THE BIG SHIFT

christian aid

Banks must invest our money in a cleaner future

In August and September 2017, extreme weather of unprecedented proportions devastated communities across the world. In just one horrific example, floods and landslides across south Asia killed more than a thousand people and displaced millions from their homes.

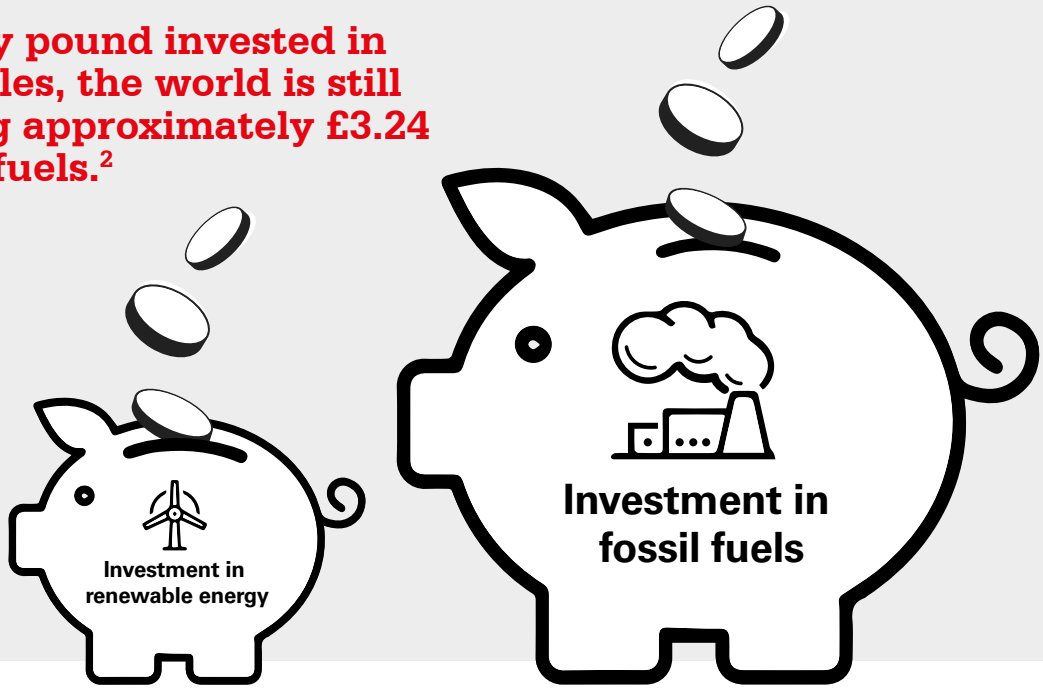
These tragic events remind us how climate change is already hitting some of the world's most vulnerable communities. It is more important than ever to fulfil the ambitions of the Paris Agreement on climate change, where world leaders affirmed their commitment to limit global temperature increases to 'well below' two degrees, with an agreed aim of limiting the rise to 1.5 degrees.

Meeting the 1.5 degree target, while satisfying global energy needs, will require an unprecedented shift in the way we finance energy. We must rapidly step up investments in renewable energy and phase out investments in fossil fuels. UK banks have an important role to play. Despite some progress, the banks are still using our money to fund highly destructive projects and companies.

Until recently, renewable energy was seen as alternative, expensive and unreliable, but technical progress and rapidly falling costs mean renewables are increasingly cost competitive.[1] Investment in renewables has risen substantially in recent years, and since 2015 renewables have made up more than

The river system surrounding Metro Manila in the Philippines can swell dramatically, hitting the millions of informal settlers on the riverbanks hardest.

For every pound invested in renewables, the world is still investing approximately £3.24 in fossil fuels.[2]



half of new electricity generating capacity, powering homes, businesses and schools from Newcastle to Nairobi.

The global transition to a low-carbon economy is well under way. However, the depth and pace of this transition is not yet enough. The world is still too reliant on fossil fuels, and we're investing too much in them. Renewables (apart from large scale hydroelectric) still only account for around 6% of global electricity generating capacity.[3] In 2015, global investment in energy extraction and infrastructure amounted to around $1.8 trillion. Of this, 55% – some $1 trillion – was invested in fossil fuels, compared to around $311 billion – only 17% – in renewables.[4] This means the world is investing £3.24 in fossil fuels for every £1 in renewables. These investment patterns are not good enough, and will not enable us to achieve global climate ambitions.

