

Bright Now: towards fossil free Churches



BRIGHTNOW
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Foreword

Church investments are a sensitive area. Managed by dedicated and experienced financial advisors and church treasurers, they provide security for countless working and retired clergy and enable the infrastructure and buildings of the Church to be maintained and contribute to the mission of the church in a wide variety of ways. However, this report sets out to challenge the status quo. Current ethical guidelines for investments are simply not adequate as humanity faces the overwhelming challenge of climate change.

This report provides a clear and challenging case for the need to move church investments out of fossil fuels. In doing so the Church would show its faith in a low-carbon future, help reframe the debate and inspire hope. Investment in renewable energy, energy conservation and sustainable infrastructure is consistent with Christian values and would provide much-needed capital and symbolic approval for these sectors. Moreover this report unpacks the growing risks around investment portfolios strongly biased in favour of fossil fuels.

In the Gospels (Mark 12: 28-31; Matthew 22:36-40 and Luke 10:25-28) Jesus gave us two commandments – to love God with all our hearts, minds, souls and strength, and to love our neighbour as ourselves. But how do we show our love for God if we stand by while his precious creation is damaged? How can we love our neighbour if we ignore the impact of climate change on poor communities?

Now is the time to act. Last year global energy-related CO₂ emissions reached a record high, increasing by 1.4% to reach over 30 gigatonnes. The energy sector accounts for around two-thirds of greenhouse-gas emissions, as more than 80% of global energy consumption is based on

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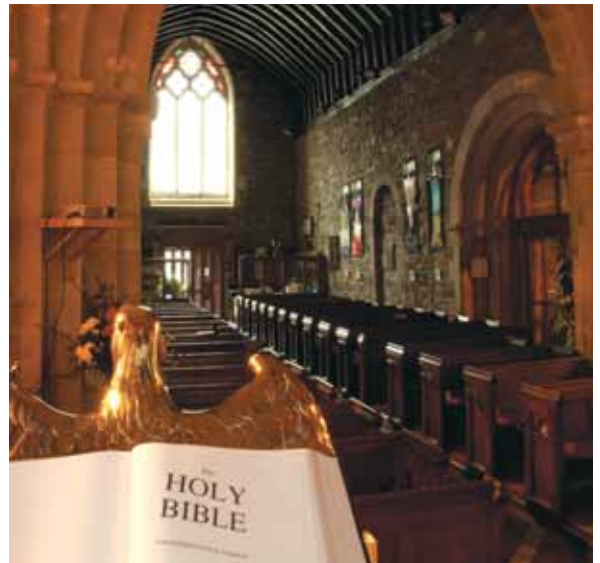


Photo: Jim Mitchell

fossil fuels.¹ By showing clear moral leadership now, the Churches could influence the direction of this country, and others, towards a sustainable and just future.

In 2012 Operation Noah produced the Ash Wednesday Declaration² which challenges all Christians to realise that concern about climate change, and care for this fragile and beautiful creation, should be central to our faith. This issue is a key outworking of this declaration.

Operation Noah is therefore calling on the Churches and the Christian community in the UK to:

- **disinvest** from companies involved in the extraction of fossil fuels
- **take** a leading and influential role in the national debate on the ethics of investment in fossil fuels
- **support** the development of clean alternatives to fossil fuels through their investment policies.

Please read this report carefully. We hope it will encourage you to join our call.

Dr Isabel Carter, Chair of Operation Noah



¹ International Energy Agency, Redrawing the energy-climate. June 2013. http://www.iea.org/publications/freepublications/publication/WEO_RedrawingEnergyClimateMap.pdf

² Climate change and the purposes of God: a call to the Church, 2012, <http://www.operationnoah.org/ash-wednesday-declaration>

Executive summary

This report sets out the compelling theological, moral, scientific and financial reasons why Churches of all denominations should completely divest from publicly listed companies involved in the extraction of fossil fuels (oil, gas and coal), as soon as possible.

Climate change is already upon us and will intensify rapidly. Its worst impacts will be upon people in poor communities in geographically vulnerable regions. We need to make a decisive break with fossil fuel dependency.

Operation Noah's Ark Wednesday Declaration acknowledges that runaway global warming would be a disaster for present generations and for the earth, and would burden future generations with untold ecological debts. The Declaration recognises that, as Christians, we have a responsibility to heed the evidence and to act prophetically.

At current rates of oil, gas and coal consumption, in only a few more decades humanity will have emitted far more carbon than is compatible with a safe climate. Because proven fossil fuel reserves far exceed the total amount of carbon we can 'safely' burn, much of the world's known oil, gas and coal must be left in the ground. Fossil fuel companies should be using their knowledge, skills, expertise and resources to develop solutions to climate change rather than actively working to accelerate the causes.

UK Churches have committed to respond to climate change, and they see ethical investment as an integral part of their mission. But their current ethical investment policies and practices do not make these connections.

They are not yet addressing the need to divest from fossil fuels.

As of September 2014, 181 institutions and local governments, and 656 individuals, representing an estimated \$50 billion in assets, have divested from fossil fuels. This includes 49 local and national churches.³ UK institutions that have pledged to make their investments fossil-free include the British Medical Association (BMA), Oxford City Council, the University of Glasgow and the Joseph Rowntree Charitable Trust. Churches and faith communities from around the world that have committed to divest now include the Church of Sweden, the World Council of Churches, Quakers in Britain, Brighthelm United Reformed Church, the Uniting Church in Australia and the United Church of Christ in the US. The Presbyterian Church in New Zealand voted to divest from fossil fuels at its General Assembly in 2014, while five Anglican dioceses in New Zealand and three Anglican dioceses in Australia have also committed to divest.

As recognition of the need to divest from fossil fuels grows among Churches and others, we call on UK Churches to act decisively. Negotiations for a new international agreement to hold global warming below 2°C (with a deadline of December 2015) provide a good opportunity for church denominations to achieve complete divestment from fossil fuels, and to help lead the transition to a low-carbon economy.

This is an updated version of the original Bright Now report first published in September 2013.



Photo: Frank Reeder/Dreamstime.com

³ Arabella Advisors, *Measuring the Global Fossil Fuel Divestment Movement*, 2014, <http://www.arabellaadvisors.com/wp-content/uploads/2014/09/Measuring-the-Global-Divestment-Movement.pdf>, p.1.

The theological and moral case for disinvestment

A Christian response to climate change

Human-induced climate change, mainly a result of burning fossil fuels, is occurring fast and will confront humanity with its greatest ever challenge.⁴ The earth is on a pathway to global warming well beyond the 2°C internationally agreed as the maximum possible if we are to avoid cataclysmic climate change.

