A beginner's guide to fossil fuel divestment

Divestment is the opposite of investment – it is the removal of your investment capital from stocks, bonds or funds. The global movement for fossil fuel divestment (sometimes also called disinvestment) is asking institutions to move their money out of oil, coal and gas companies for both moral and financial reasons. These institutions include universities, religious institutions, pension funds, local authorities and charitable foundations.

It is the fastest-growing divestment campaign in history and could cause significant damage to coal, gas and oil companies, according to a study by Oxford University. Previous divestment campaigns have targeted the tobacco and gambling industries and companies funding the violence in Darfur. Divestment is perhaps most well known for its role in the fight against apartheid in South Africa.

What is the case for divestment?

Almost all of the arguments in favour of fossil fuel divestment fit into two categories: moral and financial.

First, the moral argument, which is rooted in basic maths. Scientific research shows that in order to keep to international targets to limit global warming to a 2C rise and thus prevent catastrophic levels of climate change, between two-thirds and four-fifths of fossil fuels need to remain in the ground. But fossil fuel companies are currently banking on these targets not being met so are extracting these reserves and selling them – and are actively prospecting for more. In doing so they are setting the human race on a route to irreversible climate change that will cause rising seas, flooding, droughts, rising disease, increased conflicts and refugee crises.

What is fossil fuel divestment and why does it matter?

The UN has lent its "moral authority" to the divestment campaign, while Desmond Tutu has said that "people of conscience need to break their ties with corporations financing the injustice of climate change".

Second is the financial argument, which rests on the premise that if international agreements on climate change are met, the investments will become worthless. The theory that these "stranded assets" are creating a trillion dollar "carbon bubble" that could plunge the world into another economic crisis is now the subject of an investigation by the Bank of England, after Governor Mark Carney said publicly that "the vast majority of reserves are unburnable."

The World Bank has come out in support of the financial argument for divestment, with president Jim Yong Kim stating that: "every company, investor and bank that screens new and existing investments for climate risk is simply being pragmatic".

Although the impact of divestment on share prices may be relatively small, the reputational damage can have serious financial consequences.

Further reading:

10 myths about fossil fuel divestment put to the sword

Alan Rusbridger: the argument for divesting from fossil fuels is becoming overwhelming

Leave fossil fuels buried in the ground to prevent climate change, study urges

What is the carbon budget?

The carbon budget is the amount of greenhouse gas that can still be released into the atmosphere without exceeding dangerous levels of climate change – the 2C target agreed by governments. In 2013, the Intergovernmental Panel on Climate Change (IPCC) put a figure on the carbon budget for the first time, announcing that the world burns through about 50bn tonnes of greenhouse gases every year. It is also very likely that more than 20% of emitted CO2 will remain in the atmosphere longer than 1,000 years after manmade emissions have stopped. This means that if we continue to emit at current levels, we will "spend" the carbon budget within 15 to 25 years. Given that we have already used two-thirds of the budget, the IPCC have urged governments to act quickly, using the carbon budget as the basis for international negotiations.

What is the carbon bubble?

The "carbon bubble" is a term that has been used by regulators, financial companies and campaigners to describe the over-valuation of stocks in coal, gas and oil reserves owned by fossil fuel companies around the world. If governments pursue international targets on carbon emissions in order to curb climate change, then between two-thirds and four-fifths of these reserves cannot be used, rendering them worthless. As fossil fuel companies are among the richest in the world these "stranded assets" have the potential to trigger a new global economic crisis if investors pull out in quick succession.

The carbon bubble could be inflating stocks worth trillions of dollars, according to a study published in 2013 by thinktank Carbon Tracker and economist Lord Nicholas Stern. He authored an eponymous 2006 report commissioned by Gordon Brown, then UK chancellor of the exchequer, into the economic consequences of climate change.

Shell has refuted the concept, predicting in a letter to its shareholders that fossil fuels would account for between 40% and 50% of the energy supply in 2050 and beyond. The Bank of England is currently conducting an investigation into the potential of a "carbon bubble" to damage the economy.

