.*

The creation accounts in Genesis 1-2 speak of a loving creator God who delights in creating a multitude of creatures - in the air, under the seas, on the land. Psalm 24 declares that: “The Earth is the LORD’S and all that is in it, the world, and those who live in it”

*This abundance of species is aesthetically and culturally important for humans.*

Human diets, art, language, traditions and rituals are all shaped by our encounters with and experience of other species.

Non-human species are critical to Māori whakataukī. e.g. On the passing of a significant





elder: “Kua hinga te tōtara i Te Waonui a Tāne” (A tōtara has fallen in the great forest of Tāne). Likewise, our everyday English draws heavily on nature metaphors e.g. “I’m hungry as a horse”; “Off to a working-bee”; “Strong as an ox”.

### *All life on earth is interconnected*

Iconic species such as polar bear are often used as the pin-ups of climate change. But it is not only a few mega-fauna species that are threatened by the changing climate. Often it is the smallest species which are most critical to the health and functioning of ecosystems. Bees are essential for pollination (and therefore human agriculture) but climate change is impacting on bee habitats and populations. Similarly, phytoplankton is the basis for the marine food web. Changing sea temperatures will potentially have a negative effect on plankton, thus impacting all other species within this food chain.

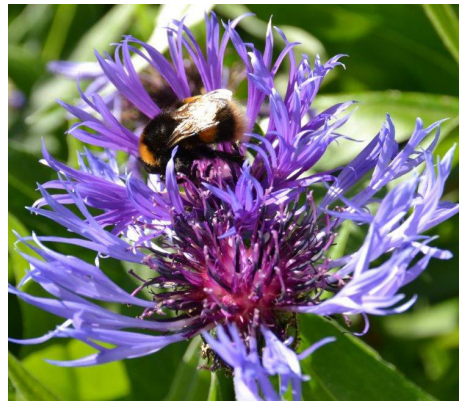
*O Lord, how manifold are your works!  
In wisdom you have made them all;  
the earth is full of your creatures.*

*Psalm 104:24 (NRSV)*

All species are part of an intricate web-of-life. But slowly through our actions we are modifying or destroying this web. Ultimately, less biodiversity means ecosystems are less able to cope and adapt to sudden changes.

*“Each one [of the Earth’s five million invertebrate species] plays a role in its ecosystem. It’s like we’re tearing the cogs out of a great machine. The machine might work after you tear out ten cogs, but what happens when you tear out a hundred?”*

Scott Black - Invertebrate conservationist





## Watch

How Whales Change Climate (4:52 mins)

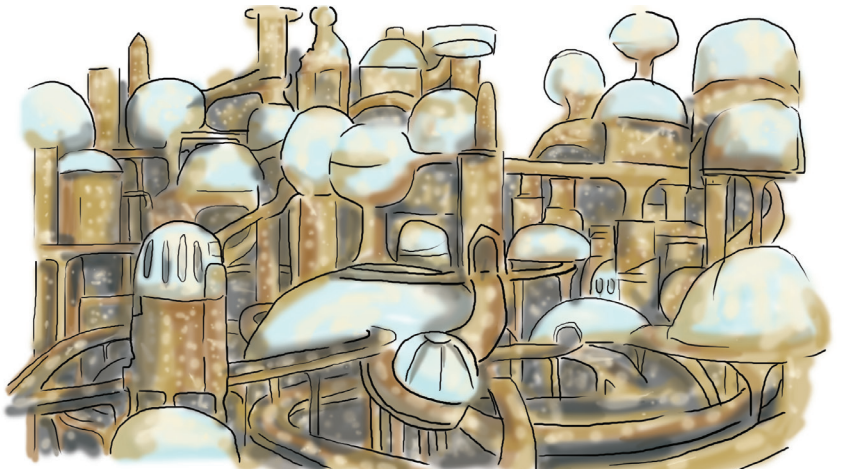
<https://www.youtube.com/watch?v=M18HxXve3CM>