As Christians, how can we hear the science and its implications and not act by realigning our investment strategies with a vision for a sustainable future?

'The earth dries up and withers, the world languishes and withers, the heavens languish with the earth. The earth is defiled by its people; they have disobeyed the laws, violated the statutes and broken the everlasting covenant.'

Isaiah 24:4-5

Poor communities in vulnerable regions – people least responsible for causing climate change and least able

to adapt – will be most affected. Large-scale population displacement is highly likely, and future generations will suffer cumulative effects.

'It would be a serious catastrophe for my country if much of the land in Bangladesh disappears under the sea. I become frightened to think that my grandchildren will have no place to live on this planet earth.'

Rt Revd Michael S Baroi, Bishop of Kushtia, Bangladesh

Humanity has always had the capacity to damage the environment, but we now have this to an unprecedented extent. Whereas previous generations did not know the harm they were causing, today we do. Governments have not yet shown the leadership necessary to limit and reduce fossil fuel consumption and accelerate the transition to a low-carbon economy.

Christ teaches us to love all our neighbours, not just our own family and friends. This love extends to grandchildren and future generations. Humans, made in God's image, have responsibility for the care of creation. If we do not act now, we are, in effect, asking future generations to sacrifice their well-being so that we can continue to live carbon-dependent lives.

The Ash Wednesday Declaration on 'Climate change and the purposes of God', signed by senior church leaders, acknowledges that runaway global warming would undermine food security, accelerate species extinctions, make human life impossible in many parts of the world, and burden future generations with severe and unjust ecological debts.⁵ The Declaration highlights how continuing to pollute the atmosphere, when we know the dangers, goes against God's will; that God grieves over the destruction of creation; and that repentance means finding immediate ways to address the danger.

For our generation, reducing fossil fuel dependence has become essential to Christian discipleship.

The Church of England has adopted a carbon reduction target of 80% by 2050 (in keeping with the UK Government's emissions reduction objective) and an interim target of 42% by 2020.⁶ The Baptist Union,



Photo: Wakenphotography/Dreamstime.com

4 United Nations Radio, 'Climate change is a "clear and present danger" to humankind says UN chief' (UN Secretary-General Ban Ki-moon), 2013, <http://www.unmultimedia.org/radio/english/2013/04/climate-change-is-a-clear-and-present-danger-to-humankind-says-un-chief> [all websites accessed August 2013].

5 The Ash Wednesday Declaration, *Climate change and the purposes of God: a call to the Church*, 2012, <http://www.operationnoah.org/ash-wednesday-declaration>

6 Church of England, *Shrinking the Footprint*, <http://www.churchofengland.org/about-us/our-buildings/shrinking-the-footprint.aspx>

Methodist Church and United Reformed Church have committed to reduce carbon emissions 'proportionate to the overall reductions necessary by 2050 of at least 80%' with 'urgent and immediate interim steps'.⁷ Quakers in Britain have committed to become a 'low-carbon, sustainable community'.⁸

Church investing and the low-carbon economy

The urgent transition to a low-carbon economy will come about only if people and institutions are prepared to change. The Churches, which recognise ethical investment as an integral part of their mission and witness, can lead the way with their financial stewardship. For example, the Church of England accepts a duty to avoid 'profiting from, or providing capital to, activities that are materially inconsistent with Christian values'.⁹ Epworth Fund Managers aim to be 'a Christian witness in the investment community'.¹⁰ While avoiding investments in alcohol, defence and gambling, however, most denominations still have substantial holdings in fossil fuels, with no clear commitment to change this in the near future.

Worsening climate change and continuing reliance on fossil fuels will increase fuel poverty and exacerbate poverty worldwide. By contrast, a low-carbon sustainable

Church investments in fossil fuel companies

To give an idea of the amounts of Church investment involved, in 2012 the Church of England's UK Equity Fund, Global Equity Fund and Investment Fund had over £60 million invested in major fossil fuel companies. The Church Commissioners and Pensions Board have further significant investments held in fossil fuels. In February 2014 the Methodist Church's UK Equity Fund had £52.5 million invested in oil and gas producers, with a further £1.5 million invested in oil equipment and services.¹¹

Could fossil fuel companies ever be considered ethical?

For a fossil fuel company to be considered ethical, it would need to:

- have diversification strategies in place away from fossil fuels
- have strategies in place to avoid exploiting the full potential of its existing fossil fuel reserves
- not exploit new fossil fuel reserves, especially in ecologically sensitive areas
- invest in carbon capture and storage
- work within safe targets for carbon emissions and urge governments to adopt and implement such targets.

Unfortunately, fossil fuel companies currently show no evidence of their responsibilities regarding fossil fuel pollution. They continue to seek to maximize the return on their investments from exploiting existing reserves and seeking new sources of oil, gas and coal.

economy would prioritise well-being, decrease fuel poverty in the longer term and generate jobs. The 2013 report Zero Carbon Britain describes in detail how the UK could achieve this.¹² A UK energy efficiency programme, especially one linked to a Green New Deal, would help transform the economy.¹³ Renewable energy already supports 110,000 UK jobs and could support 400,000 by 2020.¹⁴

Worldwide, known fossil fuel reserves now far exceed the total amount of carbon that could be burned without triggering climate catastrophe. Operation Noah believes therefore that it is immoral to develop new reserves. Yet oil, gas and coal companies continue to search for and develop more. An ethical approach by fossil fuel companies, which would merit church encouragement, would see them progressively diversifying into renewable technologies at a pace consistent with the mounting crisis, and ceasing to lobby on behalf of fossil fuel

7 Baptist Union, Methodist Church and United Reformed Church, *Hope in God's Future*, 2009, <http://www.jointpublicissues.org.uk/wp-content/uploads/2013/01/higf-studyguide-100909.pdf>, p.30.

8 Quakers in Britain, 'Minute 36: our Canterbury commitment', 2011, <http://www.quaker.org.uk/minute-36>

9 Church of England, 'Ethical Investment Policy of the National Church Institutions', <https://www.churchofengland.org/media/55096/Ethical%20Investment%20Policy%20of%20the%20National%20Church%20Institutions.pdf>

10 Epworth Investment Management, 'Mission', <http://www.epworthinvestment.co.uk/about/index.php>

11 Information from *Church Commissioners Annual Report 2012 and CFB Funds Performance Report 2014*. The Methodist Church's UK Equity Fund has a further £24.9 million invested in mining companies, some of which have an interest in coal.