A demonstrator holds a placard calling for institutions across the country to divest from fossil fuels Photograph: Samuel Hardy / Alamy/Alamy

Who has divested?

More than 220 institutions around the world have now committed to some form of fossil fuel divestment, including pension funds, foundations, universities, faith organisations and local authorities.

A coalition of philanthropic foundations, including the heirs to the Rockefeller oil fortune, started to pull out their investments last year, while cities divesting include San Francisco, Seattle and Oslo. The world's largest sovereign wealth fund, Norway's Government Pension Fund Global (GPFG), recently revealed it had dropped 114 companies, including tar sands producers, on climate grounds.

The Church of England has divested from the most heavily polluting fossil fuels, while the World Council of Churches, which represents half a billion Christians worldwide, has ruled out all fossil fuel investments.

In October 2014, Glasgow University became the first in Europe to make the commitment. In the US, Syracuse University is the largest to divest from coal, oil and gas while Stanford University is removing its assets from coal companies.

On 23 June, the Lutheran World Federation of churches said it would divest from fossil fuel companies, which would affect current and future investments, though it did not yet know the value of funds that would be divested.

Further reading:

The rise and rise of the fossil fuel divestment movement

Who has decided against divestment?

A number of key institutions have explicitly refused to divest from fossil fuels.

In May, Swarthmore College in the US, the birthplace of the fossil fuel divestment movement, made the shock decision not to divest from any fossil fuels, stating that it would focus its environmental efforts on changing consumption habits.

In March, the Guardian launched Keep it in the Ground, a campaign calling on the world's biggest charitable foundations – the Wellcome Trust and the Bill and Melinda Gates Foundation – to divest. Both institutions have so far refused to do so. The Wellcome Trust argue that engagement with fossil fuel companies is a more effective way to reduce carbon emissions, while the Gates Foundation have declined to comment.

Mayor of London Boris Johnson has recently rejected a call from the London Assembly to divest City Hall's pension fund from fossil fuels. He said that divestment is "a cliff edge" and that the UK needs to rely more on fracking as an energy source.

UK environment secretary Liz Truss has refused to encourage the MPs' pension fund to divest, telling the Guardian: "I believe the right way [to affect investment] is through carbon reduction targets."

The president of Harvard University, Drew Gilpin Faust, has rejected divestment as "neither warranted or wise", calling its endowment "an economic resource, not an instrument to impel social or political change". The University of Edinburgh rejected calls for divestment, saying it would prioritise engagement with fossil fuel companies.

Is there a difference between divesting from coal, oil and gas?

Opinion is divided between campaigners and institutions on what level and type of divestment is necessary.

According to Liberal Democrat peer Lord Dick Taverne, the Keep it in the Ground campaign "ignores the need to discriminate between [fossil fuels]. The greatest threat of a dangerous rise in global temperatures comes from the world's reliance on burning coal … In the short or medium term, the most effective substitute for coal is gas. The US has recently reduced its carbon emissions more than any other major country, because it has switched from coal to gas."

Several institutions have taken a similar line in their divestment decisions. Stanford university in the US and the London School of Hygiene and Tropical Medicine are two that have divested from coal alone, while the Church of England has specified thermal coal and tar sands oil, on the basis that these fuels are the most polluting in terms of carbon emissions.

But Jamie Henn of 350.org says it is important that institutions divest from coal, oil and gas: "none of [these fuels] are compatible with a liveable future. Coal is an easy target. Most coal industry stocks are so low that if you're still holding on to them at this point, you're either stupid or just spiteful. Divesting is just good common sense. That said, the commitments still make a huge impact, since they hasten the industry's decline and help push governments to take action.

"Coal does the most to pollute our climate, but it's the oil industry that does the most to corrupt our politics. They're the major power players we need to stigmatise in order to make the space for progress," he says.

Some, such as author and activist Naomi Klein, have called for the plummeting oil and coal price to be used as an opportunity to tackle climate change and "kick oil while the price is down."

What are the arguments against divestment?

