

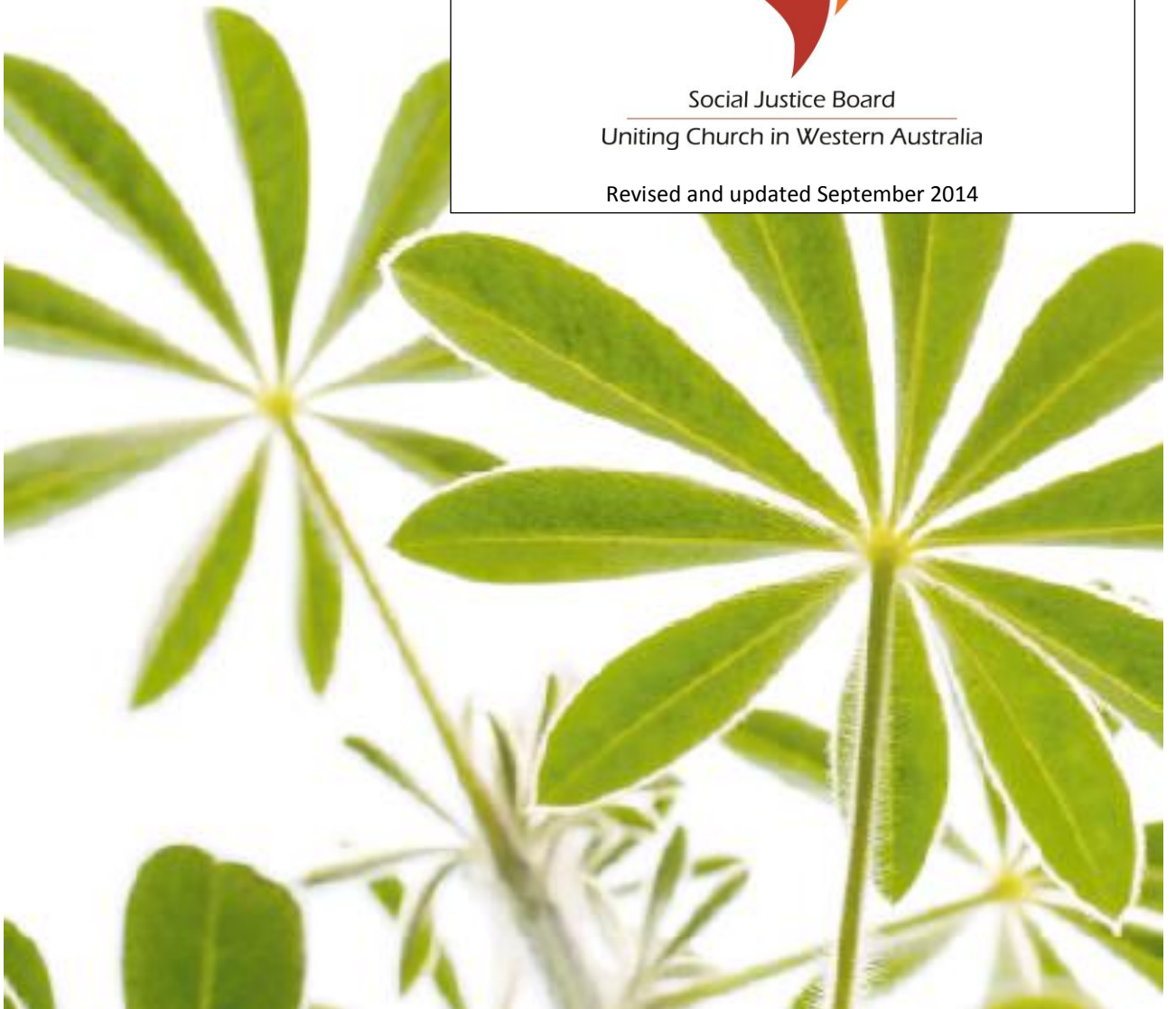
# Green Church Handbook

Uniting Church in Western Australia



Social Justice Board  
Uniting Church in Western Australia

Revised and updated September 2014



## Introduction

Welcome to the latest version of the Green Church Handbook prepared by the Social Justice Unit of the Uniting Church in Australia Synod of Western Australia. Our work is guided by the policies of the Uniting Church on care for the environment.

The Handbook is designed to be a guide for local congregations and individuals who are part of congregations and who want to be part of a transition to a low carbon economy.

### **A Uniting Church in Australia Statement on Climate Change:**

The Uniting Church in Australia has a long standing commitment to care for the environment, which we call God's creation. The following is the first part of the statement by the Assembly Standing Committee in November 2006. This statement built on past statements of the Uniting Church, including the 1977 *Statement to the Nation* and the *Rights of Nature and the Rights of Future Generations*, which was passed by the 6<sup>th</sup> assembly in 1991.

#### **For the sake of the Planet and all its people**

The Assembly Standing Committee adopted a statement *For the Sake of the Planet and all its People: a Uniting Church in Australia Statement on Climate Change*. (<http://www.unitingjustice.org.au/environment/uca-statements/item/481-for-the-sake-of-the-planet-and-all-its-people>).

They went on to Uniting Church members, congregations, groups, agencies and councils to:

- a) Model ways of living and working that minimise the production of greenhouse gas emissions
- b) Seriously and regularly include matters of environment and lifestyle change in prayer and worship, study, and communal decision making; and

The Committee also encouraged Uniting Church members to:

- a) Advocate for government to implement policies that significantly reduce our dependence on fossil fuels and increase our use of non-nuclear renewable energy sources
- b) Engage in dialogues, shared learning.

We hope this Handbook will help us all take up this challenge!



Caring for creation is a key Christian task.....	4
Green Church – An Opportunity for Modelling .....	6
Things to Do in Your Church .....	7
Choose carefully when making purchases:.....	7
Recycling .....	7
Water .....	8
In the Garden .....	8
Carbon Emissions .....	9
Sustainable Energy.....	10
Web Links to Find Out More .....	11
Ecological Footprinting Tools .....	12
Eco-Theology Worship Resources.....	12
Commit to Care for the Earth - A prayer for creation.....	13
Advocacy – Climate Refugees .....	14
Want to Know More?.....	15
Food for Further Thought .....	15
Nuclear Energy .....	15
Some Useful Internet Sites related to Nuclear Energy .....	16
Green homes -Ideas for Sustainable Living:.....	17
2014 Policies for a Greener Church .....	19
Sustainable Buildings Policy .....	19
Policy on Sustainability and Motor Vehicle Fleet management .....	21
Sustainable Landscaping Policy.....	22
Congregational Sustainable Practice .....	25
Air Travel Policy.....	27
Uniting Church WA Synod Resolutions 2014 .....	29
Divestment from Fossil Fuels .....	29
Protection from the impacts of unconventional gas exploration and extraction .....	31

## CARING FOR CREATION IS A KEY CHRISTIAN TASK

Both the Bible and the Christian tradition have some vital and profound things to say about caring for the environment, which the Church understands as God's creation.

Approaching environmental issues through a Christian lens offers valuable ethical and spiritual insights for people committed to caring for the environment, both within and outside the church.

The Christian approach is also an approach filled with hope.