12 Centre for Alternative Technology, *Zero Carbon Britain*, 2013, <http://zerocarbonbritain.org/>

13 Consumer Focus, 'Energy efficiency investment is one of best ways to boost the economy – new research reveals', 2012; *Independent*, 'A "Green New Deal" can save the world's economy, says UN', 2008; Green New Deal Group, 'Cuts won't work, but green spending will reduce public debt, create jobs, cut carbon', 2009.

14 BBC News, 'Renewables "help jobs and growth"', 2012, <http://www.bbc.co.uk/news/science-environment-17812299>

Regional bodies in the Church of England and Methodist Church call for disinvestment

In November 2014 the Diocese of Oxford passed a resolution urging the Church of England's National Investing Bodies to disinvest from fossil fuel companies. The resolution was based on a similar motion passed by Bracknell Deanery and calls for disinvestment from coal and tar sands 'at the earliest opportunity', from oil in three years and from natural gas in five years.¹⁵

This followed a motion passed by Southwark Diocesan Synod in July 2013 calling for the National Investing Bodies

to ensure that their investment policy (including the option of disinvestment) is aligned with the theological, moral and social priorities of the Church. This motion was debated and passed at General Synod in February 2014, with 274 in favour, one against and three abstentions.¹⁶

At Methodist Conference in June 2014 six memorials (resolutions) on fossil fuel investment, four of which called for disinvestment from fossil fuel companies, were brought forward from local Circuits and Districts.

expansion. Currently none are seriously attempting this. Investor dialogue, while often worth pursuing in other contexts, cannot hope to turn around these companies' core business strategies in time.

Recognition of the need to disinvest from fossil fuels is growing. The Church of England's report *Church and Earth 2009–2016*, written to support its Shrinking the Footprint campaign, suggested that the Church should by 2020 work towards disinvestment from fossil fuel and extraction companies and towards a carbon neutral portfolio.¹⁷ The Baptists, Methodists and United Reformed Church accept that 'Church policy in many areas, including the

investment of church funds, will need to be reviewed.¹⁸ The Methodists have committed to 'achieve a low and declining carbon footprint of CFB [Central Finance Board] investment portfolios'.²¹

Christians have historically influenced ethical investment as part of their mission and witness, such as in the South African disinvestment campaign under apartheid. Today, with governments negotiating a new international agreement to hold global warming below 2°C, and with a deadline of December 2015,²² there is fresh momentum for the Churches to act decisively in keeping with Christian theology and values.

'We are living on a planet that cannot be compartmentalised. We are one human family living together in God's world, for we not only depend on each other but also learn from each other. Thus to protect this planet from destruction, we need to take necessary and bold action together as one international family without delay!'

Bishop Paul S Sarker, Moderator of the Church of Bangladesh

Operation Noah's goal is that complete church disinvestment from fossil fuels should be achieved as soon as possible.

Quakers in Britain and Brighthelm United Reformed Church disinvest

Quakers in Britain disinvested their £21 million portfolio from companies engaged in fossil fuel extraction in 2013, declaring these investments to be at odds with their commitment to become a sustainable and low-carbon community.¹⁸ They were followed by Brighthelm United Reformed Church in Brighton, which became the first UK church congregation to commit to disinvest in May 2014. Brighthelm's minister, Revd Alex Mabbs, said, 'We don't want our money to support an industry that is killing the planet. Instead, we want to contribute to a world in which all life can flourish.'¹⁹

15 Operation Noah, 'Church of England Diocese decides to go fossil free', 2014, <http://brightnow.org.uk/news/church-england-diocese-decides-go-fossil-free/>

16 Diocese of Southwark, 'Southwark Diocese calls for the Church to take the lead in caring for the planet', 2013, <http://www.southwark.anglican.org/news/pr.php?id=2622>

17 Church of England, *Church and Earth 2009–2016*, 2009, <http://www.arcworld.org/downloads/christian-CofE-7YP.pdf>

18 Quakers in Britain, 'Quakers to disinvest from fossil fuels', 2013, <http://www.quaker.org.uk/news/quakers-disinvest-fossil-fuels>

19 Operation Noah, 'No more fossil fuels! says Brighthelm Church', 2014, <http://brightnow.org.uk/news/fossil-fuels-says-brighthelm-church/>

20 Baptist Union, Methodist Church and United Reformed Church, 2009, op. cit., p.31.

21 Methodist Church, *The Challenge for Ethical Investment: Ethical investment report 2010*, <http://www.methodist.org.uk/downloads/pi-JACEI-report-2010-250310.pdf>, p.2.

22 HM Government, 'Taking international action to mitigate climate change', 2013, <https://www.gov.uk/government/policies/taking-international-action-to-mitigate-climate-change/supporting-pages/negotiating-for-a-comprehensive-global-climate-change-agreement>

The scientific case for disinvestment

The current trajectory: 4°C to 6°C

In 2013 atmospheric concentrations of carbon dioxide (CO₂) reached 400 parts per million by volume, higher than at any time for 650,000 years. The Earth is now 0.8°C warmer than in pre-industrial times.²³ With CO₂ emissions rising at more than 2% a year, our planet is heading for a 4°C to 6°C temperature rise unless humanity decisively changes course.²⁴

A 4°C increase could come as early as the 2060s and severely worsen effects already under way, such as heating and acidifying oceans, rising sea levels, rapidly melting glaciers and polar ice, and more extreme weather events. Humanity would experience the flooding of coastal cities, freshwater shortages, food production deficits, malnutrition, epidemics, loss of biodiversity and population displacements of unparalleled severity. These impacts are likely to be 'inherently unequal and tilted against many of the world's poorest regions'.²⁵ Such a world may be 'beyond adaptation'.²⁶

Greenhouse gases and fossil fuels

CO₂ from burning fossil fuels accounts for more than four-fifths of the UK's human-induced greenhouse gas emissions, with the rest (largely methane) arising from agriculture, landfill and other sources.²⁷ Deforestation causes a fifth of worldwide CO₂ emissions.²⁸

Of the three major fossil fuels, coal is by far the most carbon intensive and polluting, releasing more CO₂ per unit of energy generated than oil or gas.²⁹ Because of this and the vast quantities of coal burned worldwide, coal is the single largest source of climate pollution, accounting for about 43% of world fossil fuel CO₂ emissions.