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On current projections, we are still heading for a global temperature increase of between 2.9 and 3.4 degrees.[5] Such a rise would be calamitous for poor countries. It is predicted that, by 2050, 47 million more children in sub-Saharan Africa will become under-nourished, largely as a result of climate change.[6] By 2060, more than a billion people worldwide could be living in areas vulnerable to coastal flooding.[7] Currently, some 1.2 billion people – mostly in developing countries – do not have access to electricity.[8]

Our Big Shift Campaign calls on the UK's largest high street banks (Barclays, HSBC, Lloyds and RBS) to ensure that their lending is in line with global climate ambitions. This should involve setting ambitious and measurable targets to increase lending to renewable energy projects, while decreasing loans to fossil fuel projects and companies.

Since the campaign launched in 2016, our staff and supporters have been involved in conversations in which all the banks have emphasised their support for clean energy projects. This is an excellent starting point.

However, as this briefing shows, the banks continue to finance companies and projects like Tullow Oil, Adaro Energy, the Cerrejón coal mine and the Maamba coal-fired power station which we believe lock the planet into a high carbon and therefore 'dirty' future.

Given the scale of the challenge, investment is key to the low-carbon transition demanded by both existing and future global climate agreements. As yet, none of the banks have produced a clear transition plan for energy financing. It's imperative they do so as soon as possible, both for the sake of the climate and to ensure that their businesses are fit for a future powered by renewables.

Get involved in the campaign at caid.org.uk/bigshift

We already have the money and technology needed to tackle climate change. However, doing so will require an unprecedented shift – both in scale and speed – in the way we use, source and finance energy.

If we continue on the current investment trajectory, $23 trillion would be invested in fossil fuels by 2050. We need to switch this to funding clean energy. To have a chance of limiting global temperature increases to two degrees, the International Renewable Energy Agency (IRENA) estimates that an extra $16 trillion needs to be invested in renewable energy and $23 trillion in energy efficiency, as well as substantial sums in areas such as distribution and battery systems. Even after taking into account the avoided investments in fossil fuels, we will need to find a staggering $29 trillion to invest in the energy system.

These figures spell out why we need such a big shift in the way we finance energy.

Banks have a vital role to play in the shift to clean energy. Renewable energy companies typically have fewer financial reserves than fossil fuel companies. This means they depend more on bank loan financing to expand their work.[9]

Many banks have started to see the opportunities in investing in large-scale renewable energy. This helps to build more sustainable and reliable national grids. However, we also urgently need to channel funding to small scale and off-grid energy systems, which often make the greatest difference to poor people in rural and isolated communities. Communities across the global South are increasingly demanding such solutions. Some lenders such as Triodos are starting to grasp these opportunities, but there is an urgent need to scale up financing so that more people can benefit.

‘Banks need to act by developing ambitious transition plans now’

2050 may seem a long time away, but banks need to act by developing ambitious transition plans now. It is widely acknowledged that the longer financial institutions take to shift their investments, the harder and costlier it will be to meet global climate ambitions. Delays also increase the risk that banks will be affected by fossil fuel investment becoming ‘stranded assets’ – investments in projects that fail to generate projected profits because their life is cut short. This could include, for example, coal-fired power stations and oil and gas infrastructure becoming less profitable because of new climate policies. The Paris Agreement will be reviewed in 2018 with a view to setting more ambitious targets. The longer the banks wait, the greater the risks will become.

The shift to renewables isn’t just good for the planet, it’s good for business too. Banks have much to gain from the growth in markets for renewables and from reducing their exposure to the risks associated with lending for fossil fuels. Given the urgency and scale of the climate challenge, they must pick up the pace and seize these opportunities before it’s too late.

Michele outside his home in Haiti, which was destroyed by Hurricane Matthew. The intensity of storms are predicted to increase in countries like Haiti due to climate change.

Funding 'dirty' deeds

These case studies are just four examples of how major high street banks are still using our money to finance projects and companies whose activities are fuelling climate change.

Case study 1: Cerrejón mine: exporting emissions

Since 2011, Barclays, HSBC, Lloyds and RBS have contributed to lending syndicates which made an estimated $109 billion in financing available to Anglo American, BHP Billiton and Glencore. Each of these companies owns a third of the Cerrejón mine in La Guajira, in the north-east of Colombia. In total, these banks committed an estimated $10.6 billion to those lending deals.

