

In 2013 the Methodist Conference agreed:

That church groups, synods and parishes use 2014 to review and consider the [Methodist] position on global warming and the benefits of a low carbon economy including practical steps the Connexion can take.

Public Issues Network (PIN), with Methodist Trust Association (MTA) and Methodist Mission and Ecumenical (MM&E) has prepared resources on climate and transitions to low carbon. These are:

- Summary of resources on transitions to low carbon with theological references
- Update on Climate Science
- Overview of NZ policy on carbon emissions and climate policy
- What churches can do to transition to low carbon economies
- Briefing on Divestment
- Church decisions on care for creation, climate change and Responsible Investment



These are available at < http://www.methodist.org.nz/public_questions_network/index>

Hard copies are available from betsan@publicquestions.org.nz

Theological References

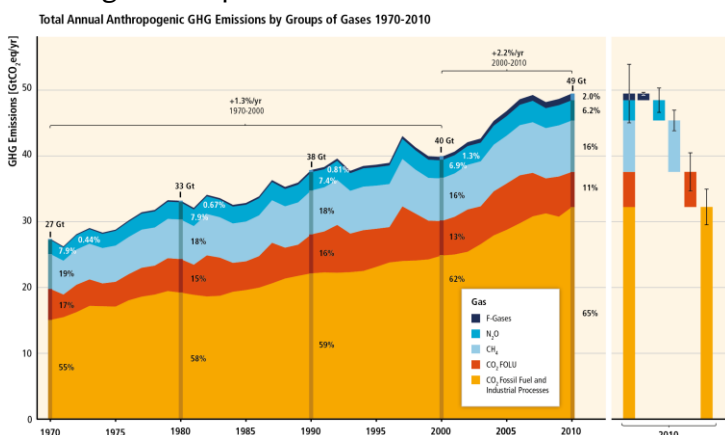
Theological themes for churches include:

- Creation: Job 38–39 and Colossians 1:16
- Consequences of acting without regard to the law of God, Jeremiah 14 and Isaiah 24
- Acting with covenantal hope Jeremiah.4: 23ff and Isaiah 35
- Restoring union with the creator: Isaiah 43, and Psalm 8
- Love and human interdependence, Luke 10:25-37
- Responsibilities of stewardship, Psalm 104, Psalm 113, Colossians 1:16, Matthew 6:19-2.

For theological resources see: www.operationnoah.org/

Climate Science Update

The Fifth IPCC Report (International Panel on Climate Change), 2013 confirms that the surface of the earth is warming at an exponential rate.



Escalating industrial development is the cause of climate change, with the burning fossil fuels, especially oil and coal, and corresponding release of carbon dioxide, CO₂ into the atmosphere. In 1990, 21,500 metric tons of carbon were released into the atmosphere. In 2013 this rose to 28,000 tons.

Climate: an inter-woven universe

Climate change is about pollution. More CO₂ is entering the atmosphere than can be absorbed by trees through photosynthesis, or by the oceans or by breakdown, as CO₂ is a very stable compound.

Radiation from the sun entering the atmosphere becomes trapped because of the concentration of CO₂, and this is causing the temperature of the earth's surface (earth and oceans) to rise. Cutting down forests reduces the capacity to take up the impact of high levels of CO₂. Other gases such as methane and nitrous oxide also trap heat, but they do not last as long in the atmosphere.

The increase in CO₂ comes principally from burning fossil fuels – coal, oil and gas. This contains carbon that was buried hundreds of thousands of years ago, producing the low CO₂ levels that has enabled our environment to develop. CO₂ is taken out of the atmosphere by vegetation growth, but is released when the vegetation is burnt. CO₂ is also absorbed in the oceans, but this causes an increase in acidity which kills corals and weakens the shell formation of shellfish.

The warming of the oceans causes them to expand which results in sea level rise. Warming is also making glaciers and land-based ice sheets melt, also contributing to sea level rise.

Climate change has impacts on health, some beneficial, others detrimental. It has been shown that the detrimental effects far outweigh the benefits, with changing patterns of diseases and new infections.

The expectations of severe food shortages will bring the most hardship to poor communities, in New Zealand and in other countries. Communities are being destroyed by severe weather such as hurricanes, and by sea level rising is making life unviable in low lying and Island states.

Safe Limits?

So far the earth's temperature is .6° above the temperature in 1950. Any more than 2° will cause an irreversible tipping point of the climate. 2° is measured on the basis of 350 parts per million (ppm) of carbon dioxide in the atmosphere. In 2013 we reached 395.5 ppm, and 28,000 metric tonnes of carbon. At the current rate of carbon emissions 2° will be reached in 30 years, and probably 4° C by 2100.

New Zealand Emission Policy and Profile

The New Zealand Emissions Trading Scheme (NZ ETS) is a financial market-based approach to reducing emissions. The Government has chosen the New Zealand [Emissions Trading Scheme \(NZ ETS\)](#) as its primary tool to reduce emissions, as it is the least-cost way of reducing emissions.

New Zealand Units of carbon are traded under the ETS, with forestry, transport, fossil fuel energy, industry, synthetic gas and waste all measured as NZUs to account for their direct greenhouse gas emissions or the emissions associated with their products. Agriculture is excluded from the ETS, yet agriculture contributes 47.2% of New Zealand's emissions.



New Zealand is protecting primary industries from our climate accountability. Forestry gives New Zealand carbon credits, and electricity generation from renewable sources, hydro and geothermal, puts us in the midline of emissions for developed countries.

Methodist Transitions to Low Carbon Economies

Practical actions are paramount.



- ✚ Would the church prioritize using recycled materials, recycle-able, biodegradable, low carbon and fair trade products in procurement policies?
- ✚ Could some PAC funds be used for energy reduction on church properties through solar panels, wind mills, double glazing, insulation and rain water tanks?
- ✚ A checklist for rebuilds and repairs using renewable energy, passive solar

- ✚ Plant food and fruit trees on church property?
- ✚ Explore co-operative models of Church and enterprise support low carbon economies
- ✚ Make climate change an issue for the 2014 national elections by asking local candidates to present their policies, and/or arrange meetings for them to talk about it

Divestment

Divestment is an option being promoted by 350.Org (www.350.org.nz) and the Anglican church. Divestment means withdrawing financial investment from major fossil fuel companies to stop the expansion of fossil fuel industry and send a signal of investor opposition to further extraction of fossil fuels – coal and oil. Fossil fuel reserves in company books are five times the amount of CO₂ that we can burn to hold climate warming to 2 degrees.

The Church, Climate Change and Responsible Investment Guidelines

The Social Principles of the Methodist church include ‘wise and careful conservation of the world’s physical resources’. However climate change involves economic, social and environmental dimensions, as well as financial investment considerations.

The church investigated socially responsible investment options. Investors have a duty to act in the best long term interests of their beneficiaries or stakeholders. This fiduciary role includes taking account of environmental, social and corporate practices, as these can affect the performance of investment portfolios. Guidelines include employment conditions, indigenous interests, responsible use of resources, and long term sustainability.

Our move toward low carbon economies is to recognize human interdependence with all creation, and the importance of a careful role in the community of life.