Energy Justice

Towards clean energy and equality of access, control and consumption





Introduction

Energy is a climate issue. The UK economy is currently driven primarily by dirty fossil fuels. Everything we do that needs energy has a potential impact on the climate. Energy is also fundamentally an equality issue. Energy is inequitably distributed, consumed and controlled in the UK and worldwide.

Transition to a zero-carbon future, fuelled by clean renewable energy, is technically feasible, though politically and socially challenging. For Quakers it is vital both that this transition happens fast and that the change has equality at its heart.

This briefing outlines some of the reasons why the current energy system is inequitable. It explores what an energy system based on equality for people and the Earth could be like, highlighting the signs that it is already emerging, and suggests what Quakers could do to bring it about.

Energy is just one facet of the economic system. It is hoped that this briefing also highlights some principles and practices helpful to the wider struggle for a new economic model underpinned by equality, which Quakers in Britain have committed to bring about.

"The environmental crisis is enmeshed with global economic injustice and we must face our responsibility as one of the nations which has unfairly benefited at others' expense, to redress inequalities which, in William Penn's words are 'wretched and blasphemous'" (Quaker faith & practice 25.13)

From Minute 36, Yearly Meeting 2011



Colin Hall of Luton Quaker Meeting taking part in a 'die-in' for 'No more deaths from fuel poverty: Energy Justice Now!', which took place on the day that Office of National Statistics figures revealed that there were 18,200 excess winter deaths in 2013/2014.¹ Photo: Sunniva Taylor for Britain Yearly Meeting

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The current dirty and unequal energy system

The current energy system is unequal in many ways. This inequality is of spiritual concern to Quakers. It contributes to climate change, which Quakers in Britain have said needs a faith response, guided by the values of simplicity, truth, peace and equality. It also presents a significant challenge to the Quaker conviction and our ability to recognise that "there is that of God in everyone".

Unequal access to energy

Access to energy is political. Much mainstream discourse about energy concerns the need for 'energy security', based on the assumption that there is not enough energy to go around. In fact, energy is abundant but it is currently very unfairly distributed, with a small minority receiving most of the benefits.²

Twenty per cent of the world's population, nearly all of whom live in the Global South, have no access to electricity. Many live in countries where energy is plentiful but where the benefits go to a privileged elite or are exported. For example, in Nigeria more than half the population (and 90 per cent of the rural population) lack access to electricity. Meanwhile, multinational companies such as Shell and Exxon-Mobil export enough energy to power the country many times over.³

In the UK access to energy is also unequal. We are paying, on average, £410 per year extra for our energy bills after inflation compared to a decade ago, despite using less energy.⁴ Average retail profits for the 'big six' energy supply companies increased by more than five times between 2009 and 2012⁵. Most energy tariffs are structured in a way that means that people who use lots of energy often pay the least per unit.

In contrast, people living in poverty pay a 'premium' for energy. Low-income households pay higher-than-average prices for gas and electricity. Of particular concern is the large number of people being forced onto prepayment meters every year – often to recover debt. Prepayment meters can be up to five times more expensive than paying by direct debit. Users can find it extremely difficult to switch suppliers or move to a credit meter, even if their payments are up to date. The impact of high prices is compounded by low incomes and inefficient homes.

Over 4.5 million households in the UK were living in fuel poverty in 2012, which means most of them could not afford to adequately heat their homes given their level of income.⁸

Unequal impact of dirty fossil fuels

The energy we currently use is mostly from dirty fossil fuels. Fossil fuels are dirty because they pollute the atmosphere when burnt. Burning fossil fuels is the main cause of global carbon dioxide emissions, causing climate change. The extraction of fossil fuels often dirties the Earth in other ways, such as the pollution of water sources.

In 2009 the United Nations Framework Convention on Climate Change (UNFCC) agreed to "hold the increase in global temperature below 2°C, and to take action to meet this objective consistent with science and on the basis of equity". 9 An approach rooted in equality suggests we should actually be aiming for a significantly lower temperature rise. An average 2°C temperature rise means very different things regionally – it may mean temperature rises of up to 6°C at the poles and in parts of Africa. 10

And yet 2013 emissions were 61 per cent higher than in 1990, when negotiations towards a climate treaty began in earnest. We are not on track to reach the necessary emissions reductions to achieve a temperature rise of no more than 2°C.

"We recognise that these crises and injustices spring from forces at work within the global economic system. These forces infiltrate our hearts and minds, capture our politics and threaten our common basis for life on Earth. This is nothing less than economic violence, which challenges our Quaker spiritual commitment to peace."

