

# CHURCHES & CLIMATE ADAPTATION

A RESOURCE FOR CHURCHES WANTING TO BE AGENTS OF HOPE IN A WORLD OF CHANGE





# RESPONDING TO THE CHALLENGE OF A CHANGING CLIMATE

The reality of climate change can awaken feelings of anxiety and despair. As church communities it is hard to know how to respond. However, while climate change will undoubtedly happen to us, we are not merely passive sufferers. We have agency – both as individuals and communities – to respond to climate change and prepare for its impacts.

Responding to climate change involves both mitigation and adaptation: *Mitigation* means preventing and reducing greenhouse gas emissions to lessen the severity of climate change. *Adaptation* means adjusting to current and future effects of climate change through reducing potential negative impacts and increasing resilience

Faith-based climate justice has tended to focus on mitigation through: 1) changing individual and communal behaviours, 2) divesting from fossil fuel industries, and 3) advocating for political, social, and economic change.

#### Churches as Centres of Resilience, Adaptation, and Interconnectedness

While ongoing efforts to mitigate the negative effects of climate change continue to be vital, adapting to changing climate is also important, especially as the impacts of climate change become more apparent. Churches can play a central role in increasing community and individual resilience and responding to the challenges of climate change.

Adaptation for church communities can loosely be split into three categories:



BUILDING ADAPTABLE & CLIMATE RESILIENT COMMUNITIES



REDUCING
VULNERABILITY THROUGH
EMERGENCY READINESS
AND RESPONSE



SUPPORTING THOSE WHO ARE MOST VULNERABLE TO A CHANGING CLIMATE



# Building Adaptable & Climate Resilient Communities

In 2022, the first NZ National Adaptation Plan (2022-2028)\* was released. It focuses on embedding climate resilience through 1) education, 2) sustainable development, and 3) managed retreat. While the plan is intended for the Government, it has a number of implications for church communities. We might also add a fourth aspect: pyschological and spiritual resilience.

#### 1. Education on climate adaptation

Every community faces different risks when it comes to climate change (e.g. flash-floods, sealevel rise, drought, fire, land degradation). Churches can play a role in educating their communities about the various risks in their area, what the likely impacts are, and how to prepare for them. Civil Defence and Local Emergency Management should have information about hazards in any given area.\*\* Educated individuals and communities can begin to make better decisions to prepare for emergencies so that, when a natural disaster occurs, the negative impacts are reduced.

#### 2. Sustainable development

As a church maintains and develops its facilities or builds new facilities, it should consider current and future scenarios when it comes to climate change.

Considerations might include:

- More green space, biodiversity, wetland restoration, and landscaping that "works with nature" rather than against it (for instance, in a heavy rain event, considering where the water naturally flows),
- Improving storm water drainage to accommodate larger volumes of water
- Installing rain water tanks and a filtering system,
- Installing solar panels and battery storage and then electrifying your building and appliances,
- Having a generator on site,
- Improving insulation and installing double or triple glazed windows.

Many of these actions both reduce a church's carbon footprint (contributing to mitigation) while also making it more resilient to extreme climate events (e.g. heat waves, cold snaps, blackouts etc.).

#### Solar installation

Churches are often well placed to get maximum benefit from solar installation. Most church communities have large buildings, often with pitched roofs, that make them ideal for solar (especially if the roof is pitched to the north, north-east, or north-west). With battery storage, power can be generated, stored, and either used at peak times (i.e. in the evening) or sold back onto the grid when energy prices are high.

Solar requires an initial capital investment, but once it is installed, it has multiple benefits:

- Environmental: The church generates clean, green energy. While the national energy generation is mostly renewable, it is still dependent on fossil fuel generation at peak times and in dry years
- times and in dry years.

   Resilience: In the wake of fluctuating energy prices, blackouts, or civil emergencies, solar enables local and reliable energy generation independent of the grid. Not only is this good for the church community, it is also good for the wider neighbourhood. It positions churches well to become Community Emergency Hubs.
- Financial: Given the right conditions, solar can be a good financial investment with returns well exceeding what you would get in the bank. At a time when many churches face stagnating congregational giving and rising costs, solar installation can help churches to become more financially sustainable in the longterm.

While the initial capital investment can be high, there are a number of grant funds as well as low- or zero-interest loans available to churches that make solar a viable option.

<sup>\*</sup>The National Adaptation Plan can be read at: <a href="https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/adapting-to-climate-change/national-adaptation-plan/">https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/adapting-to-climate-change/national-adaptation-plan/</a>

#### **Building Adaptable & Climate Resilient Communities**

#### 3 Managed retreat

A key consideration when developing a facility or building a new facility will be the vulnerability of the site. If, for instance, a site is vulnerable to future rising sea levels, some form of managed retreat should be considered.