So often, environmental issues are dealt with against a background of fear and threat. We should stop doing activity 'x' because otherwise environmental issue 'y' will happen. As Christians, however, the starting point for caring for the Earth is a response to a loving, creating God. **Caring for creation is a key Christian task.**

Throughout history, people of faith have drawn on images from the Bible to develop models of the three-way relationship between God, God's people and the created order. The two creation stories in the book of Genesis draw on images of good agricultural practice. In the first story of creation, the sixth day includes a sense of calling to good stewardship, whilst the second garden story there is a command to cultivate and care for the earth.

The images in the Genesis creation stories emphasise the place humanity has, along with the other living and non-living components of creation, as part of the created order in which God takes delight.

The people of Israel *belonged* to families, to tribes and ultimately to God. Belonging is a model that encompasses the relationship of individuals and groups to each other and also the relationship of humanity to God. To belong has notions of both privilege and responsibility, which have a dynamic quality. The Old Testament laid the basis of human relationship to the land and with it came both the privilege of being able to live in a place overflowing with milk and honey and the responsibility to care for it.

To belong involves us all in civic responsibility, yet we need to understand we need to belong – not just to human communities – but also to other life and land too. Reflecting on God's love for us and for Creation, we in turn respond with a ministry of care, nurture and love for each other and for all creation. We are called to serve and to love creation as God, in Christ, has loved us all.

The Uniting Church's commitment to the environment arises out of our Christian belief that God, as the Creator of the universe, calls us into a special relationship with the creation – a relationship of mutuality and interdependence which seeks the reconciliation of all creation with God.

We believe God's will for the earth is renewal and reconciliation, not exploitation by human beings. The foundational document of the Uniting Church in Australia, the *Basis of Union*, expressed this as the very heart of the Church's mission. It states that God in Christ has given to all people in the Church the Holy Spirit as a pledge and foretaste of the coming reconciliation and renewal which is the end in the view for the whole creation. The Church's call is to serve that end.

The Uniting Church in Australia has consistently shown concern about the continued existence of all creatures and plant life and believes nature is not to be plundered and abused.

However we must acknowledge that the Church has been complicit in the abuse of creation. We have lived out a doctrine of the domination of nature by accepting and engaging in practices that have failed to safeguard the integrity of creation. We have supported systems and structures that exploit the natural environment in the service of human greed.

We make this confession and we renew our commitment to move towards sustainable non-exploitative living, believing God's creation – the earth itself and all the life it supports – is precious and the earth's resources exist for the good of all, now as well as for future generations.



**Sustainable September resources** are produced each year for use in congregations, schools and agencies for the month of September, based upon the lectionary readings.

The celebration of Sustainable September brings us back year after year to pray and work for a world for all to share, both now and in the future. We join with other Churches around the world who also focus on the environment in worship during September. Some call it the "Season of Creation" or "Creation time".

Sustainable September resources are found on the Green Church website:

[http://green.wa.uca.org.au/?page\\_id=96](http://green.wa.uca.org.au/?page_id=96)

## GREEN CHURCH – AN OPPORTUNITY FOR MODELLING

'Green' is all around us. After the impact of films such as *An Inconvenient Truth*, and the release of the Stern Review in 2006, there has been a flood of information available on 'how to be green', and a strong call to save our increasingly frail planet.

What makes this resource any different? There are many small actions individuals already take in their lives to reduce their ecological footprint. The *Green Church Handbook*, and related website, contains a lot of suggestions of how to take this further.

Sometimes, actions we take at home don't translate to the way we act as a church community.

Our church building is the place where our faith is made visible to the wider community. Some church buildings lie dormant until they are used on Sunday morning for worship, while others are a hub of activity throughout the week. Churches can be a focal point for the communities in which we live. It is our hope that congregations will consider these ideas for 'greening' their church as an opportunity to model sustainable environmental practice to the wider community.



*Photovoltaic cells Kalamunda Uniting Church*

Suggestions in this handbook are grouped. We have tried to include suggestions for home and church, with short-term and long-term strategies. We encourage congregations who are wishing to create change to form a task group or team within the congregation to come up with some workable strategies to implement over time.

The Social Justice Unit staff can provide congregations with further resources and support. You will find detailed information on the website and if you don't have access to the web, we will happily post information out to you.

Finally, we would love to hear about your strategies. This book contains many suggestions, but with the creative power of a congregation at your disposal, we know you will come up with a whole lot more.

*See the Congregational Sustainable Practice Policy on p 24*

To contact the Social Justice staff for help, email [green@wa.uca.org.au](mailto:green@wa.uca.org.au)

## THINGS TO DO IN YOUR CHURCH

### CHOOSE CAREFULLY WHEN MAKING PURCHASES:

Many Churches can take simple measures to improve their green credentials in purchases made for Church. Photocopy paper can be purchased which is made from already recycled paper. Food for catering for Church events can be sourced locally to cut carbon miles involved with the transport of foods across vast distances.

When buying cleaning products for your church, try getting ones which don't use harsh chemicals. There are many natural alternatives to harsh chemicals, which are often traditional recipes many people already know. For example, a combination of white vinegar and lemon juice easily cleans grease.

### RECYCLING

Recycling is becoming increasingly common in our homes, but do we recycle in our churches and workplaces? Recycling is much more than aluminium cans – now almost anything can be recycled – computers, mobiles, fluorescent tubes and more. It might take some research to find out if something can be recycled, but it is worth investigating.

Most councils issue each house (and church) with a recycling bin. Glass, steel cans, paper cardboard and aluminium cans can be recycled, but the availability of recycling services can vary depending on the local council. You can tell if a plastic container is recyclable or not by turning it upside down and looking for the 'recycling triangle'. The recycling triangle will contain a number from 1-6. Some councils will not accept plastic whose recycling triangle contains the numbers 4-6. Contact your local council if you're not sure.



*Question:*

*Does your Church make it easy for people to recycle?*

*Do you have bins for sorting rubbish easily at hand in the kitchen?*

*Could you add a worm farm to the Church garden to turn food waste into compost and keep it out of landfill?*

*You could put a box in the foyer for people to deposit old prescription spectacles –they can be sent overseas.*

*Ask your local optometrist for details of how to donate a collection of them.*

Use recycled paper (particularly for your church newsletter and order of service). Recycling products use far less water and energy than raw materials

One of the great ways many churches recycle is through Good Sammy's or their local congregational Op Shop. If your Church hasn't got an op shop, you could still conduct a community garage Sale. Garage sales are a great way of recycling goods and opening your church to the local community. You could advertise it in the local paper or do a letter drop and offer refreshments through the day. An open day is a great opportunity to showcase other aspects of your church's ministry.

Recycle water! Install a greywater re-use system or aerobic treatment unit and irrigate your garden with treated greywater. You may be eligible for a rebate for installing such systems: contact the Water Corporation phone: 13 10 39 or visit [www.watercorporation.com.au](http://www.watercorporation.com.au) for more information.

Recycle food (also known as composting). Over 80% of food waster in Perth is made up of organic food scraps. Compost them or feed them to a worm farm. The bulk of what we dump in landfill is organic matter that will rot slowly beneath the surface with very little oxygen. This creates methane which is 20 times worse as a greenhouse gas than carbon dioxide.