Oil is the second most polluting fossil fuel, about a third less carbon intensive than coal, and responsible for about 36% of world fossil fuel CO₂ emissions. However, oil extraction from tar sands in Canada and elsewhere is particularly polluting because of the additional energy required to extract and process it. Humanity cannot



Photo: Remy Steingger/World Economic Forum

Fatih Birol, Chief Economist, International Energy Agency, Annual Meeting 2012; 'When I look at this data, the trend is perfectly in line with a temperature increase of 6 degrees Celsius which would have devastating consequences for the planet.' World Energy Outlook 2012

afford to risk dependency on tar sands oil or other unconventional or extreme extraction methods.

Natural gas (mainly methane) is the least polluting fossil fuel when extracted safely, roughly half as carbon intensive as coal, and causing about 20% of global fossil fuel CO₂ emissions. The UK's switch from coal to gas as its prime electricity generating fuel in the 1980s and 1990s – the 'dash for gas' – was the main reason for a significant reduction in direct carbon emissions in those years. Although cleaner than coal and oil, gas is still a major polluter and will not solve climate change. The expansion of gas infrastructure, including that for shale gas fracking, and policies to incentivise the gas industry, locks the UK economy into being dependent on gas, and it signals to renewable energy companies and investors that the Government is not committed to making the transition to much less polluting forms of energy generation or meeting UK carbon reduction targets to which it is legally bound. Shale gas 'fracking' – hydraulic fracturing to release gas from underground rock – is potentially as damaging as coal due to the additional CO₂ and methane emitted during

23 NASA (National Aeronautics and Space Administration), 'NASA scientists react to 400 ppm carbon milestone', 2013; IPCC (Intergovernmental Panel on Climate Change), *Fourth Assessment Report: Synthesis Report, Summary for Policymakers*, 2007; World Bank, *Turn Down the Heat: Why a 4 degree warmer world must be avoided*, report by the Potsdam Institute for Climate Impact Research and Climate Analytics, 2012.

24 Max-Planck-Gesellschaft, 'Global carbon dioxide emissions reach new record high', 2012, <http://www.mpg.de/6678112/carbon-dioxide-climate-change>; K. Anderson, 'Real clothes for the emperor: facing the challenges of climate change', presentation at University of Bristol, 2012; World Bank, 2012, op. cit.

25 World Bank, 2012, op. cit., p.xiii.

26 Anderson, 2012, op. cit., p.14.

27 Department of Energy & Climate Change, 'Statistical release', 2013, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/209054/PN_Jun_13.pdf

28 European Commission, 'Climate action', http://ec.europa.eu/clima/policies/forests/deforestation/index_en.htm

29 Data on carbon intensity of different fuels collated from: US Department of Energy; Greenpeace International, 'The case against coal', 2010; *Washington Post*, 'Just how dirty are Canada's oil sands, anyway?', 2012; BBC News, 'Shale gas "worse than coal" for climate', 2011; Friends of the Earth, 'Unconventional, unnecessary and unwanted: why fracking for shale gas is a gamble the UK does not need to take', 2013.

extraction and to the local environmental risks from deep vertical and horizontal drilling, heavy freshwater use and the injection of large quantities of toxic chemicals.³⁰

Limiting warming to 2°C

Under the 2009 Copenhagen Accord, governments agreed to keep global warming below 2°C, and the UK has adopted a legally binding target to cut greenhouse gas emissions by at least 80% from 1990 levels by 2050.³¹ (The UK's falling domestic emissions are currently outweighed by rising 'embodied' emissions in imported goods).³² World CO₂ emissions must peak by 2020 and steadily decline thereafter if we are to have a 50% chance of staying below 2°C.³³ Yet some climate scientists see even 2°C as 'a recipe for global disaster'.³⁴

Scientists have calculated how much more carbon humanity can afford to emit without overshooting the 2°C threshold. Compared with current oil, gas and coal reserves this is very little.³⁵ The world's state-owned and private-sector fossil fuel companies' confirmed underground stocks of oil, gas and coal, planned for

extraction (and excluding 'unconventional' fuels like tar sands), exceed the amount we can safely burn by up to five times. Berners-Lee and Clark conclude that even less than this – only a small fraction of fossil fuel reserves (565 gigatonnes) – can be exploited to stay within a 75% chance of avoiding 2°C warming. Currently there are 2,900 gigatonnes of CO₂ embedded in proven conventional fossil fuels reserves worldwide and approximately 42,000 gigatonnes embedded in 'unconventional' reserves.³⁶

Lord (Nicholas) Stern, author of the UK Government's 2006 Review on the Economics of Climate Change, puts it starkly: 'If we burn all current reserves of fossil fuels, we will emit enough CO₂ to create a prehistoric climate, with earth's temperature elevated to levels not experienced for millions of years ... Smart investors can already see that most fossil fuel reserves are essentially unburnable because of the need to reduce emissions ... Investing in companies that rely solely or heavily on constantly replenishing reserves of fossil fuels is becoming a very risky decision.'³⁷

For the sake of humanity's survival, we cannot afford to invest in fossil fuels any longer.

A growing number of Churches around the world become fossil-free

As of October 2014, 49 Churches and faith communities have committed to disinvest from fossil fuels. This includes the Church of Sweden, the World Council of Churches, the Uniting Church in Australia, the Presbyterian Church in New Zealand and the United Church of Christ in the US. Five dioceses in the Anglican Church of Aotearoa, New Zealand and Polynesia and three Anglican dioceses in Australia have also pledged to disinvest. In July 2014 the Anglican Church in Australia passed a motion recommending disinvestment to all its member churches.³⁸

Revd Prof Dutney, President of the Assembly of the Uniting Church in Australia, said, 'As Christians we are

called to respect and care for the whole of creation ... it falls to us as members of the body of Christ to show leadership in taking action to reduce damaging pollution. We simply must act. This is a matter of social, environmental, and intergenerational justice.'³⁹

Revd Mathew Newton of Auckland Diocese in New Zealand said, 'Taking money out of the fossil fuel industry ... sends a strong signal about the ... church's commitment to standing with the poor and vulnerable who will be hit first and hardest by climate change.'⁴⁰

30 Anglican Communion News Service, 'Faced with fracking? Anglican network offers advice', 2013, <http://www.anglicannews.org/news/2013/05/faced-with-fracking-anglican-network-offers-advice.aspx>

31 UN Framework Convention on Climate Change, Copenhagen Accord, 2009, <http://unfccc.int/resource/docs/2009/cop15/eng/107.pdf>; HM Government, Climate Change Act 2008.

