

There *is* an alternative to fracking
Building a climate jobs plan for
Blackpool, Fylde and Wyre



There is an alternative

The movement against fracking on the Fylde has been inspiring. And will go on. But one thing we keep coming up against is the false promise made by the oil drilling company Cuadrilla, and the government, that fracking will bring jobs. And heaven knows we need jobs.

The only thing is, it's not true. According to our calculations¹, fracking will mean 420 jobs at most in the Fylde Peninsula, and probably many fewer. But there is an alternative: a national campaign to create new *climate* jobs in renewable energy, public transport and construction to convert our economy to stop climate change. That could mean more than 10,000 jobs.

This pamphlet explains what we mean, and invites you to help us begin to make that alternative a reality.

What's wrong with fracking?

There are many movements against fracking across the world. And the movement in the UK has been growing since the government announced in 2014 that it was “going all out for shale”.² In Bulgaria, France, Germany, Ireland, Netherlands, Scotland, and New York State in the US these movements have won bans against fracking. This is for good reason.

Fracking is a new, unconventional, drilling technique for natural gas invented in the United States. The full name is ‘hydraulic fracturing’, and it allows access to reserves of hard to reach gas trapped in small pockets in shale rock.

Drilling rigs go down for a mile or more vertically and then turn and run horizontally. Releasing the trapped oil and gas requires a mixture of water, frac sand³, and powerful chemicals pumped at high pressure through drilling pipes. The sand helps to “prop open” the fractures in the rocks releasing the “trapped” oil and gas.

Arguments to oppose fracking takes many forms, from industrialisation of the landscape with new drills, pipelines, access roads and other infrastructure, to contamination of our water supplies from chemicals used in the process.

These objections are all valid. However, in this document we are focussing on the threat fracking poses to tackling climate change, and on the economic potential of climate jobs.

To have any chance of stopping catastrophic climate change, we need to **immediately** stop extracting fossil fuels (gas, coal and oil), reduce our current use of them, and invest in renewable energy – wind, wave and solar power – instead. At the same time, we need to create sustainable, well-paid and unionised jobs that lower greenhouse gas emissions. Fracking does neither of these things.

We need an alternative economic plan which tackles the climate and economic crisis

The current government and fossil fuel corporations don't want us to believe this because it's good for *their* political and economic interests. So if we want to seriously challenge them, we need an alternative economic plan which tackles the climate and economic crisis.

This pamphlet is the first step to achieving this and provides an introduction to a longer report. Working with trade unionists, the local community, environmental campaigners, academics and anyone who wants to turn this plan into reality, the aim is to draw up a practical, inspiring and sustainable plan based on a localised version of the One Million Climate Jobs.

We think the workers and communities of

Blackpool, Fylde and Wyre not only deserve better, but that they should have democratic control in setting out a frack-free alternative economic vision.

A climate jobs plan for Blackpool, Fylde and Wyre

Workers in Britain have seen the greatest decline in real wages (10%) of any European country except Greece since the financial crash in 2007. The North West is no exception, with unemployment, lack of skilled work, and low wages. Yet there is no shortage of money in the UK. It is just in the wrong hands and government investment is in the wrong priorities.

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This creates vast inequality and undermines democracy. Both workers and communities lose power over their lives. This is exactly what we have seen in the case of Cuadrilla and fracking in Lancashire.

In 2017, trade unions and campaigners including those against fracking launched the *Blackpool Needs A Pay-rise* campaign to:

- stop the continued growth of inequality and transfer of wealth from the poor to rich people in Britain, including the end to precarious work and zero hours contracts
- stand up for wider needs in society, to oppose austerity, defend the NHS and public services
- oppose fracking and promote renewable energy
- create real, socially, and environmentally useful jobs such as climate jobs.

Climate jobs

In 2009, in response to the financial crash trade unionists, academics and environmental activists got together to develop an alternative plan to tackle the environmental and economic crisis. It's called *One Million Climate Jobs*.⁴

Climate jobs are jobs that lead directly to cuts in greenhouse gas emissions. They are new jobs, and they are government, public sector, jobs. They would be secure, permanent and unionised jobs with good pay, terms and conditions.

To transition to a zero carbon economy, we will need lots of workers to:

- develop renewable energy sources in wind, wave, tidal and solar. This includes making wind turbines, maintenance and working on a new national grid;
- insulate our homes and buildings, installing renewable energy, and building new zero carbon homes;
- run our transport services as part of an

integrated transport system including buses, trains and trams;

- train and educate workers for new skills and job roles, including those currently excluded from work.