---

## WATER



*Why do we need water in plastic bottles when it is in the tap?*

Water is a precious commodity. How can we model water conservation to our community? Some congregations have installed rainwater tanks to make full use of the church roof. Space-saving rainwater tanks are available and may be worth investigating for small blocks. Maroubra Junction Uniting Church named their rainwater tank Delilah and had it painted by a local artist, drawing publicity from local and national media. The tank provides rainwater for the flushing of toilets and a tap to water the church's lawn. More importantly, it has been a visible sign of the congregation's commitment to living faithfully as a sustainable community.

- Install dual flush toilets and in-tap flow regulators.
- Make sure there is always cold water available at Church for drinks during the summer. Serve water at meetings.
- Maintaining buildings by fixing leaking toilets and dripping taps can effectively reduce water wastage.
- Think about the kind of appliances which use water at Church –are they energy efficient and water efficient?

---

## IN THE GARDEN

Most churches are built on a bigger block of land than the average house. A great way of modelling good environmental practice to the community is to have a sustainable garden around the church building. There are many options to be considered here, such as creating a community veggie garden, or making a peaceful outdoor space for the public to enjoy



*The herb garden at Kalamunda Uniting Church*

Perhaps someone in your congregation has a 'green thumb' and would be able to share their gift with others to help maintain these spaces. The following are some things to consider in your home or church garden.



- Plants native to Western Australia are perfectly adapted to our dry climate. Native plants need much less care, so they are great for a church garden. Native plants will also attract native insects and birds. By planting native plants you are benefitting your whole backyard ecosystem.
- Go water wise! If your garden is in the design stage, you can get a Waterwise Garden Appraisal from your local Waterwise Garden Centre. They will be able to assist you in designing your garden to suit your needs but also save you water.
- Mulching around your garden will help conserve water with the added benefit of keeping weeds down.
- Ever tried growing your own fruit and vegetables? Many people feel home grown produce tastes far better than commercially grown. Regular composting of your home veggie patch helps enrich the soil so that your produce will be sweet and tasty.
- Keep Chooks at Church! They help recycle green household and garden waste into eggs! Check your local council by – laws for conditions or restrictions.
- How many trees are required to sequester (store) 1 tonne of CO<sub>2</sub>? In the 300 – 450mm rainfall area of WA, the number of trees required per tonne of CO<sub>2</sub> varies from about 4 - 10 depending on the location, species of tree, soil type and type of planting. (If we could plant karri trees in 1000mm rainfall areas, it may be more than a tonne of CO<sub>2</sub> per tree!)
- **Men of the Trees WA** is one community organisation whose fundamental aim is to plant as many trees per year as possible. They educate individuals and the community in seed collection, seed propagation, re-vegetation and tree planting. Your church could consider volunteering time or money, or by growing seedlings.
- Plant less lawn. Make sure the lawn you do plant is water efficient lawn that is heat and drought tolerant. Warm season grasses such as Couch, Buffalo, Saltene, or Kikuyu respond well to the hot summers in Western Australia.
- Use Permaculture and companion planting methods. For more information about this, find out if there is a permaculture garden in your area and pay them a visit.

*Creating a community garden is a great way to build connections with your local community. If you decide to grow vegetables, these can be consumed by those involved, donated or sold to raise money.*

*Churches could consider setting up a composting system or worm farm. Don't hide it! Model your actions to the community by placing it in a visible area. You could encourage church members who don't have space for a compost bin in their own house to contribute to the church bin. Compost from this can then be used to improve the church garden. There is a great resource on composting available on our website, or we can post it out to you.*

*Please see page 22 for the SUSTAINABLE LANDSCAPING POLICY*

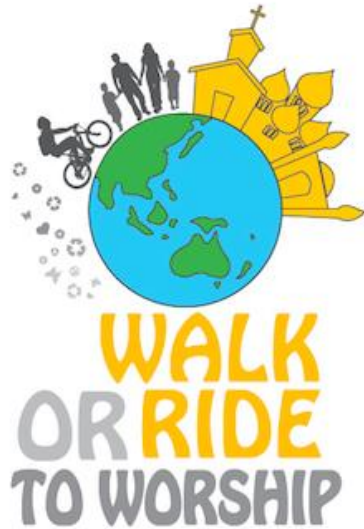
## CARBON EMISSIONS

Australia has one of the highest rates of carbon emission in the world, per head of population, partly generated by our dependence on cars and trucks to keep us connected over large distances. As new houses spread up and down the WA coastline, each with air conditioning, multiple bathrooms and filled with the latest appliances, these are also adding to the amount of carbon we are putting into the atmosphere.

There are many ways we can reduce our energy pollution. Here are some suggestions for reducing your carbon emissions as a congregation which go beyond switching off the lights (*which we hope you are already doing*).

- Where possible walk, cycle or use public transport to get to Church.

- Consider installing a bike rack outside your church building to encourage bike riders. This is a particularly good idea if your church is near local shops or other facilities, as it would also be helpful for the wider community.



- What kind of car is your Minister driving? Does it comply with the Motor Vehicle Policy? (see page 20)
- Turn off appliances at the wall when you're not using them – particularly at night or if no one will be using the building for a few days. Standby modes (the little red light) make up to 12% of electricity used by Australians.
- Re-think your heating and cooling needs. One degree of difference on your heater or air conditioner can reduce your energy consumption by 10%. Draught stoppers and good ceiling insulation will greatly reduce the amount of heating and cooling you need. In winter, you can also ensure rugs are available for your congregation who may feel the cold more than others.
- If you are installing air-conditioning for cooling consider an evaporative cooler rather than a refrigerative system. These use considerably less energy to run.
- If you are planning to re-build or expand your church, get some good advice about energy efficient building practices. Simple things like sky lights can make a big difference.
- Carefully consider what kind of hot water system you will install. Large electric storage units can be very hungry on power. You can reduce your carbon emissions by installing an instantaneous gas system or better still a gas boosted solar hot water system.
- You may like to explore ways to offset carbon emissions. Some companies such as Carbon Neutral [www.carbonneutral.com.au](http://www.carbonneutral.com.au) or Green Fleet [www.greenfleet.com.au](http://www.greenfleet.com.au) calculate emissions, and purchase native trees to offset use of your car or home or even flights.

*Carpooling is a good way to make the most of car use. But sometimes we don't know where other people live. Why not spending some time as a congregation mapping out where people live and talk about ways you could share resources?*

*Why not offset the minister's vehicle? A 'carbon neutral' sticker on the minister's car might be a good way to start a conversation about why the environment is important to Christians.*

*See also the Policy on Sustainability and Fleet Management p 20*

## SUSTAINABLE ENERGY

Related to the issues of carbon emissions is the kind of energy we choose to use. There are many different options for sustainable energy now available, and by supporting such technology churches can make a stand for a sustainable future.

- Individuals and organisations now have the choice to buy 'green power', which is energy generated from renewable sources such as solar and wind. Generating renewable energy produces no greenhouse gas and therefore has minimal impact on the environment. You will pay extra for this kind of power, but even choosing to pay a percentage of your energy bill in this way

will make a difference, not just by decreasing the amount of fossil fuel used, but also by encouraging investment in more sustainable technology.

- Congregations that have made the switch to green power might like to display a sign to let the wider community know they are doing this.
- Other energy alternatives to explore are the Photovoltaic Rebate Program, or the 'Earth Friendly' greenhouse offset options. For more information go to [www.synergyenergy.com.au](http://www.synergyenergy.com.au)
- Solar energy is a renewable energy source which means it can never be depleted. In Western Australia, where we have sunshine for most of the year, it is a great option for churches and individuals wanting to reduce their reliance on fossil fuels.