32 BBC News, 'UK CO₂ emissions rising, government advisers warn', 2013, <http://www.bbc.co.uk/news/business-22267231>

33 European Climate Foundation, 'Leading international climate scientists call on world leaders for global emissions peak by 2020', 2009, <http://www.europeanclimate.org/index.php/de/news/60-leading-international-climate-scientists-call-on-world-leaders-for-global-emissions-peak-by-2020>; UN Environment Programme (UNEP), *The Emissions Gap Report*, 2010, <http://www.unep.org/publications/ebooks/emissionsgapreport/chapter2.asp?c=2.4>

34 J.E Hansen, 'Tipping points near', <http://www.worldwatch.org/node/5798>; Center for Environmental Journalism, 'Threshold for dangerous climate change closer than believed?', 2010, <http://www.cejournal.net/?p=4054>

35 *New Scientist*, 'Humanity's carbon budget set at one trillion tonnes', 2009, <http://www.newscientist.com/article/dn17051-humanitys-carbon-budget-fast-running-out.html>; Carbon Tracker Initiative, *Unburnable Carbon: Are the world's financial markets carrying a carbon bubble?*, 2011, <http://www.carbontracker.org/wp-content/uploads/2014/09/Unburnable-Carbon-Full-rev2-1.pdf>; Carbon Tracker Initiative with Grantham Research Institute, *Unburnable Carbon 2013: Wasted capital and stranded assets*, <http://carbontracker.live.kin.it/Unburnable-Carbon-2-Web-Version.pdf>; International Energy Agency (IEA), *World Energy Outlook 2012*, <http://www.worldenergyoutlook.org/publications/weo-2012/>

36 M. Berners-Lee and D. Clark, *The Burning Question: We can't burn half the world's oil, coal and gas. So how do we quit?*, Profile Books, 2013.

37 N. Stern, Foreword, Carbon Tracker Initiative, 2013, op. cit., p.7.

38 RTCC, 'Australian Bishop accuses Abbott of denigrating climate science', 2014, <http://www.rtcc.org/2014/07/04/australian-bishop-accuses-abbott-of-denigrating-climate-science/>

39 Uniting Church in Australia Assembly, 'Assembly to divest from fossil fuels', 2014, <http://assembly.uca.org.au/news/item/1585-assembly-to-divest-from-fossil-fuels>

40 *Anglican News*, 'Auckland challenged on fossil fuels', 2013, <http://www.anglicannews.org/news/2013/09/auckland-challenged-on-fossil-fuels.aspx>

The financial case for disinvestment

Fossil fuels: stranded assets, poor performance and mounting risk

Investors have been used to thinking of oil, gas and coal as safe investments, but this can no longer be the case. Publicly listed fossil fuel companies, with reserves valued in the trillions of dollars on the world's stock markets, will have to leave most of their assets in the ground if we are to keep climate change below 2°C. Fossil fuel companies are hugely overvalued. Their shareholders risk being left with stranded assets – worthless fuel stocks that regulation will prevent from being burned or can only be consumed at unimaginable cost to us all. Either result will be a disaster for investments and pension funds.⁴¹

Recent analyses have found that investor portfolios already perform better in the absence of oil, gas and coal. According to one study, 'removing the fossil fuel sector in its entirety and replacing it with "fossil free" portfolios of energy efficiency, renewable energy, and other alternative energy stocks' would raise average annual portfolio returns over the past five years from 1.8% to 2.3%.⁴²

Risks and costs incurred by fossil fuel companies are rising, while profitability is falling or dependent on high prices. The 2010 Deepwater Horizon disaster may eventually cost British Petroleum (BP) and its partners \$65 billion.⁴³ Development of the Canadian tar sands is very costly.⁴⁴ By contrast, offshore wind is forecast to be cheaper than gas by 2023.⁴⁵ However, fossil fuel companies keep seeking to expand their reserves and to develop unconventional fuels such as highly carbon-intensive tar sands, shale gas, deep coal, and Arctic and deepwater oil, which worsen the ratio of unburnable to burnable carbon.⁴⁶ 'Up to \$647bn in wasted capital is spent each year towards finding more reserves' in a misallocation of money that is now 'incompatible with climate security'.⁴⁷

The London Stock Exchange is heavily weighted towards fossil fuels, giving high exposure to financial risk. In 2012



Photo: iStock

investors, politicians and scientists wrote to the then Bank of England Governor, Sir Mervyn King commenting that 'the depth and breadth of ... [the UK's] collective financial exposure to high carbon, extractive and environmentally unsustainable investments could become a major problem ... [and be] another example of our capital markets fundamentally mispricing assets and, as a result, building up a systemic risk.'⁴⁸

The Economist reported in May 2013 that 'worries about mispricing are cropping up in the markets' and that HSBC had found that 'if lower demand led to lower oil and gas prices ... the potential value at risk could rise to 40-60%' of market capitalisation (about '\$4 trillion').⁴⁹ According

41 *Investment Magazine*, 'Climate change: a fiduciary duty to act', 2013, <http://investmentmagazine.com.au/2013/07/climate-change-a-fiduciary-duty-to-act/>

42 Impax Asset Management, 'Beyond fossil fuels: the investment case for fossil fuel divestment', 2013, https://s3.amazonaws.com/s3.350.org/images/Impax-20130704_white_paper_fossil_fuel_divestment_uk_final.pdf; MSCI ESG Research, 'Responding to the call for fossil-fuel free portfolios', 2013; 350.org, 'Analysts: fossil fuel-free portfolios outperform investments that include carbon polluters', 2013.

43 Ceres, *Sustainable Extraction? An analysis of SEC disclosure by major oil & gas companies on climate risk & deepwater drilling risk*, 2012, <http://www.ceres.org/resources/reports/sustainable-extraction-an-analysis-of-sec-disclosure-by-major-oil-gas-companies-on-climate-risk-and-deepwater-drilling-risk>

44 *Financial Post*, 'Oil sands mines face growing challenges as supply costs rise', 2013, http://business.financialpost.com/2013/05/28/oil-sands-mines-face-growing-challenges-as-supply-costs-rise/?_lsa=e4ef-6c80

45 Institute for Public Policy Research, 'How a decarbonisation target will lead to lower energy bills', 2013, <http://m.ippr.org/articles/56/10422/how-a-decarbonisation-target-will-lead-to-lower-energy-bills>

46 See e.g. Platform, Greenpeace and FairPensions (ShareAction), *Out in the Cold: Investor risk in Shell's Arctic exploration*, 2012, http://www.shareaction.org/sites/default/files/uploaded_files/investorresources/ArcticFinalReport.pdf