From Meeting for Sufferings' Statement on Inequality, Quakers in Britain, 2014



In fact, companies have responded to dwindling reserves of easily accessible fossil fuels by pushing for extraction of new and less-accessible reserves, for example Arctic drilling, tar sands oil extraction in Canada, and fracking for shale gas and oil in the UK and elsewhere (see opposite). These methods are unequal and violent in impact. They involve practices that extract from the Earth in increasingly brutal ways and can have a detrimental impact on people living in areas where the extraction takes place. For example, tar sands exploitation has made it very difficult for indigenous people to practise their cultural traditions because of the destruction caused by tailing ponds and strip mining operations, which have also caused high rates of rare cancers and other health problems. Exploration for new fossil fuel resources continues despite the fact that up to 80 per cent of known fossil fuel reserves need to stay in the ground if we are to have an 80 per cent chance of avoiding a 2°C temperature rise.

If we don't achieve this reduction it is the poorest people and those least responsible for climate change who will be hit first, and who will suffer the greatest impact. A 4°C temperature rise would, for example, result in reductions of around 30–40% in yields of important staple crops in some areas; in China it would mean temperature rises of up to 6°C. ¹⁴ In fact many people believe that a 4°C rise is "incompatible with any reasonable characterisation of an organised, equitable and civilised global community." ¹⁵

Unequal support for dirty fossil fuels

In 2012 alone fossil fuel companies spent \$674 billion globally on exploration and development projects. This private finance is facilitated by public finance, incentives and tax breaks. ¹⁶ Oxfam estimates that \$1.9 trillion of government subsidies are made to the fossil fuel sector globally each year. ¹⁷ The UK has recently substantially increased the scale of its national subsidies for oil and gas exploration, in particular for shale gas and deepwater offshore drilling in the North Sea. Annual national subsidies in the UK are now \$1.2 billion. ¹⁸ Research by Greenpeace found that the UK government (via the UK Export Finance agency) has pledged hundreds of millions of pounds of financial support for fossil fuel industries abroad between 2010 and 2014. ¹⁹

Subsidy calculations vary, but the International Energy Agency calculated that in 2013 fossil fuel consumption subsidies were over four-times the value of subsidies to renewable energy globally.²⁰

Fracking

Fracking is a process used to extract gas and oil locked in rock formations thousands of metres below the Earth's surface. A mixture of chemicals, sand and water is injected deep underground at high pressure to fracture the rocks and release the shale gas or oil.

QPSW is campaigning for an immediate cessation of fracking as it undermines commitment to action on climate change.

Based on a precautionary approach 20 per cent of total known fossil fuel reserves can be burnt by 2050 if we are to have an 80 per cent chance of avoiding a 2°C temperature rise. There is not space in the UK or global carbon budget for additional forms of fossil fuel, such as gas or oil extracted by fracking.



Hilary Whitehead, a member of Crawshawbooth Meeting (front right), was one of the 'nanas' who in August 2014 occupied a field outside Blackpool in protest at Caudrilla's plans to frack in the area. The nanas' camp was later joined by Reclaim the Power, a 500-person strong anti-fracking camp. Photo: Nina Taylor

The transition to a clean energy future threatens the profits of fossil fuel companies. Hence, fossil fuel companies spend millions of pounds each year lobbying to prevent ambitious climate regulation.²¹ There are few clearer examples of inequality than a few huge global fossil fuel companies defending their financial interest at the price of widespread human suffering.

The UK government has introduced some measures to support the expansion of renewable energy, such as the Energy Company Obligation (ECO), Renewables Obligation (RO) and the Feed-in Tariff for renewable energy. These and other measures have an impact on energy bills, because the energy supply companies pass the costs on to consumers. Environmental and social levies (programmes to improve energy efficiency, encourage low carbon generation and reduce fuel poverty) still make up a relatively small proportion of a domestic energy bill – 9 per cent of an average combined (electricity and gas) bill in 2012.²² Energy efficiency measures should cut consumption and thus bills immediately and into the future.²³ However, there is an outstanding question as to whether the cost of these measures should be paid for by company profits or the government rather than the energy user.

Energy Justice: towards clean energy and equality of access, control and consumption

The transition to a clean energy future is technically possible. However, there are political, social and economic challenges to overcome if it is to be a reality. Quakers are taking action to bring about these changes at the grassroots. In addition the transition will require a significant change in government policy and investments.

Clean energy

For there to be an outside chance of a maximum 2°C temperature rise, industrialised countries need to reach emissions reductions of the order of about 40 per cent by 2015, 70 per cent by 2020 and over 90 per cent by 2030.²⁴ In effect, we would have to have phased out fossil fuel emissions at this point.