A National Climate Service would coordinate efforts to tackle climate change by transforming the way we generate and use energy, and create new public sector climate jobs

We are not talking about jobs that already exist and which may be considered environmental jobs such as park keepers. These are important. But we need climate jobs too, to reduce greenhouse gas emissions.

So, like the National Health Service created after the Second World War, a new National Climate Service would coordinate efforts to tackle climate change by transforming the way we generate and use energy, and create new public sector climate jobs.

There will of course be many other manufacturing and service jobs in the supply chain too.

Lancashire said NO and the government said YES

On 29 June 2015, Lancashire County Council rejected the application by the company Cuadrilla to drill and frack at Little Plumpton (Preston New Road). It had earlier rejected one at Roseacre Wood. The council concluded the proposal for eight wells at the two sites would create too much noise and have an unacceptable visual impact. A decision the council called “democracy in action”.⁵

In July 2015, Cuadrilla submitted an appeal to the Secretary of State for Communities and Local Government (DCLG). This is the same department which released new planning guidance to local authorities in August 2015 to fast track applications for fracking. The department made it harder for local authorities to oppose fracking. At the same time they made it easier to oppose onshore wind turbines by insisting that “wind turbines then need to have the clear backing of the community.”⁶ But fracking will go forward against the clear wishes of the community.

The following year, on 6th October, DCLG Secretary of State Sajid Javid MP agreed to Cuadrilla’s appeal and gave the go ahead to drill for shale gas at Preston New Road. This was first site to host fracking in the UK.

But the government and Cuadrilla are far from having the last word.

This January marked one year since Cuadrilla began work at Preston New Road. A year that has seen a daily presence of protestors at the site.

The campaign is now moving to a new phase as members of Frack Free Lancashire develop their strategy to continue the fight. A fight that will also mean winning on climate change and winning on jobs.

Climate change and greenhouse gas emissions

Climate change is real and happening now as a result of human activity. Burning fossil fuels releases dangerous greenhouse gas emissions accelerating changes to our climate. Global warming of the Earth's sea and land temperatures has resulted in long-term changes to rainfall patterns, ice melt in the polar regions and sea level rise. This has in turn led to an increase in the severity and frequency of *extreme weather events* like hurricanes, droughts, floods and heat waves.

In 2017 there were what the World Meteorological Organisation (WMO) described as a globally “remarkable number of weather – and climate-related disasters”⁷.

Devastating floods killed more than 1,400 people in India, Nepal and Bangladesh. Millions lost their homes.⁸ A series of powerful hurricanes in the Atlantic basin left the small island of Barbuda uninhabitable.⁹ Floods in Sierra Leone resulted in mud slides aided by deforestation, killing an estimated 500 people.¹⁰

This isn't a one-off. The WMO also say that sixteen of the warmest years on record have occurred this century. In 2018, it's not difficult to do the maths.

As the TV cameras move on to the next breaking news story, left behind are lives left devastated, people displaced,

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without homes, schools, hospitals, and work. It doesn't just happen in 'poor' countries, although weak and underfunded infrastructure does often mean impacts are more severe. Even in richer countries such as the US, poorer communities are hit harder than others in the same area. This is what happened when Hurricane Katrina struck New Orleans in 2005.

Coastal communities are particularly vulnerable to climate change with sea level rise and storm surge.

What has this got to do with fracking and the Fylde?

In 2015, world leaders agreed the Paris climate agreement with the aim to keep global warming to 2 degrees Celsius on pre-industrial levels but more, to pursue efforts to limit temperature increase to 1.5 degrees. Scientists at the UK Met Office predict we will exceed this lower target at least once in the next five years.¹¹ This means we have to drastically cut our greenhouse gas emissions and stop burning fossil fuels such as oil and gas *right now*.

So far there has been a lot of work done in the electric power sector to start looking at alternative ways to generate electricity such as with renewable energy – wind, solar, tidal. But it's not happening quickly enough. Amid the fanfare of renewables replacing coal, if you take wind, solar and hydro power together, they still provide only a third of the UK's electricity supply. And this includes nuclear and biomass.

If we then include gas for heating and hot water and oil and petrol for road, rail and air transport, then renewables represent only 3% of the overall energy mix.¹²

The limited gains however are quickly wiped out as we fail to do some immediate basic measures that could cut energy use. Making our homes and buildings more energy efficient. That means insulation and ensuring new buildings, residential and commercial, are built to the highest environmental, or what is called *Passiv Haus*, standards.¹³

Buildings and transport are the biggest consumers of energy. Emissions from transport are *increasing*.¹⁴ So we need electric cars, buses, trains, trucks and vans, with the electricity coming from wind and

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solar power. And we need to invest in mass public transit programmes that are affordable and run on renewable energy.