Managed retreat\* can take a number of forms:

- Avoid. Avoid building a new facility in an area that is vulnerable,
   Accommodate. Build in a way that accommodates a changing climate (e.g. an elevated building on stilts to allow for flood waters),
- Protect. Incorporate protections into the landscaping to protect the building (e.g. banks to divert water to overflow plains),
  Retreat. Relocate a building to a plot of land in a less vulnerable area.

#### 4. Psychological and spiritual resilience

Church communities are well-placed to respond to the growing reality of eco-anxiety.\*\* Through preaching, liturgy, education, friendship, and concrete action, churches can be environments where people are given space to process, adapt and respond to the reality of climate change.

Concrete actions might involve a restoration project or a regular beach clean-up: community actions that restore and heal our local environment. While one community cannot solve the global reality of climate change – it can have a transformative effect on its local area making the physical environment biologically diverse and more resilient to climate change.

\* For more information on Managed Retreat, see: https://environment.govt.nz/what-government-isdoing/areas-of-work/climate-change/adapting-to-climate-change/managed-retreat/

\*\* Eco Church Aotearoa New Zealand has some great information and resources available: https://www.ecochurch.org.nz/eco-anxiety-wellbeing

## **Emergency Readiness &** Response



#### **Emergency Management involves four areas:**

- Reduce impacts of hazards 1.
- Readiness for an emergency
  - 3. Respond to an emergency
- 4. Recover from an emergency

#### **Emergency Readiness and Response**

#### 1. Reducing impacts of hazards

Reducing the impacts of hazards has to do with both education and sustainable development (see above). Churches can play a role in educating people about the hazards in an area and how to respond accordingly. A church can also develop its buildings and environment to reduce negative impacts of a natural disaster when it occurs. For instance, if a church is in a flood-prone area, it could preempt such flooding events by restoring greenspaces, developing land to redirect water, and actively keeping drains clear.

#### 2. Readiness for an emergency

Preparing for an emergency might involve:

- Putting together a list of resources and supplies in the community (e.g. generators, water tanks etc.)
- Getting to know the neighbourhood and updating a list of contact information. This list could be used to both check-in on people in an emergency and to mobilise volunteer help. Include notes about vulnerable people in your community and their needs (e.g. limited mobility)
- Having a list of volunteers on stand-by ready to be mobilised, including a team of leaders who can coordinate volunteers
- Having a list of radio stations and key contact numbers with your local Emergency Management
- Church leadership participating in First Aid training (physical and psychological)
- Educating households in your community and encouraging them to put together an emergency plan
- Building relationships with neighbouring churches and other community groups for mutual support and coordination in the event of an emergency

Civil Defence NZ has excellent resources that can help churches prepare for an emergency. See: <a href="https://getready.govt.nz/">https://getready.govt.nz/</a>

#### 3. Responding to an emergency

Churches might consider becoming Community Emergency Hubs (CEHs). A CEH is a community-led hub. It is not resourced and run centrally like a Civil Defence Centre. Becoming a CEH does not necessarily mean having the capacity for people to bunk down overnight. A CEH is a place for people to find shelter, be informed, and get connected.

- Shelter. People might come to find somewhere dry and warm to stay for a few hours while they evaluate their options. They might come to charge their phone or to get access to water (if, say, your church has solar or water tanks).
- **Informed.** CEHs will act as conduits between Civil Defence and local people. Key messaging can be passed on to people in your neighbourhood. Conversely, local needs can be passed on Civil Defence.
- Connected. CEHs can be places for people to gather and help one another. A cup of tea or coffee and a place for friendship may be a huge help. As people's needs become apparent, volunteers can be mobilised to help in relevant ways.

Even if your church is not a CEH, it can still fulfil some of the functions above – especially for the church community and those on your pastoral roll.

#### 4. Recovering from an emergency

After an emergency, churches can continue to mobilise volunteers to help with clean-up, ongoing needs, and supporting vulnerable people. Pastoral visiting will be vital.

Church leadership should take the opportunity following a disaster to review and revise its Emergency Management Plan.

While regular Sunday gatherings may initially be challenging (depending on the emergency), finding ways to gather and create connection will be vitally important as people support one another, process what has happened, and pick up the pieces of their lives.

New partnerships can be formed with other churches or organisations. In the event of an emergency, some churches may be worse affected than others. In the spirit of hospitality and ecumenism, It is worth asking how your church might offer help to other church groups.