This is technically possible. The Zero Carbon Britain report demonstrates how we could rapidly reduce greenhouse emissions to net zero by 2030, using only currently available technologies. It involves reducing demand for energy by 60 per cent; meeting 100 per cent of the remaining energy demand with renewable and carbon neutral energy sources such as solar, geothermal, hydro, tidal and wind; changing diets; and diversifying land use. Research by WWF Scotland shows how Scotland's electricity system could be powered almost entirely by renewables by 2030. Per cent of the power cent of

There are lots of signs that renewable energy is already blossoming, particularly in the US and Germany, but also in the UK.²⁷ For example, 31 per cent of Germany's electricity was provided by solar and wind in the first half of 2014, with a new record being set in June as solar generated over half the country's total electricity for part of the day. Electricity costs in Germany have reduced by 32 per cent since 2010 as a result. This transition has been enabled by supportive legislation that gives priority grid access to all electricity from renewables.²⁸ In the UK, by the start of 2014 solar panel installations had more than doubled since 2012,²⁹ though less than 1 per cent of Britain's renewables are owned by households and communities, against 50 per cent in Germany.³⁰ Renewable energy has big advantages over fossil fuels: though it needs high initial outlay (for example, solar panels) the power is then basically free, and these upfront costs have fallen dramatically in the last decade.³¹

Fossil-free Kirklees festival

The Fossil-free Kirklees festival was hosted by Huddersfield Quakers. Fossil-free Kirklees is helping people in the area get active on fossil fuel divestment. Photo: Maya Williams for Britain Yearly Meeting



Taking power

Although transformative technology is vital, so too are transformations in society, politics, economics and culture. In the words of author and climate change campaigner, Naomi Klein:

"Our problem has a lot less to do with the mechanics of solar power than the politics of human power".³²

In addition, there is no inherent reason why an energy system based on renewable power rather than fossil fuels would be more equitable. Although the need to shift energy from fossil fuels to renewables is urgent, it should not perpetuate the economic model of corporate control of energy. Quaker concern with equality leads us to be as interested in the question of how energy is owned, organised, and distributed, and how much it costs, as where it comes from.

Traditional utility companies are investing in renewables, but as renewables are inherently decentralised (the sun falls everywhere, for example) alternative non-centralised models of controlling energy are growing. Indeed, renewable energy generation is predicted by some, including EnergyUK (the trade association for the energy industry), to be beginning to challenge the profitability of conventional generation.³³

There is no single shape for a transformed, more just and more equal energy system. Here are some suggestions as to how it could be owned and organised, in addition to private ownership (such as domestic solar panels):³⁴

Cooperatives

The number of small, renewable energy cooperatives (including solar panels, and wind turbines) is growing all the time in the UK. They are a powerful way of connecting people more viscerally to what energy is and where it comes from, as well as growing local democracy and community.

Gill Westcott of Exeter Local Meeting has been involved in setting up Exeter Community Energy, which installs solar panel arrays on large community roofs. For Gill, "it seems to be part of the way we answer that of God in others and in ourselves, to come together in service to our communities."³⁵

In Hackney, a community group is working to install solar panels on a housing estate. It is also working with young people from the estate to learn about the cooperative business model, and to gain practical skills in fitting energy efficiency measures.

Since 2008 the island of Eigg in Western Scotland has had its own 100 per cent renewable energy system, integrating multiple renewable energy sources into its own grid system to supply an isolated and scattered small community.

On an even larger scale, Denmark has largely ended its dependence on imported fuel, moving to locally-controlled renewables. Germany's 'energiewende' or 'energy transition' has seen 50 per cent of all renewables owned by households, farmers and cooperatives.³⁶

In 2014 the government published the UK's first ever Community Energy Strategy, laying out support for community energy projects;³⁷ a big step in the right direction, though many argue it does not go far enough.³⁸

Municipalisation

Remunicipalisation means local government taking back control of services from the private sector, as has happened in a number of towns in Germany. Hamburg is now in control of energy supplies; Berlin and other cities have held referendums in which a majority of voters backed municipalisation.³⁹

"...Action that aims merely to alleviate the worst effects of inequality is not enough. As we wrestle with the implications of our testimony to equality, Quakers feel called to act more radically to tackle the underlying causes. This calling requires spiritual struggle and real practical change."