Unfortunately for the UK we also have a high dependency on gas to heat our leaky, badly insulated homes and buildings. When natural gas was discovered in the North Sea in the 1960s, the UK was literally rewired to pipe it into our homes. Now we are running out, but no planning has been made for workers losing jobs in the oil and gas industry or alternative fuel sources.

That means we are increasingly importing gas to make up the shortfall in supply. A large part comes from Norway, but also countries such as Qatar and Russia.

The argument goes therefore that we need to revitalise a home grown gas industry by developing fracking in order to meet

energy needs, and provide jobs.

Gas is said to be a 'clean' fuel and therefore contributes to tackling climate change. It is true that gas emits half the carbon dioxide emissions of coal when burnt. But it emits *high* levels of methane, another powerful greenhouse gas. More important, while gas has half the carbon dioxide emissions, wind and solar power once constructed have no emissions at all.

It's also argued that without fracking, imports will cause more damage because of methane leakage in transportation. Again, this is true but the answer is to reduce our

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need for gas and invest in alternative sources of energy and other measures.

These may seem like powerful arguments to support fracking but we think the arguments against fracking are stronger.

i) Energy security

Even if fracking goes ahead, estimates are that it will only provide a small percentage of the energy needed. There is a lot of misreporting around shale gas *resources* and shale gas *reserves*. One is what geologists think is available, the other is

what they believe may be economically extracted. So promises of an abundance of cheap gas are highly questionable and comparisons with the United States are completely false.

In the UK when fracking started, the industry boosters were estimating 4,000 wells drilled by 2032, with 6,100 direct jobs on site a year. Now Greenpeace has revealed that a still unreleased government report estimates there will be 155 wells drilled by 2025, which means about 300 or 400 wells by 2032. That would mean a total of 610 direct jobs at all well sites across the country.¹⁵

Renewables are an intermittent source of energy but this argument relies on seeing renewable energy as a static source bound within its geographical location. When the wind isn't blowing in one place, it will be blowing elsewhere. The UK is already part of an energy network with extensive underground connectors linking the UK to Norway for example. Work is already underway to import hydro-power from Norway as a source of low carbon energy. Given the windy advantage of the Fylde coast, it's likely that it will become an exporter to other parts of the UK.

Whilst we don't have all the answers yet, technology is evolving. Battery storage is rapidly developing, and the way energy will be produced and owned is changing. The future will be more decentralised energy where consumers themselves are feeding the grid such as through solar panels on roofs.

Following the *dash for gas* will lock us into an old energy infrastructure. It's a fast buck for the fracking companies, but a climate debt for the planet.

ii) Climate change

Shale gas is a fossil fuel. If we don't invest now in alternatives such as renewable energy and ways of saving energy and resources to reduce our energy use we'll be too late to avoid catastrophic climate change. This is not just our opinion, it's the assessment of the overwhelming majority of scientists. It's the conclusion of millions of workers who are demanding their pension funds are divested from fossil fuels. We don't need more new kinds of gas and oil. We already have far more oil, coal and gas reserves than we can use without heating the planet past any liveable levels.

iii) Jobs

In 2014, an updated *One Million Climate Jobs* pamphlet included a case study of how many jobs fracking would create in the Fylde peninsula compared to climate jobs. The calculations were based on looking at the experience in the US, and adjusted to the UK as a much smaller country.

The study estimated an average 420 jobs were possible in fracking. With the Greenpeace revelations of confidential Cabinet Office estimates, we would expect the number to be much smaller than 420. By contrast, the study estimated that, investing in climate jobs could create an average 4,500 new jobs over twenty years. Ten times as many. Jobs that lower greenhouse gas

emissions, tackle economic deprivation, and address issues of social inequality such as low pay and fuel poverty.

If we follow the American pattern, peak drilling will only last a few years. After that, there will not be many jobs in keeping the gas flowing. If there were 30 new wells a

Investing in climate jobs could create an average 4,500 new jobs over twenty years

year in the Fylde, the climate jobs campaign estimated 840 jobs a year in the early years, which would average out to 420 jobs in fracking over a 20 year period.

But if the confidential government documents are right, there will be less than half that number of jobs available.

In renewable energy, the Fylde is ideal for work in offshore wind. At the moment one of the major areas for development of wind power is the Celtic Array in the Irish Sea. It starts 40 miles from the coast of Cumbria so the Fylde is convenient.