*“It is estimated that one-third of all reef-building corals, a third of all fresh-water mollusks, a third of sharks and rays, a quarter of all mammals, a fifth of all reptiles, and a sixth of all birds are headed toward oblivion.”*

Elizabeth Kolbert, *The Sixth Extinction: An Unnatural History* (Picador, 2014)

*“I believe it could conceivably be possible that in a few hundred years’ time we reduce [our] dependence [upon the ecological services provided by the world] and we lived in an almost wholly science-fiction-like, artificial world – the world of the cult-movie, *Blade Runner*. The question you have to ask: “Do you want to live in that world?”*

Lord Robert May, *The State of the Planet* – BBC Series (1999)





## Relect & Discuss

- How would you feel if a key species important to your lifestyle and identity ceased to exist?
- How would the extinction of polar bears impact human inhabitants of the Arctic region?
- What would it mean for New Zealanders’ sense of identity if the kiwi or tuatara went extinct?
- Can you imagine a world without penguins, whales, bears or frogs?



## Who Will Suffer?

No one will be immune from the impact of global climate change. There will be a decrease in biodiversity, and where humans live, our diet and our patterns of living will change.

*Therefore the land mourns,  
and all who live in it languish;  
together with the wild animals  
and the birds of the air  
even the fish of the  
sea are perishing.*

*Hosea 4:3 (NRSV)*

Wealthier countries will be able to cope better with some of these challenges. They will be able to pay for the damaged caused by more severe storms and to rebuild/redesign infrastructure threatened by sea level rise. Likewise, they will be more likely to have the resources to adapt to some of the worst impacts of climate change - e.g. using technology to ensure access to precious freshwater and developing genetically-modified crops resistant to bugs and disease.

However, for much of the world’s human population, the spectre of global climate change is truly frightening. Let’s have a look at who will be worst affected:

- Almost 25% of the world’s population still live primarily as *subsistence farmers*. Using low-technology these small-holding farmers are particularly vulnerable to the impact of climate-change. As farming land becomes less productive so families will face food shortages. In some areas too, the scarcity of water will force people from their homes.



- *Low-lying countries* such as Bangladesh and Kiribati and Tuvalu in the South Pacific will be profoundly affected by sea level rise. These countries already struggle economically and climate change will exacerbate this.
- *The poorest in human societies* often live in the most vulnerable environments. Sea level rise and the increased intensity of storms will have a disproportionate impact on the poorest communities around the globe. Think of the impact of Hurricane Katrina on the poor communities in New Orleans, USA, in 2005 and of recent flooding events in South Dunedin.

## What Will This Mean For The Future?

### *Environmental refugees*

Many geographers believe that in the future the effects of climate change will lead to an increase in global refugees. Food shortages, lack of employment and the scarcity of water will force people from their homes. Some estimate



that by 2050, 150 million people will be environmental refugees due to the impact of natural disasters and the loss or degradation of land.

Some have suggested that an extensive drought from 2006-2011 is one of the factors behind the Syrian civil war and thus the existing Syrian refugee crisis. Closer to home, whole communities in the South Pacific - such as Kiribati and Tuvalu - are watching their homeland disappear due to sea level rise.

**A Definition:**

The Environmental Program of the United Nations (UNEP) defines environmental refugees as: “those people who have been forced to leave their traditional habitat, temporarily or permanently, because of a marked environmental disruption (natural and/or triggered by people) that jeopardized their existence and/or seriously affected the quality of their life. By ‘environmental disruption’ is meant any physical, chemical and/or biological changes in the ecosystem (or the resource base) that render it temporarily or permanently, unsuitable to support human life.”

Essam El-Hinnawi, *Environmental Refugees* (UNEP, 1985)



*A future of mega-tropolis*

Many geographers predict that climate change will exacerbate the rural - urban drift which characterises the modern world. As crops fail through a combination of drought, salination of groundwater, and plant-diseases, the rural poor will continue to head towards mega-cities in hope of employment. Currently 1 in 7 of the human population live in urban

slums in the mega-cities of the world. By 2030, potentially 1 in 4 (over 2 billion) will live in these contexts.