From Meeting for Sufferings' statement on inequality, Quakers in Britain, 2014

Nationalisation and state investment

Some state ownership may be very important in producing the scale of renewable energy generation necessary. Platform, a research and activism organisation, suggests that it would be useful for the UK government to set up a national renewables company to own and operate; for example, a significant stake in offshore wind. By being active in the industry this would improve the state's bargaining potential and regulatory processes.⁴⁰

The state also has a vital role in terms of regulation and legislation. In 2012 and 2013 Quakers were calling for the insertion of a decarbonisation target in the Energy Act, to virtually decarbonise the energy sector by 2030. The government rejected the proposal, but a future government could enact it. It could also stop using public finance to subsidise fossil fuels, and mandate fossil fuel and energy-intensive companies to disclose their spending on lobbying activities.

The 'one million climate jobs coalition', supported by many unions, argues that the twin challenges of fuel poverty and climate change could be met by the government setting up a National Climate Service, hiring one million people to do 'climate jobs'. Many of these people could be employed in huge publically-driven programmes to insulate homes, prioritising those on low-incomes and at risk of fuel poverty.⁴¹

"...Climate change isn't an 'issue' to add to the list of things to worry about...it is a civilizational wake up call. A powerful message – spoken in the language of fires, floods, droughts and extinctions – telling us that we need an entirely new economic model and a new way of sharing this planet."

Naomi Klein, *This Changes Everything*, 2014, page 25

Consuming more equitably

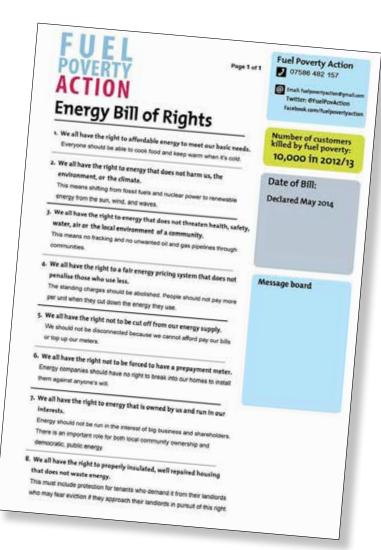
As well as 'powering up' renewable energy and taking control from corporations, we collectively need to 'power down' our consumption of energy. According to Zero Carbon Britain we need to reduce energy demand by 60 per cent by 2030. It demonstrates clearly how this is possible without sacrificing modern standards of living.

Not everyone needs to make reductions. In fact those in fuel poverty may need to be able to access more energy. This could be facilitated by restructuring energy tariffs so that those who use smaller amounts of energy don't pay more per unit, as well as by increasing the energy efficiency of homes. Fuel Poverty Action's Energy Bill of Rights, which Quaker Peace & Social Witness (QPSW) has endorsed, sets out principles on which a fairer, more affordable, more sustainable energy system would be based.⁴² The richest individuals and industry will need to reduce their consumption of energy dramatically. Savings can be made particularly in heating buildings and transport.⁴³

Creating the change

Change at this scale may be highly contested. Whilst collectively we will gain, many people who currently have financial and political power are set to lose out.

It's going to take a mass movement of people using a variety of tactics to transform the energy system into one truly based on equality. We need to intervene in and withdraw from the current system; join with those suffering from the consequences of the current system; and participate in the building of an alternative founded on equality for both people and the Earth.



What can we do?

- Engage with politicians. Use this briefing and Britain Yearly Meeting's *Quaker Vote* election guide to raise the issue of energy justice with politicians and parliamentary candidates in the run up to the 2015 general election and beyond. See www.quaker.org.uk/quakervote.
- Support local energy cooperatives invest, volunteer, join one, or even set one up.
- Promote the Energy Bill of Rights, and take part in actions organised by Fuel Poverty Action. See www.quaker.org.uk/energy-bill-rights.
- Know your rights about energy and help others to do the same. Fuel Poverty Action run workshops and produce a helpful guide. See www.quaker.org.uk/energy-bill-rights.
- Divest your own money and pension from fossil fuels. Campaign for institutions you are a part of to do the same. See QPSW's Disinvestment briefing, as well as the Share Action Green Light campaign focused on pensions. See www.quaker.org.uk/disinvest-fossil-fuels.
- Share the Million Climate Jobs pamphlet. If you are part of a union, share the pamphlet with members or put forward a motion. Copies are available from QPSW or see www.climate-change-jobs.org.
- Educate yourself and others on Zero Carbon Britain. See http://zerocarbonbritain.com/.
- Campaign for an end to subsidies for fossil fuel companies.
- Join campaigns to stop new fossil fuel extraction in the UK; for example fracking, or elsewhere tar sands.
- Join the Earth & Economy mailing list for regular action updates and information about these issues at www.quaker.org.uk/earth-and-economy.

Recommended further reading

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