*In the wheatbelt town of Dandaragan, the local school has made use of solar panels to generate its own electricity supply, with the surplus being sold back to the mains power grid. A number of churches have also explored this option, which is one way the church can be helping the environment even when it is not in use.*

---

#### WEB LINKS TO FIND OUT MORE

Uniting Church in Western Australia – Green Church <http://greenchurch.wa.uca.org.au/>

UnitingJustice Australia, Cherishing Creation - [www.nat.uca.org.au/unitingjustice/cherishingcreation/](http://www.nat.uca.org.au/unitingjustice/cherishingcreation/)

<http://fiveleafecoawards.org/>

The Five Leaf Eco-Awards are an ecumenical environmental change program specifically designed for churches. The awards assist, inspire and reward churches for taking environmental action and becoming more sustainable in response to God's call to care for creation.

Men of the Trees - <http://www.menofthetrees.com.au/>

Maroubra Junction Uniting Church: Project Green Church - <http://hopeuniting.org.au/ministries/project-green-church/>

Boomerang Alliance - <http://www.boomerangalliance.org/>

Carbon Neutral: Turn emissions into trees - [www.carbonneutral.com.au](http://www.carbonneutral.com.au)

Friends of the Earth (Australia) – <http://www.foe.org.au/>

Greenpeace Australia Pacific - <http://www.greenpeace.org/australia/en/>

Treehugger - <http://www.treehugger.com/>

An Inconvenient Truth - <http://www.takepart.com/an-inconvenient-truth/film>

The Climate Institute Australia – <http://www.climateinstitute.org.au/>

---

## ECOLOGICAL FOOTPRINTING TOOLS

Do you want to find out how much carbon you or your congregation use? Here are some helpful sites.

*A simple way of starting is to collect a year's worth of power bills. How many units do you use each day? Take some energy saving measures and see if you can reduce the number!*

Carbon Cops – An ABC TV program helping families reduce their ecological footprint:

<http://www.abc.net.au/tv/carboncops/>

Powerhouse Museum Footprinting Tool- <http://www.powerhousemuseum.com/ecologic/>

Environmental Protection Agency of Victoria - <http://www.epa.vic.gov.au/>

---

## ECO-THEOLOGY WORSHIP RESOURCES

Try these sites for great ideas on holding Church services which focus on the environment.

Seasons of Creation - <http://seasonofcreation.com/>

Scots Uniting Church Ecofaith Ministry - <http://www.ecofaith.org/>

World Council of Churches Creation time worship resources from around the world

<http://www.oikoumene.org/en/what-we-do/climate-change/time-for-creation>

The screenshot shows the website for the World Council of Churches, specifically the 'Time for Creation' page. The header includes the WCC logo and name, with navigation links for 'About us', 'Member churches', 'What we do', 'Get involved', 'Resources', and 'Press centre'. A search bar is visible in the top right. The main content area features a sidebar with a list of prayer themes from 2009 to 2013. The main text describes 'Time for Creation' as a period from September 1st to October 4th, linking it to the beginning and end of the church year. It mentions that September 1st was proclaimed as a day of prayer for the environment by the late Ecumenical Patriarch Dimitrios I in 1989, and that October 4th commemorates Francis of Assisi. A photograph of a man holding a sapling is shown on the right side of the page.

---

## COMMIT TO CARE FOR THE EARTH - A PRAYER FOR CREATION

I believe in the sacredness of the earth.  
The integrity of the whole of creation and  
dignity of all people and creatures.  
I believe in a gracious God who created humankind  
male and female, and gave them the responsibility  
to care for the earth. We need to care.  
I believe we human beings have failed God and  
ourselves.  
In the name of greed and development  
we have dominated the earth.  
The people and creatures destroyed the forest  
polluted the air, river and seas and have  
sacrificed the future of our children. We need to  
change.  
I believe that when we destroy the earth  
we eventually destroy ourselves.  
We must protect and preserve the earth  
not only for our own survival  
but for the sake of our mother earth.  
The time to change is now.  
I believe we need to change our ways, values, and  
lifestyle and ways of relating with creation.

Consume less, waste not, work for justice and  
peace.  
We should not covet our neighbour' s timber,  
butterflies,  
white sand beaches, nearly extinct animals nor  
cheap labour  
We should not oppress children, indigenous  
people  
women, the homeless, refugees and victims of  
war.  
We need to live in the sense of people and  
creation.  
For I believe in the inter-woven-ness of life.  
Creator and creatures, cosmic and individual,  
west, north, east, south. Rest and prayer.  
Food and freedom. Theology and ecology.  
I therefore commit myself, together with you,  
To take care of mother earth.  
To advocate for peace and justice.  
To choose and celebrate life.  
These things I believe. Amen.

Elizabeth S Tapia Philippines in Gifts of Many  
Cultures, Pilgrim Press, Cleveland 1995

## ADVOCACY – CLIMATE REFUGEES

There are many issues to take in where we begin to consider our personal and collective impact on the environment around us.

Climate change has had, and will continue to have, a marked impact on the way people are able to live their lives. The effects of climate change has the potential to ruin infrastructure and traditional industry, deplete fresh water and food supplies, and change the social and cultural patterns that have grown around everyday practices. It has the potential to impact detrimentally on lifestyles and livelihoods around the world and potentially leading to widespread humanitarian disaster, famine and displacement.



One of the most troubling aspects is that climate change will affect the world's poorest first while they are not responsible for the bulk of global carbon emissions. In places where people live closely with the land; where infrastructure does not provide a safety-net in times of economic decline; and in low lying nations where rising sea levels will swallow homes and agricultural land, people are already feeling the effects of global warming.

Over the next century, global warming will create a new group of displaced populations as seas rise and extreme weather patterns continue. It has been estimated that over 150million people will require resettlement by 2050 due to environmental problems. The term 'climate refugee' has been given to these displaced people.

The Pacific Region is an example of regions that have already, and will continue to be, affected by climate change. Rising sea levels, extreme weather, collapsing ecosystems and contamination of fresh water with salt water will make it impossible for the Pacific to be safe and stable place to live.

Some of the smallest and lowest lying countries in the world are located in the Pacific. Rising sea levels associated with climate change are devastating communities. Tuvalu, islands in Vanuatu, Kiribati, the Marshal Islands, Papua New Guinea and the Federated States of Micronesia could very soon be completely inundated by the rising sea.

Australia's response to the impending humanitarian crisis of climate change has been lacklustre. While the Australian Government has refused to recognise climate refugees, the New Zealand Government has

committed to receiving a yearly quota of refugees from the Pacific Access Category. Australia must re-examine its aid priorities in light of the imminent humanitarian problem caused by global warming.

In the 10<sup>th</sup> National Assembly, 2003, resolution *Tuvalu and the Impact of Global Warming* the Uniting Church called the Australian Government to:

- Immediately ratify the Kyoto Protocols in relation to global warming, especially because this has affected the nation of Tuvalu and other Pacific countries;
- Offer the guarantee of special immigration status to the people of Tuvalu, for immigration to Australia when its nation loses its viability for human habitation.