**Reflect & Discuss**

- Have you spent considerable time away from home?
- Describe your emotions during this period away from home.
- How did it feel to return home after the time away?
- How would you feel if you knew you could never return home?
- Could you imagine yourself (& your family) as a climate refugee, living in a urban slum?



## Activity: Contemplative Reading of Scripture

Sit in silence and have one person slowly read Revelation chapters 8 & 9 out loud. Have the passages read again.

- What words/phrases/images stick out for you?
- What emotions are aroused by listening to the passage?

Reflect and discuss any resonances between the graphic visions of calamity offered in these passages and the images/information from this study.

Timothy Gorringe suggests that the book of Revelation is very apt for our times. For Gorringe, “Revelation is not astrology: it is not foretelling particular events, the catastrophes that might attend climate change. What it does do, however, is prompt us to thought.” The “visions of calamities” from Revelation, Gorringe suggests, “must be read within the framework of God’s redemptive will. They are not... about divine vengeance or destruction.” Rather, Gorringe argues they are a “Wake up” call to the Church. And, says Gorringe, “the call to repentance is always a call to action.”

T.J. Gorringe, ‘Visions of the End? Revelation and Climate Change’ in Sebastian Kim & Jonathan Draper (eds.), *Christianity and the Renewal of Nature* (SPCK, 2011)



## Reflect & Discuss

- Have you previously considered the idea that the Book of Revelation is a warning to each generation and a call to repentance and action?
- What do you think of this idea?





## Activity: Pray

**Together read this lament written by Rev Phil Jump**

*God of all creation,*

*You have filled the earth with good things:*

*Food, fuel, seedtime and harvest; land, property and prosperity  
Placed at our disposal through your goodness.*

*We confess our capacity to make good things bad*

*Through taking and using more than we need;*

*Through placing profit and gain above the principles of care and sustainability;*

*Many are left without*

*While others use the earth's resources for their personal gain.*

*And in its midst*

*Your world is speaking*

*Ravaged by storm and flood.*

*Melting ice and rising seas*

*Declare afresh the message of their creator.*

*This earth is not ours to exploit*

*But yours, entrusted to our care.*

*Forgive us when we fail to listen.*

*Forgive us for when we hear*

*But find the challenge too much for us.*

*Give us the resolve to act differently,*

*The wisdom to be faithful stewards of your creation,*

*The courage to work for change, and the contentment*

*To be satisfied only with what this earth can afford to give.*

*So may we be part of your new creation*

*In every aspect of our living and being*

*Through Christ our Lord,*

*Amen*



# Study 3 – How Did We Get Here?



Thus far we have explored the fact that the climate of the Earth is changing.

- Climate change is re-shaping the nature of life on our planet.
- Climate change is going to have a disproportionate impact on other species and the people who are already most vulnerable to the effects of poverty, conflict and disasters.

In this study we look at how we got here and consider the challenge to change.

## Our Ecological Footprint

The relationship between human behaviour (burning of fossil fuels) and changes in the atmosphere has been well recognised since the 1990s. However, culturally we seem unable to envisage a different way of living. We seem captive to the belief that we can continue to live lives that are ‘unsustainable’.

*“The ‘environmental crisis’ has happened because the human household of economy is in conflict at almost every point with the household of nature. We have built our household on the assumption that the natural household is simple and can be simply used. We have assumed increasingly over the last five hundred years that nature is merely a supply of ‘raw materials’, and that we may safely possess those materials merely by taking them.”*

Wendell Berry, ‘The Total Economy’ in *What Matters? Economics for a Renewed Commonwealth* (Counterpoint Press, 2010)



## Reflect & Discuss

- In our societies when we discuss the state of the economy what are we usually referring to?
  - Within our own households what measure do we use to define whether one is doing well? How do we measure ‘rich living’?
- What other measures/indicators do we tend to ignore when determining the state of an economy?





With increasing awareness that our monetary economy is dependent upon the health of our natural economy (soil, land, water, atmosphere) new tools have been developed for measuring whether human activity on this planet is truly sustainable in the long term. Concepts such as an ecological footprint and carbon

footprint measure our use of the ecological raw materials and measure the output of carbon required for one's standard of living.