The Cerrejón mine claims to be one of the largest open pit coal export operations in the world.

Coal is one of the most carbon-intensive fuels available and urgently needs to be phased out if we are to have a reasonable chance of keeping temperatures rises below 1.5 degrees.

The Cerrejón mine, which claims to be one of the largest open pit coal export operations in the world,[10] has caused controversy for more than three decades. Local communities, including indigenous Wayúu people, have been relocated to make way for mine activities.[11] Other local people claim the mine failed in its legal responsibility to properly consult them on its expansions.[12]

Cerrejón produced more than 33 million tonnes of coal in 2015,[13] and plans to increase this to 40 million tonnes over the next few years.[14] Most of the coal is destined for electricity production in Europe and the US. Even at current levels, the emissions from this could amount to more than 75 million tonnes of CO_2 per year.[15] This is almost equivalent to the whole of Colombia's emissions.[16] With the mine expected to operate until 2034, total emissions across the rest of the mine's lifespan could be as high as 1.3 billion tonnes.

While the majority of emissions associated with Cerrejón coal will be produced in rich countries, it is people in poorer countries who will continue to pay the highest price for climate change. La Guajira is one of the poorest regions in Colombia and already suffers severe drought. According to the United Nations, many people are vulnerable to food insecurity and changing weather patterns are threatening traditional ways of life.[17]

'To ensure a just transition, countries like Colombia will need help and finance from the international community to rebalance their economies'

Despite this, coal mining continues to play a major role in the Colombian economy. In the context of the Paris Agreement, this is simply not sustainable. To ensure a just transition, countries like Colombia will need help and finance from the international community to rebalance their economies. Continued investment by UK banks in companies that own what we believe are destructive projects will only get in the way of that transition.

Anglo American and Glencore deny any failure to consult local people. They told us that Cerrejón participated in prior consultations that resulted in agreements to mitigate and compensate for the impacts of specific projects. They also state that, since 2006, Cerrejón has carried out all resettlements in line with the International Finance Corporation's performance standards.

Case study 2: Locking Indonesia into a 'dirty' future

Adaro Energy is one of Indonesia's largest coal producers, producing more than 52 million tonnes in 2016. According to the company's annual report, HSBC provided Adaro with $45 million of bank guarantees in 2015 and 2016. The bank also participated in a number of lending syndicates which made more than $2.1 billion in credit available for the group to draw on.[18]

If global temperature rises were indeed kept to below 1.5 degrees, companies like Adaro simply would not have a customer base. Despite the World Bank and others warning that more coal-fired power plants in Asia would be a 'disaster for the planet', Adaro has started expanding into coal-fired power generation to create what it calls a 'captive demand' for its product.[19,20] Adaro already owns one

power station and holds major stakes in two more under development. Together these will produce an estimated 11.7 million tonnes of CO_2 per year by 2020, equivalent to 2.4% of Indonesia's current total emissions.[21] Each plant has an expected lifespan of at least 30-40 years. These projects will therefore help to lock Indonesia into a dirty future.

As a tropical archipelago, Indonesia is highly vulnerable to sea level rises, and an estimated 41 million people do not have access to electricity. The country therefore must urgently increase its electricity supply while taking action on climate change.[22]

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Renewable energy has a vital role to play. Indonesia has huge potential for solar power and small-scale bioenergy from farm waste. It also has 40% of the world's geothermal reserves.[23] With the right investment, these resources could offer a real boost, not just to Indonesia's national grid but by helping isolated areas secure access to clean, affordable energy where grid connections are too expensive. Banks like HSBC could help make this a reality. Instead, deals with companies like Adaro help make this clean future more remote.

Case study 3: Tullow Oil's new oil field in Kenya

Since 2011 Barclays, Lloyds, RBS and HSBC have contributed to several lending syndicates which have made an estimated $10.4 billion in financing available to the Tullow Oil group. Between them, these banks committed an estimated $1.5 billion to these loan deals.