47 Carbon Tracker Initiative, 2013, op. cit., pp.33, 36.

48 P. Abberley et al., Open letter to Sir Mervyn King, Chairman, Financial Policy Committee, 2012, <http://carbontracker.org/wp-content/uploads/2014/09/Letter-to-Bank-of-England-Financial-Policy-Committee-19th-January-2012-Final.pdf>

49 *Economist*, 'Unburnable fuel', 2013, <http://www.economist.com/news/business/21577097-either-governments-are-not-serious-about-climate-change-or-fossil-fuel-firms-are>

to Mercer's analysis, 'climate policy could contribute as much as 10% to overall portfolio risk, with the economic cost expected to amount to \$8 trillion by 2030'.⁵⁰

The problem of stranded assets extends beyond fuel reserves to the UK's economic infrastructure and even to its higher education system. Investment in fossil fuel technologies, such as gas generation plants, commits us to their use and consequent pollution for decades to come, making it more difficult to change course politically or economically. The building of new fossil fuel infrastructure should stop by 2017 to avoid locking us into catastrophic warming, says the formerly pro-fossil-fuel International Energy Agency.⁵¹ Additionally, oil and mining

companies spend lavishly on lobbying and on funding fuel and technology higher education research in the UK and other countries.⁵³ These factors add to the challenges involved in moving to a low-carbon trajectory and provide further reasons to disinvest from fossil fuels.

To those who believe that a major fall in the value of fossil fuel companies could never occur, ratings agency Standard & Poor's responds that 'oil firms could soon be facing credit downgrades ... financial models that only rely on past performance and creditworthiness are an insufficient guide'.⁵⁴ In Nicholas Stern's view, 'the market has either not thought hard enough about the issue or thinks that governments will not do very much – or somewhere between the two ... Honesty and transparency require that this contradiction and its implied risk to the balance sheets of large companies – or to the planet, or both – be recognised and tackled'.⁵⁵

Fiduciary duty⁵²

Institutional investors' fiduciary duty (their legal trust to their shareholders) extends beyond maximising short-term financial returns. As the UN Principles for Responsible Investment (UNPRI) point out, 'prudent pension funds have good reason to pursue cost-effective strategies to support climate change mitigation and adaptation'. The UN Environment Programme (UNEP) Freshfields Bruckhaus Deringer's report concluded that consideration of climate change risk in investment analysis is 'arguably required in all jurisdictions'.

Others agree: 'It is critical that trustees consider the impacts of climate change ... on their investments ... a failure to do so is likely to be a breach of their duties'; 'Fiduciaries are acting prudently when they consider the direct risks of a fossil-dependent portfolio and the likely resilience and collateral benefits of fossil-free investing.'

Churches and their investment boards also have a duty to ensure that investments do not compromise the ethical position of their institutions.

Early movers and the positive alternatives

The International Energy Agency's recent report⁵⁶ presents a scenario of four policies which would 'keep the door open to the 2°C target through to 2020 at no net economic cost.' These are specific energy efficiency measures, limiting the construction of coal fired power stations, minimising methane emissions from oil and gas production and accelerating the phase-out of subsidies to fossil fuel consumption.

Institutional investors are increasingly 'either divesting or electing not to invest' in climate-damaging sectors and companies.⁵⁷ Norwegian pension fund and life insurer Storebrand has disinvested from coal and tar sands on financial grounds, and Pax World Management also excludes these sectors.⁵⁸ In September 2014 the Rockefeller Brothers Fund – an \$860 million fund – pledged to move its investments from fossil fuels to clean technology.⁵⁹ Dutch bank Rabobank has also excluded shale gas and tar sands. A number of equity managers now state such policy positions and a preference for clean and renewable technologies.⁶⁰

50 Cited in FairPensions (ShareAction), *Protecting Our Best Interests: Rediscovering fiduciary duty*, 2011, http://www.shareaction.org/sites/default/files/uploaded_files/fidduity/FPProtectingOurBestInterests.pdf, p.63.

51 IEA, *World Energy Outlook 2011*, <http://www.iea.org/Textbase/npsum/weo2011sum.pdf>

52 Sources: UNPRI, 'Investor leadership on climate change: an analysis of the investment community's role on climate change, and a snapshot of recent investor activity', 2009, p.10; UNEP Finance Initiative and Freshfields Bruckhaus Deringer, *A Legal Framework for the Integration of Environmental, Social and Governance Issues into Institutional Investment*, 2005, p.13; Baker & Mackenzie, *Pension and Superannuation Trustees and Climate Change Report*, 2012, p.29; HIP Investor, *Resilient Portfolios & Fossil-Free Pensions*, 2013, p.9.

53 Platform, New Economics Foundation and Corporate Watch, *Degrees of Capture: Universities, the oil industry and climate change*, 2003, http://b.3cdn.net/nefoundation/59acc35490945b298_5rm6y12qk.pdf

54 Business Green, 'Standard & Poor's warns oil firms could soon be facing credit downgrades', 2013, <http://www.businessgreen.com/bg/news/2251879/standard-poors-warns-oil-firms-could-soon-be-facing-credit-downgrades>

55 N. Stern in *Financial Times*, 'A profound contradiction at the heart of climate change policy', 2011, <http://www.ft.com/cms/s/0/52f2709c-20f0-11e1-8a43-00144feabdc0.html#axzz3KHkBOG6A>

56 International Energy Agency, *Redrawing the energy-climate map*. June 2013. http://www.iea.org/publications/freepublications/publication/WEO_RedrawingEnergyClimateMap.pdf

57 Global Investor Coalition on Climate Change (GICCC), *Global Investor Survey on Climate Change*, 2013, p.6.

58 Blue & Green Tomorrow, 'Norwegian pension fund divests from "financially worthless" fossil fuel firms', 2013, <http://blueandgreentomorrow.com/2013/07/05/norwegian-pension-fund-divests-from-financially-worthless-fossil-fuels>

59 BBC News, 'Rockefeller's to switch investments to clean energy', 2014, <http://www.bbc.co.uk/news/world-us-canada-29310475>

60 GICCC, 2013, op. cit.

Besides the decision to exclude climate-damaging investments, positive alternatives to fossil fuels are emerging. 'Investments in climate resilient infrastructure, from renewable energy to energy efficiency, typically involve high capital expenditure that creates secure and predictable long-term assets – very close to what pension funds and insurance investors are looking for.'⁶¹ Sectors receiving growing attention from investors include low-carbon wind, solar, geothermal, wave, tidal and hydro generation, waste to energy, integrated energy generation, and energy- and fuel-efficient transport, buildings and equipment.⁶²

The Centre for Alternative Technology (CAT)'s report, *Zero Carbon Britain*, outlines how the UK could reduce energy demand by using efficient technology and making changes to the way we live. CAT describe the Green New Deal as a cornerstone of new economic thinking, and believe that it is possible for the UK to fully meet its energy needs from renewable energy sources with the largest contribution coming from offshore wind turbines, which could produce around half of the UK's energy.⁶³

A reported \$244 billion in new investment went into renewable energy in 2012 (slightly down from 2011's record \$260 billion), and the sector is becoming increasingly mainstream.⁶⁴ Other planet-friendly growth sectors include sustainable banking and community investment.⁶⁵

A major reallocation of church funds away from fossil fuels and into climate-resilient sectors is increasingly both necessary and possible.