---

### WANT TO KNOW MORE?

The Citizens Guide to Climate Refugees by Friends of the Earth - <http://www.foe.org.au/introduction-leaflet-environmental-refugees>

UnitingJustice <http://www.unitingjustice.org.au/environment/uca-statements/item/480-tuvalu-and-the-impact-of-global-warming>

<http://www.unitingjustice.org.au/environment/information-and-action-resources/item/906-climate-change>

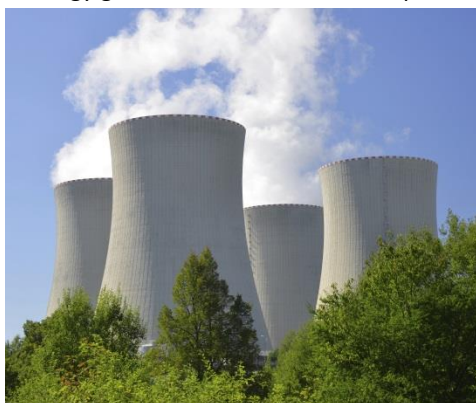
### FOOD FOR FURTHER THOUGHT

---

### NUCLEAR ENERGY

Some people have advocated for nuclear energy as an option for reducing global warming and a solution to the problems of carbon dioxide production and consequent greenhouse gas accumulation. Carbon dioxide is not generated during the actual production phase of nuclear energy; however the following matters have been raised and need to be considered.

- The carbon cost of building a nuclear power plant
- The high capital costs of building a nuclear power plant
- The high maintenance costs of running a nuclear power plant
- The high costs of decommissioning a nuclear power plant at the end of its useful life.
- The environmental and health hazards of uranium mining
- The hazards associated with containing high levels of radioactivity
- The problems of safe storage of nuclear waste
- The legacy of nuclear waste for future generations.
- The nexus between nuclear energy generation and nuclear weapons.



---

## UNITING CHURCH RESOURCES ON NUCLEAR ENERGY:

*The Nuclear Fuel Cycle – its impacts and role in the provision of energy in the future*

This paper was prepared so that the Uniting Church can participate from an informed and theologically sound position in debate surrounding the nuclear fuel cycle. Download it from here:

<http://www.unitingjustice.org.au/environment/information-and-action-resources/item/654-the-nuclear-fuel-cycle>

Nuclear Fuel Cycle Policy – Assembly Standing Committee, 2000

“Aware of the complexity of issues, but determines to work for a healthier and safer world the Uniting Church is committed to:

- Move to end the use of uranium through greater energy efficiency and research, development and implementation of environmentally benign renewable alternatives;
- Risk assessment in relation to the nuclear fuel cycle based primarily on the ‘precautionary principle’ rather than the ‘utilitarian principle’. (The precautionary principle means taking precautionary measures even if some cause and effect relationships are not fully established scientifically in order to prevent harm to human health or the environment.)”

<http://www.unitingjustice.org.au/just-and-sustainable-economy/uca-statements/item/465-nuclear-fuel-cycle-policy>

**The Social Justice Unit has prepared a briefing paper about Uranium Mining in WA Download it from the Green Church website –find it here:**

[http://green.wa.uca.org.au/?page\\_id=1125](http://green.wa.uca.org.au/?page_id=1125)

---

## SOME USEFUL INTERNET SITES RELATED TO NUCLEAR ENERGY

The Medical Association for Prevention of War (Australia) – [www.mapw.org.au](http://www.mapw.org.au)

Fact Sheets on the key issues that surround the current nuclear debate in Australia - <http://www.energyscience.org.au/>

BEIR VII: Health Risks from exposure to low levels of ionizing radiation - <http://www.nap.edu/openbook.php?isbn=030909156>

Public Health Association of Australia - <http://www.phaa.net.au/>

Anti-Nuclear Alliance of WA - <http://www.anawa.org.au/>

Australian Nuclear Science and Technology Organisation (ANSTO). ANSTO is Australia’s national nuclear research and development organisation and centre of Australian nuclear expertise. ANSTO has a strong track record in quality research, which balances ANSTO’s strategic mission and Australia’s National Research Priorities. <http://www.ansto.gov.au/ResearchHub/IER/index.htm>



## GREEN HOMES -IDEAS FOR SUSTAINABLE LIVING:

1. **Consume Less** Most people have a variety of options available to them when preparing to spend money on consumable items. Living simply is an important Christian value, and many of the choices we can make as consumers – like buying in bulk or buying local – are consistent with this.

When you are about to buy something, stop and think about whether you really need it. If, after thoughtful consideration, the answer is yes, here are some ideas of how to spend with the planet in mind.

- Take your own bags to the shops. As simple as this sounds, the introduction of the 'green' bags has made a difference. Australia has reduced its plastic bag usage from 6.5 billion to 4.5 billion per year.

Take your own bags  
to the shops.

Every time!

Plastic bags are  
harmful to the  
environment.



- Products which are less processed and packages use less energy to produce and reduce waste.
  - Buy fresh foods instead of frozen – frozen foods take ten times more energy to produce.
  - Buying high-quality products instead of disposable items might cost more initially, but they are less likely to break as quickly preventing wastage and save you money in the long run.
  - **Take one of two less car trips per week** – Use of private cars is a major contributor to greenhouse gas emissions, and Perth has a very high rate of car use, with many trips made for distances less than 5km. By substituting just one or two car trips a week with walking, cycling or public transport, we can help reduce greenhouse gas emissions as well as increase our personal fitness. For more information visit <http://www.transport.wa.gov.au/activetransport/24609.asp> Keeping your car tuned reduces the amount of carbon dioxide it produces. Things like keeping car tyres inflated and driving smoothly can also make a difference.
2. **When you buy a car – buy a fuel efficient one and drive it wisely!** – Found out more about the best vehicles in the Green Vehicle Guide <http://www.greenvehicleguide.gov.au> You can also drive to minimise petrol consumption by keeping tyres inflated, keeping the car well maintained and driving conservatively.
  3. **Think about the food you buy** – Food production has a significant environmental impact with all the fossil fuels use in production and transportation, water consumption and fertiliser use. Some ways to minimise the impact of your food choices are:

- i. Choose less-processed animal products or reduce meat consumption
- ii. Choose organically grown produce where possible
- iii. Look for locally grown food or Fair Trade goods
- iv. **Think about everything you buy** – Every consumer item we buy requires significant energy and water produce. In addition, it has been estimated that Australians spend a total of over \$10.5 billion annually on goods and services that are never or hardly used. Think about every purchase that you make and look for goods that have less environmental impact. Also think about social sustainability and buy Fair Trade where ever possible. See [www.fairtrade.com.au](http://www.fairtrade.com.au)



- 4. **Use Less Water in the Garden** – About 50% of household water consumption in Perth goes onto gardens and lawns. Apart from following water restrictions you can:
  - i. Plant Australian plants which use less water than exotic species and will attract birds
  - ii. Mulch your garden to keep the soil from drying out
  - iii. For more ideas see [www.watercorporation.com.au/save-water](http://www.watercorporation.com.au/save-water)
  - iv. A simple way to reduce water consumption in the home is to reduce your time in the shower and install a water efficient shower head.