# Supporting Vulnerable People

Adapting to climate change raises significant issues about equity. Adaptation involves transitioning to different ways of structuring our society. It includes social, economic, environmental, climate, and intergenerational justice. In the context of Aotearoa, indigenous and tiriti justice must also be included.

For instance, lower socio-economic communities are often the most adversely affected by climate change. Many people may not have the means to relocate to a different area. Meanwhile certain industries and jobs will become untenable (either because a changing climate makes them untenable or because our nation proactively transitions away from polluting industries). Supporting these people into new sustainable industries is fundamental part of a "just transition".

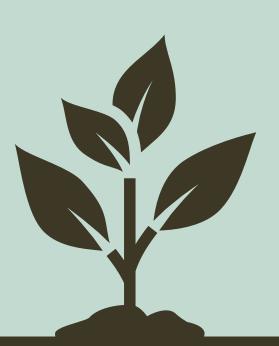


#### **Supporting Vulnerable People**

As part of adapting to climate change, churches must be sensitive to these dynamics and respond accordingly:

- Supporting vulnerable people before, during, and after a climate emergency. Vulnerable people include elderly people, disabled people, and people living in disaster-prone areas that don't have the financial means to move elsewhere,
- Supporting people who find themselves without work as a result of a transitioning economy,
- Supporting other churches situated in disaster-prone areas or churches with few financial resources to adapt to climate change.

Often the poorest communities are disproportionately affected by climate change. Churches that are part of larger networks and denominational bodies are well placed to disperse resources to the communities that need it most. Certainly, this should be taken into account when responding to an emergency. However, denominational leadership should be proactive in equitable investment in climate resilience to ensure that the most vulnerable communities are the most supported.



#### **Questions for your community**

#### Adaptable and Resilient Communities

- What is your church currently doing to build an adaptable, resilient, and well connected community?
- What more could you be doing?

#### **Emergency Readiness and Response**

- How are you preparing for an emergency (and helping your members to also be prepared)?
- What potential hazards can you identify in your area and how to mitigate the risks they pose?
- Do you have an emergency response plan? If so, when was it last updated?

#### Supporting Vulnerable People

- What vulnerable people and groups can you identify in your church and wider neighbourhood? (You might like to keep a list)
- How will you support them in the event of an emergency?
- How can you work together with other churches and community groups to support one another?



### Further reading...

#### **Practical Church Resources**

- A Rocha Rich Living Resources, on Climate, Transport, Water, Food, Waste. Resources for small group and Church use <a href="https://arocha.org.nz/rich-living-series/">https://arocha.org.nz/rich-living-series/</a>
- A Rocha Eco-church information and resources <u>ecochurch.org.nz</u>. This includes a questionnaire churches can work through to find areas of growth, resources, stories of other churches on the journey, and liturgical resources for Season of Creation

#### **Theological Resources**

- Celia Deane-Drummond, A Primer in Eco-Theology: Theology for a Fragile Earth (Wipf & Stock, 2017).
- Nicola Hoggard Creegan and Andrew Shepherd, Creation and Hope: Reflections on Ecological Anticipation and Action from Aotearoa New Zealand (Wipf & Stock, 2018).
- ElizabethA. Johnson, Come, Have Breakfast: Meditations on God and the Earth (Orbis, 2025).
- Pope Francis, Laudato si', 2015, <u>https://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco\_20150524\_enciclica-laudato-si.html</u>
- Bethany Sollereder, "A Theology of Inevitable Climate Change", Dialog, Feb, 2025, <a href="https://onlinelibrary.wiley.com/doi/10.1111/dial.12877?af=R">https://onlinelibrary.wiley.com/doi/10.1111/dial.12877?af=R</a>
- Christian Environmental Resources, <a href="https://www.earthday.org/christin-environmental-resources/">https://www.earthday.org/christin-environmental-resources/</a>
- The Earth Bible Project (Australia and NZ), <a href="https://www.webofcreation.org/Earthbible/earthbible.html">https://www.webofcreation.org/Earthbible/earthbible.html</a>

#### **Novels**

Kim Stanley Robinson, Green Earth (Del Ray, 2015) Kim Stanley Robinson, The Ministry for the Future (Orbit, 2021).

#### Nature Writing

Merlin Sheldrake, How Fungi Make Our Worlds, Change Our Minds and Shape Our Future (Vintage, 2021).

James Rebanks, English Pastoral (Penguin, 2020).

### **Interchurch Bioethics Council 2025**



The InterChurch Bioethics Council (ICBC) is an ecumenical cross-cultural body supported by the Anglican, Methodist and Presbyterian Churches of Aotearoa New Zealand. ICBC members have between them considerable expertise and knowledge in science, ethics, theology, medicine and education.