The Church of Sweden and Swedish pension fund disinvest to avoid financial risk

In September 2014 the Church of Sweden made its \$691 million of assets fossil free. Gunnela Hahn, Head of Responsible Investment at the Church of Sweden, said, 'We see a financial risk in owning fossil fuel companies. Their value consists to a large extent of fossil fuel reserves that risk losing value since they cannot be extracted if we are to have a liveable planet.'⁶⁶

In October 2014 the Second AP Fund, one of several national pension funds in Sweden, disinvested from 12 coal and eight oil-and-gas companies. This represents disinvestment of holdings with a total market value of \$116 million. The fund took this decision after conducting a financial risk analysis and in order to reduce the risk associated with their investments in fossil-fuel based energy.⁶⁷

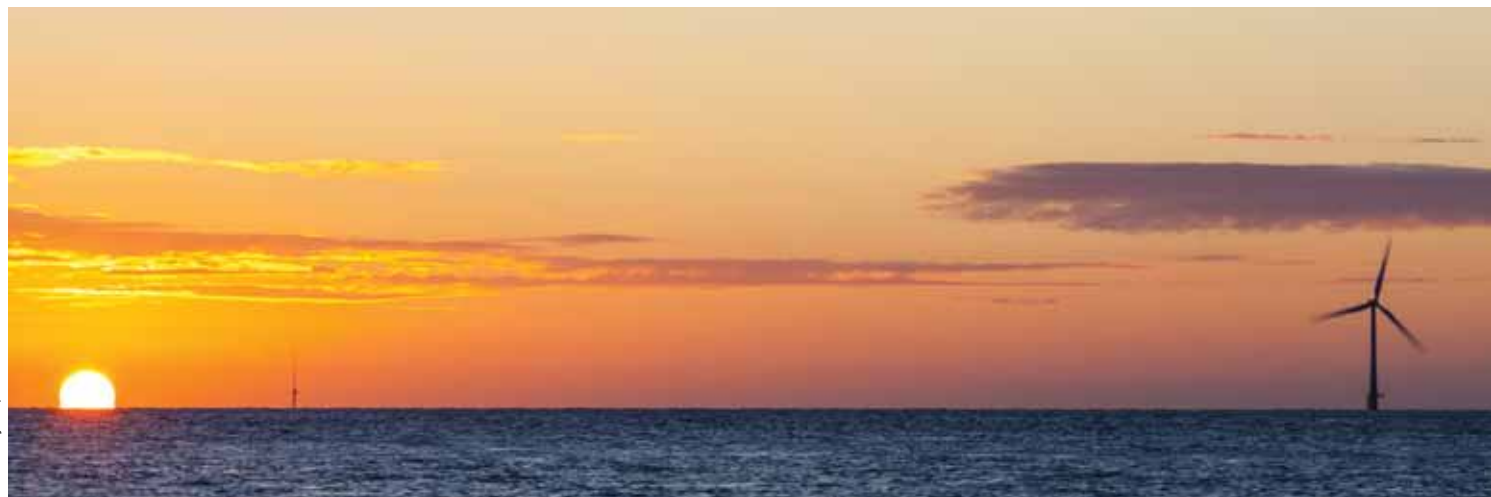


Photo: somydaez/Dreamstime.com

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62 GICCC, 2013, op. cit.; WWF, Carbon Tracker Initiative, SinCo and Trucost, *Navigating Muddy Waters: Securing investment returns under carbon and water constraints*, 2012, http://www.wwf.org.za/media_room/publications/?7260/securing-investment-returns

63 Centre for Alternative Technology, *Zero Carbon Britain*, 2013, <http://zerocarbonbritain.org/>

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65 Global Alliance for Banking on Values, <http://www.gabv.org>; Charities Aid Foundation, 'Corporate community investment', <https://www.cafonline.org/giving-as-a-company/corporate-responsibility/corporate-community-investment.aspx>

66 350.org, 'Church of Sweden completes full divestment', 2014, <http://gofossilfree.org/uk/church-of-sweden-completes-full-divestment-2/>

67 350.org, 'Sweden's national pension fund to divest from 20 fossil fuel companies', 2014, <http://gofossilfree.org/uk/swedens-national-pension-fund-to-divest-from-20-fossil-fuel-companies/>

Alternatives to fossil fuel energy investments

For Churches seeking alternatives to fossil fuel companies, new options are developing all the time at both a local and large scale. Recent examples include:

Local projects

- Investment in specific renewable energy generation projects. This can be done directly or via organisations such as Abundance and Trillion Fund, which list schemes seeking investors.⁶⁸
- Purchasing shares in community renewable energy schemes. Commonly these are formed as Industrial Provident Societies or Community Interest Companies. There are now many examples of projects seeking investors across the UK. For example, Bath and West Community Energy, which is developing solar and hydro schemes. <http://bathcommunityenergy.co.uk>.
- Investment in renewable energy companies such as Triodos Renewables, a public limited company investing in a range of sustainable energy projects. <http://www.triodos.co.uk/en/personalethicalinvestments/renewables/overview>

Community Energy in Oxfordshire

Westmill Solar in Oxfordshire is one of the UK's first community owned solar farms. The local community raised £15 million of funds for the farm through £5.8 million in shares and a £12 million 24-year bond bought by Lancashire County Council Pension Fund.