5. **Reduce waste by composting food scraps** –

80% of domestic food waste in Perth is made up of organic food scraps, which can be composted or given to a worm farm, both of which create an excellent natural fertiliser for your garden. See [www.wasteauthority.wa.gov.au/residential](http://www.wasteauthority.wa.gov.au/residential)

6. **Reduce food waste by menu planning**

It is estimated that one out of every three bags of groceries bought in Australia is wasted due to food spoilage. Eliminate waste and save money too by planning your meals and then buying just what you need. Plan for ‘leftovers’ to be used rather than thrown out- freeze them for later use, add them to soups or stews or add some pastry and make a pie!

- 7. Recycle –go further than you Council scheme( if indeed you have one)

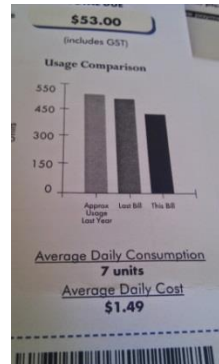
Did you know you can return old mobile phones to a retailer for recycling?

<http://www.mobilemuster.com.au/>

You can also recycle things like computers and white goods. Ask your local council.

You can donate unwanted items on Freecycle, which is a web-based group designed to stop used items ending up in landfill. Anything from old magazines to broken furniture someone might be able to fix can be donated. It's always good to remember that one person's trash is another person's treasure. Find your nearest group here: <https://www.freecycle.org/search>

8. **Make your home more energy efficient** – Electricity is primarily generated by burning fossil fuels; this is one of the most significant contributors to greenhouse gas emissions. Some of the ways to reduce energy use in the home are :
- i. Use shade and natural ventilation to cool your home
  - ii. Cut hot water consumption by washing clothes in cold water and by fitting a water efficient shower head
  - iii. Use compact fluorescent light
  - iv. See [http://www.synergy.net.au/at\\_home/energy\\_saving\\_tips.xhtml](http://www.synergy.net.au/at_home/energy_saving_tips.xhtml)



*Install solar panels and watch your electricity bills reduce.*

## 2014 POLICIES FOR A GREENER CHURCH

In August 2014 the General Council agreed to the following policies:

### SUSTAINABLE BUILDINGS POLICY

#### Introduction

The Synod of Western Australia owns and manages many buildings. It also commissions new buildings. The Uniting Church's concern for Creation will guide our decisions in all areas of our life together so that, as far as is practicable, we can reduce damage to our environment and increase the sustainability of our work together.

#### Objective

The Uniting Church in Australia Synod of Western Australia will reduce its carbon footprint by reducing its greenhouse gas emissions occurred for the construction and maintenance and purchasing of buildings for church, school and agency use.



## Scope

This policy applies to

- New and existing properties owned by the Synod of WA and associated agencies

## Responsibilities

The Synod commits itself to:

- Introducing operational efficiencies in upgrades of its own building stock to achieve measurable environmental improvements, specifically looking at energy and water use.
- Develop and choose materials, techniques and practices that have an increasingly diminishing environmental footprint.
- Modify design and construction techniques in order to facilitate adaptation and re-use of materials and buildings in the future.
- Purchase/lease buildings that are built for the local environmental conditions and have a small environmental footprint.
- Adapt and re-use materials and buildings as a sustainable practice.
- Purchase new properties after due consideration to the environmental costs of the property, its ability to be used in a sustainable way and with the aim of being a best practice model for other communities.

## Procedure

The Synod will record and measure the environmental impact of its new buildings by:

- Commissioning builders and architects to use best practice environmentally friendly materials, methods and designs.
- The Synod will work to reduce the impact of its existing buildings by
  - Monitoring water and energy use
  - Engaging with the users of the buildings to modify the use of water and energy to minimise their use

- Replacing fittings and fixtures and appliances where maintenance demands, with more energy and water efficient ones.
- Where the Synod cannot avoid carbon emissions we will offset them by practices designed to mitigate carbon emissions by investing in tree planting which will absorb carbon emissions and improve native habitats OR investing in the Synod’s own Offset Sustainability fund.
- The General Secretary will report on its application of this policy to Synod in session and will chart the reductions in carbon footprint over time.

**Related Policies and Procedures**

- Motor Vehicle Fleet Management Policy
- Air Travel Policy
- Congregation Sustainable Practice Policy
- Landscaping Policy

---

**POLICY ON SUSTAINABILITY AND MOTOR VEHICLE FLEET MANAGEMENT**

**Introduction**

Motor vehicles are a significant source of air pollutants that cause smog and unhealthy air conditions. This air pollution causes asthma, cancer, heart disease, birth defects, and brain damage. In addition, these vehicles emit close to one-third of the country’s total annual carbon dioxide emissions. By consuming vast amounts of petroleum fuel, motor vehicles reduce Australia’s energy security.

The Uniting Church’s concern for Creation will guide our decisions in all areas of our life together so that, as far as is practicable, we can reduce damage to our environment and increase the sustainability of our work together.



**Objective**

The Uniting Church in Australia Synod of Western Australia will reduce its carbon footprint by reducing its fleet related greenhouse gas emissions.

**Scope**

This policy applies to

- Fleet vehicle purchases by the Synod of Western Australia and associated agencies

### Responsibilities

Fleet managers and Church centre staff will reduce the negative human and environmental impacts of vehicles through:

- trip planning and reduction (for example by Car-pooling),
- improved maintenance and operation of conventional vehicles,
- use of fuel-efficient vehicles,
- Replacement of gasoline and diesel with clean, low-carbon alternatives.

### Procedure

#### 1.1 Cost, Quality & Supply

In greening its fleet, the Synod will move towards new initiatives such as new hybrids, battery hybrid-electric and pure electric vehicles.

Helpful advice about comparisons between vehicle makes and models can be found at

<http://www.greenvehicleguide.gov.au/GVGPublicUI/home.aspx>

**1.2** Where the Synod cannot avoid carbon emissions we will offset them by practices designed to mitigate carbon emissions by contributing to the Offset Sustainability fund at the rate of \$23 per tonne.

The General Secretary will report on the application of this policy to the Synod in session and will chart the reductions in carbon footprint over time.

### Related Policies and Procedures

- Air Travel Policy
- Congregation Sustainable Practice Policy
- Sustainable Buildings Policy
- Landscaping Policy

---

## SUSTAINABLE LANDSCAPING POLICY

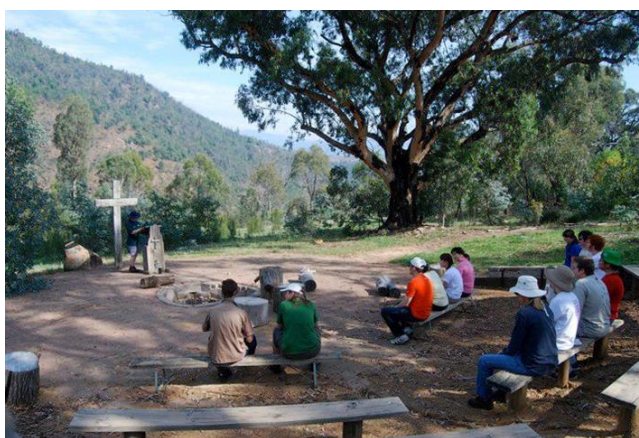
### Introduction

This policy has been prepared to enable Uniting Church congregations and agencies to live sustainability within the environments in which we live and operate.



## Objective

- To promote improved landscape provision and design to align with a sustainable approach to living.
- To improve the visual impact appeal of developments associated with churches, schools, colleges, agencies and other church properties.
- To assist in education and outreach about the Uniting Church in Australia's concerns about the environment to different community groups.
- To promote environmental sustainable landscaping.
- To enhance the use of the local environment for Church purposes.
- To enable Churches to focus on their mission and ministry by reducing the time and cost required to manage landscapes.