It is a poignant irony that the better we've got at economic growth, the worse we've got at sustainability. While we may have become more aware that we are 'living beyond ecological limits', and while phrases such as 'sustainability' have become standard in our vocabulary, at the same time the size of the ecological and carbon footprint for the average citizen of a western nation continues to grow.

One simple indicator of the increasing affluence (and thus carbon and ecological footprint) of New Zealand society is our increasing house size.

Average new house-build size :

- 1940s-50s = 113 – 118m<sup>2</sup>
- 1960s-70s = 130 – 140m<sup>2</sup>
- 1980s = 142m<sup>2</sup>
- 1990s = 166m<sup>2</sup>
- 2000s = 194m<sup>2</sup>
- 2010 = 205m<sup>2</sup>



While the size of families in New Zealand is decreasing, our houses are getting bigger. We're building 'sustainable' and 'energy-efficient' houses and yet the size of the houses and therefore the energy and material required to construct these houses continues to grow!



## Activity

<http://www.carbonfootprint.com/calculator.aspx>

Look around the internet and trial a range of the ecological footprint and carbon footprint calculators. Be honest with your answers!

- How does your personal total compare with the average NZ footprint?
- How does your personal total compare with the average worldwide footprint?
- What do you think most accounts for most of your footprint? (Household costs? Transportation? Choices of food and other consumer goods?)

## Are We Addicted?

Life in ‘developed’ western countries, like New Zealand, is characterised by transience and speed. Our transportation for school, work, leisure and our choices to travel long distance for our holidays is reliant on large amounts of energy. (See the *Transport* booklet of the *Rich Living* series). So, even as we become more aware of the problem we seem caught up in a mode of living that ultimately is leading us to disaster.

Wendell Berry asserts that at the heart of the crisis is our addiction to ‘stuff’ and our inability to recognise that we live in a finite planet in which there are therefore limits.



*“In keeping with our unrestrained consumptiveness, the commonly accepted basis of our economy is the supposed possibility of limitless growth, limitless wants, limitless wealth, limitless natural resources, limitless energy, and limitless debt. The idea of a limitless economy implies and requires a doctrine of general human limitlessness: all are entitled to pursue without limit whatever they conceive as desirable...”*

Wendell Berry, ‘Faustian Economics’ in *Harper’s Magazine* (May 2008)

Critical to Berry's diagnosis is the concept of *limitlessness* and the idea of *desire*. People who are addicted are never satisfied with more and more of the same thing. While an addict may consciously wish to change, this intention gets shouldered aside by deeper unconscious, reactive desires. We might intend to buy less, travel less, or buy ethically, but the siren call of the sale or the overseas holiday taps into our deeper drives and desires. Has our culture got to a place where we are addicted?



## Reflect & Discuss

- To what extent in your daily existence are you aware of limits? What are these limits? Geographic boundaries and constraints on travel? Availability of time? Economic? Physical/Mental health?
- Think about some of the products you most desire. What do you think are the major factors/influences that shape those desires?
- In what ways might we be addicted to consumer products and experiences?



## Activity: Read Scripture

Read Luke 12:13-34

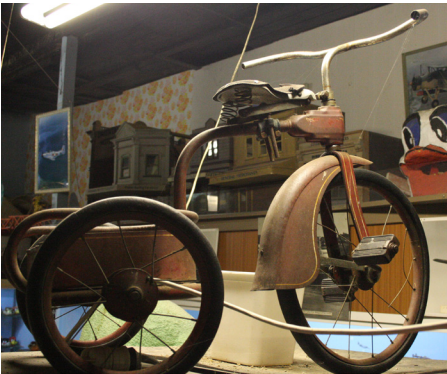
- Which part of this passage do you find most striking?
- Does Jesus' parable and teaching offer insights into *limits* and *desire*?
- What might the message of the parable be to a society in which 'rich living' consists of endless economic growth and the acquisition of more consumer items?
- What is the contrast that Jesus draws between the ravens and the lilies and activity of the Rich Fool? Which of these does Jesus suggest are living 'rich lives'?
- How does Jesus measure this richness?