The Crown Estate (which leases out offshore wind sites) says there should be at least 4.2 GW of wind from the Celtic Array. That would mean 10,800 jobs over seven years to build and install the wind farms. These 10,800 jobs would be mainly in

manufacturing wind and turbine towers, blades and nacelles, and assembling the parts at sea and installing them.

After those first seven years, there would be 2,800 permanent jobs maintaining the Celtic Array. In addition, the next obvious step for wind turbine manufacturing sites in the region would be more wind farms in the Irish Sea, and supplying floating wind turbines for use in deeper waters.

The new zero carbon economy requires thousands of workers in many forms of work. Much of the training will be done with local further education colleges. Immediately, the key people needed would be electricians. It takes three years to train an electrician, and we would need large numbers to convert buildings at first, and then in the long term for maintaining renewable energy and electrical transport. This would require about 100 trainers.

What next?

The campaign against fracking in Lancashire will continue whether we create a climate jobs plan or not. However the case is made stronger by not just saying no to fracking, but by presenting an alternative economic vision for the region that addresses fundamental issues of unemployment, social inequality and the climate. Fracking will not do that.

We will be stronger against the politicians who support fracking and prop up the

industry, and stronger within the community against the dogma that fracking brings jobs.

In 1976, workers at the arms company Lucas Aerospace developed an Alternative Corporate Plan for socially useful production in the face of redundancies and the loss of defence sector contracts. Over forty years ago they couldn't understand why people had to lose jobs when their skills and knowledge could be used to produce things – such as wind turbines – that helped people and the planet.

Today many workers are seeing their skills laid to waste or abused through bad working practices who could be put to work on building a new zero carbon economy. Blackpool, Fylde and Wyre is a resource rich area whose workers and communities deserve better.

In the coming months we will work with trade unionists, academics, campaigners and anyone who wants to get involved in developing the Blackpool, Fylde and Wyre climate jobs plan – a plan that gives all workers a pay rise and a real future.

**Find out more or
volunteer to get
involved, contact:
Green@pcs.org.uk**

Notes

- 1 https://www.campaigncc.org/sites/data/files/Docs/online_companion_nov_2014.pdf
- 2 <https://www.gov.uk/government/news/local-councils-to-receive-millions-in-business-rates-from-shale-gas-developments>
- 3 <https://geology.com/articles/frac-sand/>
- 4 <https://www.campaigncc.org/climatejobs>
- 5 <https://www.theguardian.com/environment/2016/feb/09/lancashire-county-council-fracking-cuadrilla-public-inquiry>
- 6 <https://www.gov.uk/government/news/giving-local-people-the-final-say-over-onshore-wind-farms>
- 7 <https://public.wmo.int/en/resources/bulletin/wmo-and-2030-agenda-sustainable-development>
- 8 <http://www.independent.co.uk/news/world/asia/south-asia-flooding-kill-thousands-crops-decimate-india-bangladesh-nepal-a7934776.html>
- 9 <http://www.independent.co.uk/news/world/americas/barbuda-hurricane-irma-300-years-no-one-living-ronald-sanders-gaston-browne-a7949421.html>
- 10 Unofficial figures put the number more at 1,000
- 11 <https://www.metoffice.gov.uk/news/releases/2018/decadal-forecast-2018>
- 12 The way the statistics are usually presented makes renewables look much more important. To stop greenhouse gas emissions, we will have to replace all that oil and gas with electric vehicles and electric heating from renewable energy. See Department of Business, Energy and Industrial Strategy, *Energy Trends December 2017*, Table 1.2 for third quarter of 2017 seasonally adjusted, and Table 1.3a for estimates of primary demand and electricity generation in 2016.
- 13 The Passivhaus standard combines measures to reduce space heating demands and limit energy consumption, therefore being a low energy design concept. It achieves this by using “passive measures” such as high levels of insulation, solar energy and efficient internal heat recovery. <http://www.passivhaus.org.uk/page.jsp?id=17>
- 14 <https://www.theccc.org.uk/wp-content/uploads/2017/06/Closing-the-UKs-climate-change-policy-gap.pdf>
- 15 Institute of Directors, *Getting Shale Gas Working*, 2013; Zachary Boren and Lawrence Carter, ‘Confidential government report lowers fracking expectations’, *Unearthed*, 10 Feb 2018; *Getting Ready for Shale Gas*, EY, 2014. The EY report estimates a far higher number of total jobs, at 64,000, but that includes indirect and induced jobs, and these appear to us to be wildly inflated estimates.