Oxford's Low-Carbon Hub is a social enterprise working with communities, schools and businesses to scale up renewable energy generation in Oxfordshire. In October 2014 the Hub launched share offers to raise £1.5 million to develop solar PV on 18 schools, with offers ranging from £250 to £100,000. Expected returns are 8.2% per annum with Enterprise Investment Scheme (EIS) tax relief, a scheme offered by the UK government to support small companies in raising finance.⁶⁹

Large-scale funds

There are an increasing number of fossil-free investment funds around the world. While these are currently outnumbered by conventional funds that include fossil fuels, there is a growing call among investors for more fossil-free portfolios.

For example, Impax Asset Management, based in the UK, US and Hong Kong, invests in alternative energy, energy efficiency, water, waste and sustainable food and agriculture markets through its Impax Environmental Market fund. The fund currently has £2.8 billion of assets under management.⁷⁰

For more information on the alternatives to fossil fuel investments see Bright Now's paper 'The financial case for disinvesting from fossil fuels and reinvesting in low-carbon sectors' at http://brightnow.org.uk/wp-content/uploads/2013/08/Financial-case-for-disinvesting-in-fossil-fuels_Oct2014.pdf.

The investments listed here do not imply any sort of endorsement or recommendation by Operation Noah. Competent, professional advice should be sought, and a full appraisal undertaken before making investment decisions.



Photo: Markus Gann/Dreamstime.com

⁶⁸ For more information visit <https://www.abundancegeneration.com> and <https://trillionfund.com>

⁶⁹ Information from <http://www.lowcarbonhub.org/invest>

⁷⁰ Information from <http://www.impaxam.com/about-us/key-facts>

Conclusion

This report has demonstrated the strong and mutually reinforcing theological and moral, scientific and financial cases for the Churches to disinvest from fossil fuels in the face of rapidly advancing climate change. As we confront the gravest ever threat to humanity, and to the natural world on which we depend, the Churches have both the opportunity and duty to respond more deeply, rapidly and effectively than they have so far done.

Churches have already taken courageous steps. They have recognised the problem, critically examined their direct carbon footprint, spoken out prophetically, made principled commitments, and opened constructive dialogue with governments, the private sector, their own members, other faiths and wider civil society. But more is required. Each year's delay in reducing greenhouse gas emissions creates a steeper future reduction requirement, and there is no place for half-measures.

*'But let justice roll on like a river,
righteousness like a never-failing stream!'*

Amos 5:24

The time has come for the Churches to connect up their long standing commitment to invest ethically with their recognition of the reality of climate change and its potentially devastating consequences. This means separating church finances as far as possible from participation in the fossil fuel economy, realigning them with the emerging low-carbon economy that is a condition of humanity's collective survival, and giving maximum impulse to the urgent changes needed to bring about a truly sustainable society.

We ask the Churches to join our call to:

- disinvest from companies involved in the extraction of fossil fuels
- take a leading and influential role in the national debate on the ethics of investment in fossil fuels
- support the development of clean alternatives to fossil fuels through their investment policies.



Photo: Lactier79/Dreamstime.com

'This report is timely and urgent. The UK's reliance on fossil fuels is not sustainable. Disinvestment is a crucial part of the struggle to refocus our economy. The churches must take Operation's Noah's call seriously if we are to combat the risk of catastrophic climate change.'

Canon Giles Goddard

The Ash Wednesday Declaration

This section provides a summary of the core content of the Ash Wednesday Declaration. The full version is available on the Operation Noah website.⁷¹

Climate change and the purposes of God: a call to the Church

What should our relationship be with God as both the origin and the end of all things? How do we balance our energy and material consumption with the needs of the poorest communities, and of future generations and other species? How do we sustain hope in the midst of fear and denial? How can we encourage global cooperation, challenge unsustainable economic systems and change our lifestyles?

These fundamental questions prompt this urgent call to the Church.

FIND JOY IN CREATION! Psalm 104:24, 31

According to the witness of our Scriptures, everything that we have, life and the means of life, comes to us as gift. This is the ground of our worship.

LISTEN! Jeremiah 6:17

We must listen to the scientists warning us of approaching dangers, exercise discernment, and be wary of 'false prophets' representing the vested interests of the powerful.



The full Ash Wednesday Declaration was signed by:

- The Most Revd and Rt Hon Rowan Williams
- Cardinal Keith Patrick O'Brien
- Mrs Val Morrison, United Reformed Church
- The Revd Lionel E Osborn, Methodist Church
- The Rt Revd David Arnott, Church of Scotland
- Revd Joel Edwards, Micah Challenge
- Ellen Teague, Catholic Justice & Peace Group
- The Most Revd Desmond Tutu
- The Rt Revd and Rt Hon Richard Chartres
- The Most Revd Kallistos, Metropolitan of Diokleia
- The Revd Jonathan Edwards, Baptist Union
- The Most Revd Barry Morgan

REPENT! Mark 1:14-15

Continuing to pollute the atmosphere when we know the dangers, goes against what we know of God's ways and God's will. We are failing to love not only the earth, but our neighbours and ourselves, who are made in God's image.

TAKE RESPONSIBILITY! Isaiah 24:4-5

Humans, made in God's image, have unique responsibility for the wellbeing of creation (Genesis 1:26, 2:15).

We must use our power wisely to promote the flourishing of future generations and the diversity of life on earth. This is the responsibility of every Church and every believer.

SEEK JUSTICE! Psalm 72:2-4

God is just and requires justice in response from us.

LOVE OUR NEIGHBOURS! Matthew 7:12

Christ teaches us to love all our neighbours, not just our own family and friends. This love extends to our grandchildren and future generations.

ACT WITH HOPE! Romans 15:13

We are called to live and work with hope in response to God's gift, and in the light of God's future: the promised coming of Christ's reign over all.

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Further Bright Now resources, including guidance on raising disinvestment in the Church of England and Methodist Church, **are available at www.brightnow.org.uk/resources**



Bright Now is a campaign launched by Operation Noah calling for the disinvestment of UK Churches from fossil fuels.

This report sets out the moral, scientific, financial and practical case for churches to disinvest from fossil fuel companies. It examines why they must actively seek to support clean, alternative forms of energy generation through their investment portfolios. It calls on churches and Christians to lead the debate on ethical investment and climate change with the same rigour and intensity rightly given to other issues such as the ordination of women bishops, gay marriage and poverty.

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Website: www.brightnow.org.uk



Faith-motivated. Science-informed. Hope-inspired.

Operation Noah is a Christian organisation which provides leadership, focus and inspiration in response to the growing threat of catastrophic climate change endangering God's creation.

We are informed by the science of climate change, motivated to care for creation by our faith and hope in God, and driven by the desire to transform and enrich our society through radical change in lifestyles and patterns of consumption.

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