## Activity

Ask your grandparents or someone who experienced living in a pre-1960s society to describe their standard of living from when they were young. Some questions that might be worth asking:

- How large was their house?
- How did they travel?
- What was the greatest distance they travelled?
- Did they go on international holidays?
- What appliances did they have in their house?
- Where was their food sourced from?
- What did they do for entertainment?



# Study 4 – Responding in Hope



Thus far we have explored what climate change is; how climate change is impacting human communities and the web of life; and begun to reflect on how our desire to live beyond limits contributes to the global ecological crisis we currently confront. So, how do we respond to the challenge of climate change and how do we sustain hope in the face of a future of uncertainties?

*For in hope we were saved. Now hope that is seen is not hope. For who hopes for what is seen? But if we hope for what we do not see, we wait for it with patience.*

*Romans 8:24-25 (NRSV)*

## Big Picture Change

The scale of the challenge the world is facing with regard to climate change makes working together a necessity. Personal changes are important and are part of our faithful witness as Christians. But to respond to climate change requires more than purely individual actions. Action is required at multiple levels – global governance, business, civil society, local neighbourhoods and individuals.

*“Social problems must be addressed by community networks and not simply by the sum of individual good deeds. ... The ecological conversion needed to bring about lasting change is also a community conversion.”*

Pope Francis, *Laudato Si’*, Para 219





Any serious response to climate change will need to be a global response and involve significant changes within the structures that shape our contemporary world. These will include:

- Strengthening environmental governance at all levels – international, national, regional, local.
- Protecting remaining wilderness areas from exploitation (mining, over fishing, deforestation, etc.)
- Moving to a global economy that uses clean energy and does not threaten our stable climate.
- Creating policies to ensure more efficient and sustainable use of renewable resources (especially freshwater) and restricting the use of critical non-renewable resources.

In our democratic society Christians can be involved in advocating for the structural and economic changes required at global and national levels. Likewise, Christians also have the opportunity to shape *local* public practices and can play a critical role in encouraging local government policies which implement sustainability.

Active citizens have made amazing changes to our society in the past. Many of these movements have been led by Christians. *Is there any reason why we can't also be leaders in the movement to live well on God's earth?*

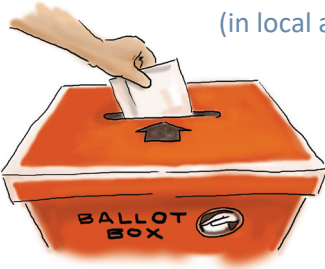
Outside of the political arena, how can Christians in their homes, communities, churches, the businesses they own, and the work-places in which they are employed, encourage the emergence of a 'sustainable consumption'? How might Christian communities and congregations act as a sign-post to our hope that God is in the process of establishing God's Kingdom here on Earth? How might Christians join with others (of other faiths and no faith) to encourage a vision of sustainability and genuine 'rich living' that will become an integral aspect of our individual lives, churches, and broader society?





## Reflect & Discuss

- What do you think of the quote from Pope Francis above?
- What weight do you give to climate change and broader environmental issues when exercising your power to vote (in local and national elections )?
- Do you know people personally working in local, regional, national politics or policy-making? How can you support them? Spend time praying for them.



## Casting a Vision

Our values, attitudes and therefore activity in the world is determined by the vision we have of ourselves, others and the world.

*"The medium is the message."*

Marshall McLuhan



## Reflect & Discuss

- What are the contemporary mediums that shape our cultural outlook?
- What vision of the world do these mediums present to us?