Critics of the fossil fuel divestment movement say that it is hypocritical because a globalised western society (and the individuals within it) are dependent on coal, oil and gas for their everyday lives. One group supporting an anti-environmentalist firm built it into their PR strategy, releasing this film:

Breaking up with fossil fuels is hard to do – Environmental Policy Alliance

Others, such as the Financial Times' John Gapper, say that the movement should be targeting the companies emitting high quantities of carbon, rather than the producers alone. He argues that divestment is only a "grand symbolic gesture" that will not have a financial impact because others will pick up the shares.

Some, such as Times columnist Matt Ridley, argue that the movement is unethical on poverty grounds, because fossil fuels are needed to build the economies of developing countries. He says it demands that institutions "prioritise the possibility of the start of net harm in the time of our great-great-grandchildren over the plight of the poor today".

Many of these arguments are refuted in 10 myths about fossil fuel divestment put to the sword.

We all use fossil fuels – isn't divestment hypocritical?

Of course, much of the goods and utilities – from heating to plastics – that we use in daily life are dependent on fossil fuels. But the fossil fuel movement will not bankrupt the industry overnight – and indeed its impact is being felt largely though political means, not financial. Instead it argues that fossil fuels are driving us towards catastrophic levels of climate change and that the world needs to transition to much greater dependence on renewables – and do so much more quickly.

Consumers can of course be pro-active and make changes to their own lifestyles, which is important. Yet it is the producers who have the power to make the difference that will – or will not – see global temperatures breach internationally agreed targets to prevent climate change occurring on a catastrophic and irreversible scale. These producers are currently committed to business models that will take us well beyond that.

Won't the fossil fuel stocks be bought by others?

Yes, others may buy the stocks, although the amounts being divested are too small to flood the market and cut share prices, so they won't be going cheap.

This cuts to the heart of the impact of the fossil fuel divestment movement – which is not to bankrupt the industry financially, but to do so morally and politically. As research by Oxford University pointed out, the financial loss of the divestment campaign – the fastest growing in history – will not be felt through the shares sold but through the reputation lost by these companies by being stigmatised.

But the fossil fuel divestment campaign does not only make a moral assertion; it makes an economic one. Shares invested in fossil fuel companies are invested in a business model that is completely incompatible with international agreements on mitigating climate change. If governments abide by them, such investments will become worthless – so pulling them out now makes good financial sense too.

Will organisations that divest lose money?

Not necessarily – in fact they may even make money. Companies such as HSBC have warned clients about the risks of fossil fuel investments. Even though fossil fuel companies are some of the most lucrative on the planet, the "stranded assets" argument – that fossil fuel investments will become worthless if international agreements on climate change are met – suggests they are several times overvalued.

Coal prices have dropped significantly in the past few years and the oil price has also done so more recently. A recent analysis by MSCI, the world's leading stock market index company, indicated that portfolios free of fossil fuel investments have outperformed those with assets in coal, oil and gas companies over the last five years.

There is also ample opportunity for investment in the green economy. Researchers predict that renewable energy will become the cheapest source of electricity in the next decade, with the cost of solar having fallen by two-thirds between 2008 to 2014, according to the IEA thinktank.

Further reading:

The climate change denier's guide to getting rich from fossil fuel divestment

Can the world economy survive without fossil fuels?

Climate Action and Profitability: the Carbon Disclosure Project

Won't divestment mean losing influence with the companies?

Jeremy Farrar, director of the Wellcome Trust, takes this view arguing that "all fossil fuel companies are not equal" and can be influenced by active shareholder engagement. This is lost if an institution divests.

But there are few examples of engagement resulting in significant change. The Wellcome Trust, for example, say that they cannot share any such results without losing the confidence of those they engage with.

The one recent example that is often used are the shareholder resolutions at BP and Shell asking them to test the extent to which their business models are compatible with international agreements on climate change. However questions have been raised about the potential impact of the resolutions and the extent to which activists collaborated with the oil giants behind the scenes.