## Scope

This policy applies to

- Managers of all church properties.
- Leaders in church schools and colleges.
- Managers of church agencies (aged care) facilities.

## Responsibilities

Properties owned by Uniting Church in Australia Synod of WA through its Property Trust are managed by agencies and congregational boards on behalf of the Synod. These groups are required to apply this policy and to report to General Council on its implementation.

## Definitions

- a. Sustainable landscaping encompasses a variety of practices which incorporate environmental issues. These practices are used in the different phases of landscaping (including design, construction, implementation and management) of residential and community facilities.
- b. Landscapes in this context are the areas outside buildings over which we have some control.

c. Sustainable landscapes include those which will be easy or low cost to maintain, will not damage native species or wildlife over the long term and which will not require unreasonable amounts of carbon-based energy to either create or maintain.



d. Community gardens

Where there are community vegetable and fruit gardens these may be contributing to the food security and sustainability of a locality and therefore can also be described as sustainable landscapes, even though they require more maintenance and will include non-Indigenous plants.

#### **Procedure**

a. Existing landscapes or gardens: Churches or church agencies should begin by conducting a survey of the current landscape or proposed landscape, to determine the ways in which a more sustainable landscape could be created, using advice from the Green Church website and other sources.

b. Churches or Church agencies then take steps such as

- Reduction of water use in landscapes through design of water-wise garden techniques.
- Reducing the carbon dioxide load in the environment -by reducing the need for petrol driven lawn-mowing for example.
- Integrated Pest Management techniques including but not limited to:
  - o Creating and enhancing wildlife habitat in urban environments
- Energy-efficient landscape design in the form of proper placement and selection of shade trees and creation of wind breaks.
- Selection of paving materials on walk ways to reduce storm water run-off and allow rain water to infiltrate into the ground and replenish groundwater.
- Recycling of products in the landscapes (e.g. mulching types).
- Maintaining and enhance the condition of the soils through recycling (compost and kitchen wastes).
- Integration and adoption of renewable energy (e.g. solar-powered lighting).



c. New landscapes or gardens: using the above steps in mind, create the most sustainable garden or landscape possible within budget and site limitations.

#### **Related Policies and Procedures**

- Motor Vehicle Fleet Management Policy
- Air Travel Policy
- Congregation Sustainable Practice Policy
- Sustainable Buildings Policy

---

## CONGREGATIONAL SUSTAINABLE PRACTICE



#### **Introduction**

In response to policies adopted by the Uniting Church Assembly and the Synod of Western Australia:

- Synod Resolutions 29/2001 advocating sustainable policy and practice
- Synod resolution 51/2005 Energy and sustainability
- Synod resolution 59/2007 Modelling Sustainability

the Synod encourages all congregations to minimise their impact on the environment by preventing pollution and continually improving our environmental performance by increasing communication and awareness of our efforts in accordance with this policy and fostering environmentally responsible behaviour amongst our members and the wider community.

We ask each congregation to accept that they have an obligation to demonstrate good environmental stewardship and social responsibility to the community, as we recognize the need for responsible and sustainable development and the pursuit of social justice.

#### **Objective**

The principle objective of the Congregational Sustainable Practice Policy is to

- Reduce the impact of the activities of the Uniting Church in Australia Synod of Western Australia upon the environment as measured by our carbon pollution, water and energy use.



## **Scope**

This policy applies to

- Congregations in the Synod/Presbytery of Western Australia

## **Responsibilities**

In conjunction with Synod agencies, congregations are responsible for

- 4.1 Fostering an environmentally responsible culture throughout the congregation and encouraging members to develop new ideas and initiatives;
- 4.2 Reducing the energy and water intensity of their operations;
- 4.3 Purchasing Green Power;
- 4.4 Reducing the amount of waste the congregation produces, and maximising the amount reused and recycled;
- 4.5 Moving as far as practicable towards the use and production of electronic rather than paper based resources and records.
- 4.6 Making environmentally-sound purchasing decisions for capital items and consumables;
- 4.7 Preventing and minimise pollution from their activities;
- 4.8 Reducing the greenhouse gas emissions associated with travel and encouraging the use of public transport and car-pooling.
- 4.9 Striving for continual improvement in the congregation's environmental performance and empowering members to minimise our environmental impacts through regular reporting, generating awareness, and encouraging participation and feedback;
- 4.10 Encouraging others to adopt environmentally sustainable practices by sharing our knowledge and promoting behavioural change, through community awareness and leading by example.

## **Procedure**

- 5.1 Congregation makes a commitment to comply with the sustainable practice policy and reports this commitment to the Synod via the General Secretary after a congregational meeting.
- 5.2 Congregation engages in a study of the "For the sake of the planet and all its people" and The Rights of Nature and the Rights of Future Generations polices.

- 5.3 The congregation starts to measure its environmental footprint
- 5.4 The congregation creates a strategy for reducing its environmental footprint
- 5.5 The congregation includes its environmental footprint in reports on congregational activity at the Annual Meeting of the congregation
- 5.6 Congregations are requested to send the reports to the General Secretary

#### **Related Policies and Procedures**

- Motor Vehicle Fleet Management Policy
- Air Travel Policy
- Sustainable Buildings Policy
- Landscaping Policy

---

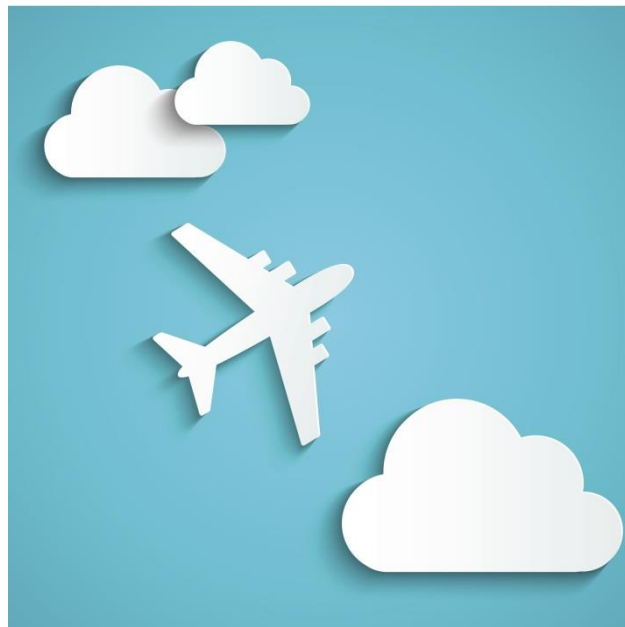
## **AIR TRAVEL POLICY**

### **Introduction**

Air Travel is costly to the environment

A return flight from Perth to Sydney results in the equivalent of 1.95 tonnes of carbon dioxide (CO<sub>2</sub>) per person entering the atmosphere (that's nearly half the emissions of the average car over a whole year). Air travel is particularly damaging to the environment

The Uniting Church's concern for Creation will guide our decisions in all areas of our life together so that, as far as is practicable, we can reduce damage to our environment and increase the sustainability of our work together.



### **Objective**

The Uniting Church in Australia Synod of Western Australia will reduce its carbon footprint by reducing its air travel related greenhouse gas emissions.