The book of Revelation is part of a genre of apocalyptic literature found in the Bible. The word *apocalyptic* in Greek means to be ‘uncovered, laid-bare’, ‘revealed’. Apocalyptic imagery is not a prediction of the future, but rather is *a vision, an unveiling and revelation of the way the world really is.*

The Book of Revelation was written to Christians living under the reign of the Roman Empire – who were aware that the luxurious lives enjoyed by the Roman elite were built upon the subjugation, exploitation and despoliation of people and the planet. The bleak images of calamity, destruction and



death present in Revelation 8 & 9 (read in Study 2) resonated with their experience of the world – in which *Pax Romana* (Roman peace) was established and sustained by violence against the earth and many of its inhabitants.

Likewise, whether we're aware of it or not, we are essentially the elite of our current global society and our lifestyle is largely dependent upon a desecration of the planet and oppression of the poor. While economic growth over the last 30 years has lifted many out of poverty it has also kept the poorest very poor. And, any advances in standards of living are now threatened by the impact of climate change. *There is a relationship here: we live in 'throw-away' societies in which both consumer items, people and non-human species are seen as disposable.*

What are the images of this we see today?

- The lives of the rich and famous and a huge excess of consumer items on the shelves.
- People in poverty, conflicts over land and resources, increasing ferocity of storms due to climate change and those same consumer goods piled high in landfills.



## Reflect & Discuss

- To what extent do these two sets of images unveil and reveal to us the true reality of the world we live in?

The images of calamity, destruction and death – present throughout Revelation and all of Scripture – are only one of the lenses which frame the way Christians see the world. Revelation also contains other passages that paint evocative visions of hope and healing for both past and present readers. We'll look at those now.



## Activity: Read Scripture

Read Revelation 4:1- 5:14 together as a group.

- Who is gathered around the throne?
- What are those gathered around the throne doing?
- The assembled worshippers (angelic, human and non-human species) between them offer five songs of praise (4:8; 4:11; 5:9-14) in which they ascribe ‘glory, honour and power’ to God – for what reasons?
- Are you surprised at the presence of living creatures around the throne of God?
- What emotions arise within you at this vision of all of God’s created order giving praise before their Creator?

Read Revelation 18:1- 19:8

- What are your emotional responses to this passage?
- Which images/words stick out to you?
- For the early Christians, ‘Babylon’ was a code-word for Rome. The vision here is of the overthrowing and ending of Roman imperial power. If Revelation was being written today, what might ‘Babylon’ be a code-word for?
- What is God’s Spirit saying to us through this passage?
- To what extent do you think these two visions (Rev 4-5 and 18-19) gave the early Christians hope? Why?
- To what extent do these visions of the world give you hope?

## The Nature of Hope

For the 1st Century Christians the revelations from John were a vision of hope – reminding them that ultimately God will overthrow those responsible for human oppression and the desecration and pollution of creation. The vision of Revelation climaxes in chapters 21-22 with God coming to dwell eternally in a restored and abundant creation.

*But hope is not the same as a false optimism.* While not denying human ingenuity and endeavour and the power of technology, it appears highly unlikely that the world is going to ‘solve’ the problem of climate change. The world of the future that our children and grandchildren will inhabit, is going to be different. Some changes such as sea level rise and the loss of species are now locked in. Also, the impacts of climate change make human conflict over resources and increasing economic inequalities more likely in the future.

*But it is in our power to limit this damage if we act with urgency.* As we’ve already noted, the actions of the affluent can harm or protect the most vulnerable. A just, compassionate response is in our hands, even if it requires changes well beyond our individual or local actions.

But, here’s the key for Christians. Our search to live in ways that takes seriously the well-being of the poor and the planet should not primarily be about *success*, but about *faithfulness*. Rather than being motivated by guilt and seeking to be ecological messiahs, we are invited to joyfully – and empowered by the risen Christ – engage in the practices of ‘rich living’.

In fact, even if there was no ecological crisis, we’d still be right to ask about how to live well in the natural world. Why? Because environmental questions are also spiritual and moral questions. How we live is indicative of our inner lives.

For Christians, searching to live ‘rich lives’ that are genuinely sustainable:

- is the appropriate joyful response of thanksgiving and worship, as creatures, to the goodness of the Creator God.
- allows us grow into our vocation as God’s image-bearers.
- is an action of hope, which gives witness to our ultimate hope that God, in Christ, is reconciling and healing all things.