Shareholder engagement can work – to persuade companies to pay their workers the living wage or to adopt better recycling practices – but as campaigner Bill McKibben has pointed out, it is unlikely to persuade a company to commit to eventually putting itself out of business. Leading environmentalist Jonathon Porritt spent many years engaging with such companies but concluded recently that his efforts had been futile. It's also worth noting that some market regulators, such as in the US, do not allow this kind of engagement.

Is my own money invested in fossil fuels?

Almost certainly. Most of the high street banks, including HSBC, Lloyds, Barclays, Royal Bank of Scotland and Santander, have millions invested in fossil fuel companies. Most investment funds, including the trillion dollar pensions industry, are heavily invested in fossil fuels and do not offer savers a fossil free option, although demand is rising. Responsible investment charity ShareAction can support you to approach your own pension provider, while Move your Money are campaigning for banks to divest.

As part of the Keep it in the Ground campaign, the Guardian has partnered with ShareAction to create an online tool to help you contact the right person at your pension fund easily. We will then help you decipher the responses.

Further reading:

How to divest your bank account from fossil fuels

How to get your pension fund to divest from fossil fuels

How to divest your personal finances: your questions answered

ShareAction campaign on fossil free pensions

Ok, I'm interested in divesting – what does it entail? How long does it take?

If you are interested in personally divesting or in putting pressure on institutions with which you are connected to divest, then see the previous question. If you are in a position of power in an organisation that may consider divestment, you should first consult your investment advisers. It is likely that they will direct you to the UN's Principles of Responsible Investment, which although not insignificant they are principles alone and do not require any divestment.

A common first step is to freeze any new fossil fuel investments while conducting a review, which can often take several months. Different institutions have defined divestment in different ways, but the divestment movement asks for the removal of funds from the top 200 companies globally (100 coal companies and 100 oil and gas), as defined by the projected carbon emissions of their reserves.

Once an institution has committed to divestment, it can remove its direct investments in these companies – some do so with immediate effect, others choose to phase them out more gradually over a set time frame.

Next comes the issue of indirect investments: these are much more difficult to remove because they are in commingled funds which which are a blend of assets from different accounts. Managers who offer fossil-fuel-free options are currently in a minority. Investors can engage with managers or consultants about carbon risk or switch to managers who are able and willing to create fossil free accounts. This takes much longer; a five year time-frame is common.

Other organisations, such as the university of Sydney and a number of large pension funds, have gone down the route of decarbonisation. This means they commit to phasing out carbon emissions from all the companies in their portfolios rather than exclusively targeting those in fossil fuels. The UN has also supported a coalition of investors taking this approach, called the Portfolio Decarbonisation Coalition

Further reading:

Neil Berkett: why the Guardian Media Group is getting out of fossil fuels

Institutional pathways to fossil free investment

The Forum for Sustainable and Responsible Investment

Where can the money divested from fossil fuel stocks be reinvested?

Although the fossil fuel divestment movement doesn't stipulate where investors should move their money to, some institutions and campaigners have called for a focus on investing in the green economy. When Syracuse University divested from fossil fuels it also committed to investment in a number of clean energy solutions, including solar, biofuels and advance recycling. A number of key foundations who are part of the Divest-Invest coalition have taken this approach, including the Rockefeller Brothers Fund and the Wallace Global Fund.

Ikea is an example of a multinational that has focused on investment in renewables rather than divestment from fossil fuels – it has invested £1.1bn in renewable energy equipment, and last year met almost half of its global energy demand by generating its own renewable energy power. Ethical investment platforms can help with building a positive investment portfolio, such as Ethex, a non-profit that works with individual investors, financial advisers and social businesses to highlight financial viable alternatives to traditional investments on the stock market.

Further reading:

Generation Investment Management

Beyond Fossil Fuels: the investment case for fossil fuel divestment

Which organisations are invested in fossil fuels?

Most institutions, including universities, faith organisations, local authorities, pension funds and charitable foundations have endowments that are almost certainly invested in fossil fuels to some extent. Campaigners are now challenging these investments on a local, national and international scale and many have started to divest. You can find out much more about this through Fossil Free, the divestment campaign run by 350.org