Tullow describes itself as 'Africa's leading independent oil company' and operates in 10 countries across the continent. It has recently found a major oil field near Turkana in northern Kenya. The company estimates that this could contain up to a billion barrels of oil and is planning to move into full-scale production by 2020.[24]

In 2016, Tullow's global operations produced more than 70,000 barrels of oil per day.[25] Oil can be used in many ways, but if even three-quarters of this was burned as fuel, it would produce more than 8.49 million tonnes of CO_2 per year, about two-thirds of Kenya's annual emissions.[26] If commercial production in the Turkana fields goes ahead, this emission figure could rise significantly. It would also result in considerable public and private investment in costly and long-term oil-related infrastructure, including an 892-kilometre heated pipeline to transport the oil for export.[27]

Case study 4: Coal power in Zambia reveals the banks' double standards

Coal-fired power stations lock the world in a high-carbon and 'dirty' future.

Like several other banks, Barclays will not make loans to new coal-fired power station projects in rich countries like the UK. However, they are prepared to lend to similar projects in poor countries like Zambia.

In 2015, Barclays was part of a syndicate of five banks that provided $590 million in direct project funding to the Maamba power plant in southern Zambia.[28] This coal-fired plant could operate for 30-40 years and will initially have a capacity of 300MW. However, with the potential to triple this, the annual CO_2 emissions from the plant could be as high as 4.6 million tonnes – more than Zambia's total emissions in 2013 – the latest year for which figures are available.[29]

The plant will use coal from the nearby Maamba mine, another example of coal mining companies moving into power generation to secure their product's future. In addition to the climate impact, communities near the mine have complained about water and air pollution, with some now calling for Zambia to keep its minerals – including coal – in the ground.

'Zambia needs to be supported to boost its electricity supply in a low carbon way. Coal power funded by banks is not the answer.'

Banks often claim that coal power is necessary for development. As in Indonesia and South Africa, it is true that Zambia desperately needs to boost its electricity supply and diversify its energy mix. Zambia needs to be supported to boost its electricity supply in a low carbon way. Coal power funded by banks is not the answer.[30]

Zambia has significant solar, wind and geothermal energy resources which, with the right financial support, could be exploited for both on- and off-grid electricity systems.[31] Bank investment in renewable energy projects would help to expand the range of options available, helping Zambia to leapfrog to a low-carbon future, rather than one based on the fuels of the past.

Maamba contends that the power plant project was approved by an environmental impact assessment, which confirmed that the project would help control air and water pollution by using stockpiles of previously mined coal. Maamba says it makes sure its operations benefit the local community and minimise the impact on the environment.

Financing for a clean energy future

Bank finance doesn't have to lock us into a dirty future, as the following positive examples show.

Case study 5: Contributing to large-scale, clean energy in South Africa

In 2015 Barclays participated in loan syndicates which provided more than $1.3 billion in direct project financing to six large-scale renewable projects in South Africa.[32] Since 2011, HSBC, Lloyds and RBS have also made loans worth an estimated $605 million to companies involved in these projects.[33]

The projects – three windfarms and three solar power plants – are situated in the Northern Cape province and will feed power into the main electricity grid. According to the companies involved, they will generate enough electricity to power around 475,000 South African homes, saving at least 1.8 million tonnes of CO_2 emissions per year, compared with fossil fuels.[34]

South Africa currently generates most of its electricity from coal. Increasing energy demand in recent years has meant that the country's electricity supply has been under considerable stress. Unplanned power outages have been a regular part of life for many South Africans, particularly during the winter. Securing an expanded, stable and clean electricity supply is a national priority. Support for projects like the Northern Cape wind and solar installations shows how banks can help to secure a clean energy future.

Case Study 6: Triodos – an alternative banking model

Triodos Bank offers an alternative banking model. The bank has just launched a current account for UK customers. Triodos provides banking and investment services to more than 750,000 customers across the UK as well as the Netherlands, Belgium, Spain and Germany.[35] Triodos refuses to lend to or invest in companies that 'put profit before people or the planet'. More than 23% of its loans support renewable energy projects. The bank also has clear policies for its investment products, meaning it will not invest in companies that make more than 5% of their revenue from extracting, producing, selling or generating electricity from oil, gas or coal. Some of the projects recently supported by Triodos include a small-scale community hydroelectric project in Cheshire and a community windfarm in the Scottish borders that will provide an income for a local housing association.

Triodos customers can find out exactly how funds deposited with the bank are being used, thanks to an online database containing details of all the bank's business borrowers. Triodos' asset management arm lists all of the companies in which it holds shares, as well as those in which it would be prepared to invest on ethical grounds.