*“The external deserts in the world are growing, because the internal deserts have become so vast. Therefore the earth’s treasures no longer serve to build God’s garden for all to live in, but they have been made to serve the powers of exploitation and destruction.”*

Pope Benedict XVI (2005)



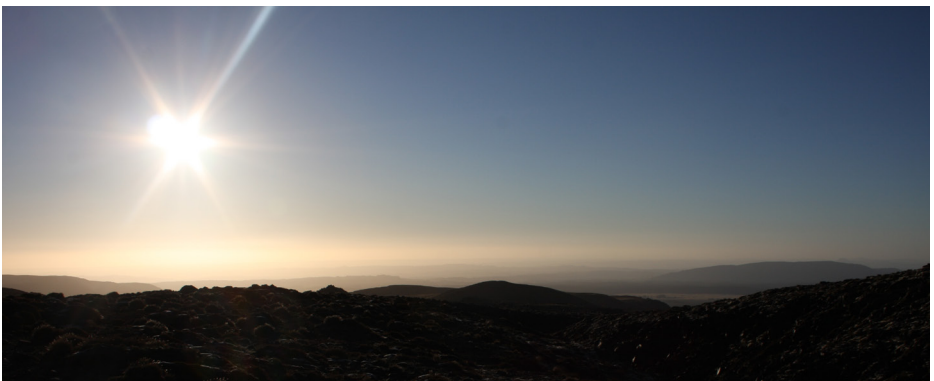


## Reflect & Discuss

- How hopeful are you about the future?
- What motivates you to seek to live in a more sustainable manner?
- Does the invitation to seek to live in a more sustainable manner fill you with dread or joy?
- In what ways is sustainable living a part of living richly?



While it is important to understand that seeking to live more sustainably is not fundamentally about preventing climate change, nevertheless, such living can be powerfully effective. Around the world there is a growing mass movement of people who are seeking to practice new ways of living which are healthier for themselves, for others, and for the planet. As with mass movements of the past (abolition of slavery, civil rights, anti-apartheid) the movement towards sustainable living has the potential to reshape cultural values and attitudes and therefore the systems that shape our societies. Faith communities have the opportunity to engage with this broader sustainability movement – to learn from others further along in the journey and to share why Christian hope shapes our actions.



“Believing in the resurrection does not just mean assenting to a dogma and noting a historical fact. It means participating in this creative act of God’s ... Resurrection is not a consoling opium, soothing us with the promise of a better world in the hereafter. It is the energy for a rebirth of this life. The hope doesn’t point to another world. It is focused on the redemption of this one.”

— Jürgen Moltmann, *Jesus Christ for Today’s World* (Fortress Press, 1995).



## Reflect & Discuss

- Jürgen Moltmann states that belief in the resurrection is “the energy for a rebirth of this life.” Share one element/experience from these studies which has impacted and energised you.
- Share stories of families, neighbourhoods, communities, churches that you know who are seeking to live in more sustainable ways.
- What is it about these communities that you find inspiring?
- Are there aspects/practices of their lives that you, your family, neighbourhood, faith community could adopt?



## Activity: Pray

Spend time praying together.

- Thank God for the things you have learnt during these studies.
- Ask for the resurrection power of God’s Spirit to energise you as a community as you seek to live richer and more sustainable lives into the future.





## Activity: Into the Future

There are four other booklets in the *Rich Living* series that reflect on the themes of Water, Food, Transport and Waste. These studies begin to explore how in each of these areas we can seek to live more sustainably. If you've enjoyed engaging with the studies in this booklet, order the other booklets and continue the journey together.





The existing Western lifestyle is unsustainable – our consumption habits impact on the wellbeing of our human and non-human neighbours. But Christian faith communities have the potential to be agents of hope.

This booklet is one of five in the Rich Living series (*Climate Change, Water, Food, Waste, Transport*). Designed for small groups, each booklet consists of four studies designed to assist communities make sustainability integral to their lives of faith.

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