## Scope

This policy applies to:

- Air travel by employees, ministers and others authorised and funded by the Synod of Western Australia and associated agencies.

## Responsibilities

Managers will reduce the negative human and environmental impacts of air travel through

- trip planning and reduction,
- use of alternative meeting technologies such as phone conferencing, video conferencing
- use of alternative travel methods where practicable –such as rail travel to Kalgoorlie and Bunbury.

## Definitions

Offsetting is a way to effectively reduce emissions at times when we can't reduce our emissions through energy efficiency, or switching to an alternative technology.

## Procedure

Offsetting the Emissions incurred in air travel

The Synod of Western Australia will:

- Work to reduce the number of air miles required as part of the Churches' work by 5% per year
- Keep accurate records of Synod-funded air miles per year
- Calculate a cost of the air travel we make on the environment using a calculator such as <http://www.carbonneutral.com.au/carbon-calculator/air-travel.htm>
- For each 1 tonne of carbon pollution from air miles, the Synod will direct the Financial controller to deposit in a fund set aside for the purpose, the sum of \$23.00
- Moneys from this fund will be available to churches and church related agencies to engage in carbon lowering technologies and improvements such as but not limited to
  - o Purchase and installation of solar panels on roof of church or manse
  - o Purchase and installation of insulation in the roofs of church or manse buildings
  - o Purchase and installation of fuel efficient heating/cooling appliances

## Reporting

The General Secretary will report on its application of this policy to Synod in Session annually and will chart the reductions in carbon footprint over time.

## Related Policies and Procedures

- Motor Vehicle Fleet Management Policy
- Congregation Sustainable Practice Policy
- Sustainable Buildings Policy

- Landscaping Policy

Interested to read more?

## We must reconsider our need to fly

By Thea Ormerod | <http://www.eurekastreet.com.au/article.aspx?aeid=41832#.U-10pPm4WnV>

<sup>1</sup> *The impact of planes on the climate is complicated and not perfectly understood. The CO2 emissions are straightforward enough, but plane engines also generate a host of other "outputs", including nitrous oxide, water vapour and soot. At flying altitudes in the upper troposphere and lower stratosphere, these outputs produce a range of climatic effects, multiplying the plane's environmental impact. For example, nitrous oxide causes the formation of ozone — a greenhouse gas that warms the local climate — but at the same time undergoes reactions which destroy methane, thereby removing another greenhouse gas from the atmosphere.*

*Even more complicated is the impact of soot and water vapour, which together can cause contrails (vapour trails) and in cold air can lead to the formation of cirrus clouds. The science surrounding this topic is not yet rock solid, but researchers believe that contrails add to the greenhouse effect — especially at night, when their tendency to stop heat escaping from the Earth isn't offset by their tendency to reflect incoming sunlight.*

*Today, most experts favour an aviation "multiplier" of around two. In other words, they believe that the total impact of a plane is approximately twice as high as its CO2 emissions. The exact multiplier, however, will always depend on the individual plane, the local climate and the time of day. This article is adapted from [The Rough Guide to Green Living](#) by Duncan Clark.*

<http://www.theguardian.com/environment/2010/apr/06/aviation-q-and-a>

## UNITING CHURCH WA SYNOD RESOLUTIONS 2014

The 2014 Synod agreed to the following resolutions with regard to the environment

### DIVESTMENT FROM FOSSIL FUELS

1. The Synod Notes:
  - a. the long commitment of the Uniting Church to social, environmental, and intergenerational justice, which is expressed in various Assembly documents
    - Statement to the Nation; For the Sake of the Planet and all its People and; An Economy of Life;
  - b. the continued reluctance by some governments around the world to take action sufficient to keep climate change within the internationally agreed limit of two degrees or less;
  - c. that the amount of carbon in listed reserves owned by the global top 20 fossil fuel companies is five times greater than can be emitted while limiting climate change to two degrees, and therefore that action on climate change would turn most of these reserves into 'stranded assets';

- d. the resolution by the NSW.ACT Synod to divest from direct fossil fuel extraction; the recent resolution of the Vic/Tas Synod to divest from companies mining or exporting the most damaging forms of fossil fuels; the resolution of the Assembly Standing Committee to divest from investments in corporations engaged in the extraction of fossil fuels and; the World Council of Churches' similar decision to divest from fossil fuels.
  - e. that the Uniting Church in Australia Synod of Western Australia uses the Ethical Investment Principles of the NSW.ACT Synod
2. Recognise that profiting from the fossil fuel industry is unethical due its polluting effects, particularly those associated with increasing the threat of climate change.
  3. Asks that the Social Justice Board and the Resources Board jointly begin a process of financial divestment from fossil fuels and implement the following measures over the next 12 months, taking advice from the NSW.ACT Synod, the Assembly Standing Committee and other Synods implementing similar divestment strategies, so that the Uniting Church Investment Fund:
    - a. not directly invest in companies involved in: mining and/or exporting thermal coal; coal powered energy generation; extracting or refining oil (including shale oil, tar sands oil, deep water drilling) or; extracting and/or exporting gas (including shale gas, coal seam gas, tight gas);
    - b. engage with Tier 3 and 4 companies about their indirect fossil fuel exposure (through their investment support of the aforementioned companies), with eventual divestment if response is unsatisfactory;
    - c. seek to invest in companies which preserve the environment through power generation from renewable sources.
  4. Asks the Resources Board to regularly report back to General Council about the financial implications of this process
  5. Ask the Social Justice Board to engage congregations to raise awareness and understanding of the need to divest and the process of divesting, and addressing the social implications of a transition to a non-fossil fuel economy for those now engaged in the industries involved
  6. Congratulate the NSW.ACT and Vic/Tas Synods, and the Assembly Standing Committee on their work towards divestment from fossil fuels, and urge the wider ecumenical church to join the movement to divest from fossil fuels.



---

## PROTECTION FROM THE IMPACTS OF UNCONVENTIONAL GAS EXPLORATION AND EXTRACTION

1. Note that the Hydraulic Fracturing ('Fracking') process:
  - a. uses large volumes of toxic chemicals at high pressure to extract gas;
  - b. is known to have contaminated groundwater aquifers;
  - c. produces significant greenhouse gas emissions in both the extraction process and post-production usage and;
  - d. impacts on natural landscapes and ecosystems, and agricultural productivity when situated on viable agricultural landholdings.
2. Ask the Government of Western Australia to recognise
  - a. the inadequacy of the Petroleum and Geothermal Energy Resources Act 1967 (WA) to protect the environmental integrity of gas fracking sites.
  - b. the increasing risks to ecosystem and human health due to the cumulative impacts of multiple gas fracking sites.
3. Call on the Government of Western Australia to place a moratorium on all unconventional gas exploration and extraction activities in Western Australia.
4. Call on the Government and people of Western Australia to move towards renewable energy and away from fossil fuels for the sake of the earth and its peoples.



Social Justice Board

**Uniting Church in Western Australia**

Green Church Handbook was written and compiled by Rosemary Hudson Miller, Wendy Longworth, Janine Bensusan, Alison Atkinson-Phillips, Cameron Montgomery, Eira Clapton, Daena Guest and Geoffrey Bice with contributions by Rev Isobelle Shortreed, Dr John Masarai and Rev Ken Devereux.