Although most projects funded by Triodos are based in Europe, it invests in M-KOPA, a company providing solar energy to households in Kenya, Uganda and Tanzania. M-KOPA offers small scale off-grid solar power systems, which can be used to run lights, radios and charge phones. Customers pay a deposit then pay for the rest of the system in instalments. M-KOPA claims that this business model has brought clean, safe and affordable energy to more than half a million homes.[36]

Campaigners call for increased clean energy access in Kenya, where political support for renewable energy is growing.

Clean energy in Kenya – why developing countries need renewables

While fossil fuel companies like Tullow Oil and Maamba Collieries are looking to Africa for their profits, Africans are increasingly looking forward to a future free from fossil fuels.

In Kenya, where almost 80% of households are living without basic energy services, access to clean, affordable and reliable energy emerged as an important issue ahead of the country's 2017 elections.

Kenya has substantial renewable energy resources. Hydro and geothermal account for more than 60% of currently generated power. Off-grid biogas and solar energy systems show significant potential to meet the demand for clean and safe energy for household cooking and lighting. These technologies can be rolled out quickly and are increasingly preferred by poor and rural households, for whom connecting to the main electricity grid can be prohibitively expensive and subject to long delays.

'Africans are increasingly looking forward to a future free from fossil fuels'

Polling shows that 64% of Kenyans were more likely to vote for a political party that promoted clean energy. With growing public awareness and media interest, renewable energy access is set to remain a hot topic in Kenya's political and development agenda.

Kenya's economic development blueprint, Vision 2030, aims to connect all Kenyans to the national grid by 2020. This will require an enhanced focus on sustainable energy generation. Renewable energy, especially through decentralised systems, will play a key role in making sure that energy-poor communities have access to affordable and reliable electricity. As the political support for renewables increases, so too will investment opportunities.

Note on finance figures

Unless stated otherwise, all finance figures are based on information sourced through proprietary financial databases such as Bloomberg and Thompson Reuters. These are widely used within the financial services industry.

In case studies 1 and 3 we give two figures. The first is for estimated *total finance made available*. This refers to the estimated total maximum value of all separate loans made to a company by banking syndicates of which Barclays, Lloyds, HSBC and RBS were members. The second figure for *estimated funds committed* represents our estimates of the funds that Barclays, Lloyds, HSBC and RBS contributed to those deals.

Some of the deals included within these figures include a form of lending known as a *revolving credit facility*. This is a bit like a corporate version of a personal overdraft, whereby a bank, or syndicate of banks, agrees a credit limit with a company for a certain period of time. The company can borrow and repay up to the credit limit at any time. For example, under a $10 billion credit facility a company might use $2 billion over a three-month period, pay it back, then use another $1 billion the following month. Revolving credit facilities are often renegotiated at the end of their term.

We contacted each of the banks referenced in this briefing. None of them expressly endorsed or denied our figures. Some of the banks, such as Lloyds, suggested that the data differed from their own but did not provide any further explanation. The banks did, however, stress their general commitment to actively supporting the UK business community as it transitions to a low-carbon economy and embraces renewable energy projects.

Some banks commented that the maximum limit of a revolving credit facility may not be a fair reflection of the funds loaned to a company. They also suggest that by counting renegotiated facilities as separate loans, some double counting may have crept into our calculations.

Our view is that it is legitimate to include both figures. Even if a company does not use its maximum credit allowance, this represents a guaranteed sum that can be drawn on at any time. This helps to give confidence to investors, customers, and governments, all of which are vital to a company's ability to do business. We also state it is legitimate to consider each individual credit agreement. This is because each time a facility is renegotiated it represents a new decision on the part of a bank or banks to continue a lending relationship.

Endnotes

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[26] According to the World Bank, Kenya's CO_2 emissions were 13,300.299 kt in 2013, https://data.worldbank.org/indicator/EN.ATM.CO2E.KT?locations=KE

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[32] The projects are the Khobab, Loeriesfontein 2 and Noupoort wind farms and the Prieska, Ilanga 1 and Xina Solar One solar installations. Sum does not include lending for Khobab and Loeriesfontein, for which no figures are publicly available.

[33] This refers to general corporate financing loans made to SunPower and Abengoa, which were involved in several of the projects.

[34] Does not include Ilanga CSP One/Karoshoek Solar One, for which no estimates are available.

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We believe in life before death

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