

# Banking while Borneo burns

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How the UK financial sector is bankrolling Indonesia's fossil fuel boom

September 2013



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**September 2013**

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## Executive Summary

The Republic of Indonesia, the world's fourth most populous country, is in the midst of a fossil fuel export boom. Until recently a member of OPEC and one of the world's biggest exporters of liquid natural gas, Indonesia has now become the world's biggest exporter of thermal coal, an industry centred in Kalimantan, the Indonesian part of the island of Borneo.

But this is a boom that has failed to benefit the people of Indonesia. While tens of millions of tonnes of coal, oil and gas are produced in Indonesia every year, one third of people in the country's biggest coal producing province are still without reliable electricity, whole villages of people have been forced to leave their land and large areas of biodiverse rainforest used by indigenous peoples for generations are being destroyed. Coal mining has also led to water pollution and health problems from the inhalation of dust. The devastating effects of climate change caused by the burning of these fossil fuels will also disproportionately affect the very poorest. When considered in the light of these realities, it is clear that this fossil fuel boom is not benefiting the majority of people in Indonesia.

Much of the finance behind the Indonesian fossil fuel industry comes from the UK. The big UK banks lend money to companies involved in fossil fuel extraction, and help them raise money from share and bond issues. Some of the money that makes its way the 7,300 miles from the UK to Borneo comes from pension funds that invest their money in companies listed on the London Stock Exchange, where, alongside the big international firms like BP and BHP Billiton, the smaller Indonesia-focussed companies Bumi plc and Churchill Mining receive millions of pounds, often through the mediation of asset management firms like Legal & General and Aviva.

This report gives an indication of the extent to which the UK financial sector centred in the City of London is involved in high carbon investment in Indonesia. It seeks to show, through the example of Indonesia, how the equity issues, syndicated loans and flotations of the City translate into evictions, deforestation and climate change on the ground.

This report finds that:

- Indonesia's fossil fuel extraction boom has done little to benefit the lives of people living in regions where extraction is taking place, and has in fact in many cases caused significant damage to the livelihoods of some of the country's poorest people.
- Of the five biggest UK banks, four are significantly involved in Indonesian fossil fuel financing: HSBC, Barclays, Standard Chartered and RBS. A fifth, Lloyds, while not having a physical presence in Indonesia, is involved in financing multinational fossil fuel companies with a presence in Indonesia.

- A total of 52 coal pits<sup>1</sup> across Indonesia have some financial link to the UK. Among these projects are the top five biggest coal projects in the province of East Kalimantan, and the two coal companies that are leading the rush to expand large scale coal exploitation into the province of Central Kalimantan.
- About 83 per cent of the coal produced in the province of East Kalimantan is mined by companies with a financial link to the UK.<sup>2</sup>
- UK banks have lent more money for Indonesian coal than banks from any other country and come second only to the Swiss banks in terms of overall financing of Indonesian coal.<sup>3</sup>

Home to hundreds of ethnic groups, vast expanses of rainforest and a breathtaking diversity of flora and fauna, Indonesia has much invaluable natural heritage to protect. Urgent action needs to be taken in the UK to ensure that the livelihoods of people living within the 735,358 square miles of the southeast Asian archipelago are not ruined by the actions of a few people working within the single square mile of the City of London.

Established market based solutions such as carbon trading schemes have largely ignored the financial sector's responsibility for climate change and have failed to bring the UK any closer to its legally binding target of reducing emissions by 80 per cent by 2050.

It's time for a new approach. The post-1980s model of blanket deregulation and the unfettered flow of global capital is not working. Nothing less than a fundamental reorientation of the working of the financial sector will succeed in moving our banks and financial institutions away from their dependency on fossil fuels. There is a pressing need for radical regulatory reform to ensure that the UK financial sector is no longer bankrolling climate change and the devastation of local communities in countries like Indonesia.

## Introduction

This year levels of CO<sub>2</sub> in the atmosphere reached 400 parts per million. People across the world are beginning to feel the effects of the 0.75°C rise in global temperatures that we have already seen. Recent reports tell of how towns and villages from Africa to Alaska are being displaced by this human and environmental catastrophe. As long as the emissions of rich industrialised countries remain at an unsustainable level, there is a high risk that this will get much worse.

The poorest people in the global south will bear the brunt of these changes to our climate. They are most at risk from increased extreme weather, and their limited economic power further deepens their vulnerability to climate change. The climate change watch group DARA attributed 5 million deaths to climate change in 2010, 90 per cent of these deaths were reported to be in developing countries.<sup>4</sup>

We are close to reaching the point at which two degrees of global warming is inevitable regardless of how quickly we reduce our carbon emissions.

Even a two degree increase in temperatures will mean increased hunger due to falling crop yields, severe drought and the exposure of millions of people to coastal flooding. However, the continuation of business as usual emissions could lead to a six degree global temperature rise, which would mean millions dying from food and water shortages due to drastic falls in crop yields and desertification. Major coastal cities (possibly including London) would be flooded, while large parts of Africa and south Asia would become almost uninhabitable. The Intergovernmental Panel on Climate Change (IPCC) estimates that up to 70 per cent of species could become extinct in a six degree world.<sup>5</sup>

A six degree rise in average global temperatures can still be avoided if we take serious measures to move away from our dependence on fossil fuels. But powerful interests are in favour of the status quo. Alongside the obvious oil, gas and coal companies, banks, institutional investors and other parts of the financial sector are closely implicated in perpetuating the high-carbon economy. Fossil fuel companies currently make up a quarter of the value of the London Stock Exchange (LSX). The value (market capitalisation) of fossil fuel shares on the LSX is £900 billion, more than the GDP of the whole of sub-Saharan Africa. Between 2010 and 2012 the top five UK banks underwrote bonds and shares in fossil fuel companies to the tune of £170 billion.<sup>6</sup>

Using the specific example of Indonesia, this report seeks to contribute to revealing the true human cost of the financial sector's addiction to high carbon investment. While not intended as a comprehensive survey of the effects of UK financing of the Indonesian fossil fuel industry, it paints a picture of how the multimillion pound deals translate into significant suffering for

vulnerable people living in the vicinity of major extraction projects in addition to contributing to climate change.

**Chapter 1** gives a brief explanation of how the UK financial sector is complicit in promoting high carbon investments that are catastrophic for the climate and for local communities in the global south. It explains how banks, asset management firms, pension funds and private equity firms are all involved in perpetuating the high carbon economic model. It also explains the idea of the 'carbon bubble' that could lead the world to another global financial crisis, and reveals that the UK's true carbon footprint is significantly higher than is commonly recognised.

**Chapter 2** is focussed on the Indonesian fossil fuel sector as a whole, and the role of the UK financial sector. It profiles the overall state of the coal, oil and natural gas industries and their impact on local people. It briefly summarises each major UK bank's involvement in Indonesian fossil fuels.

**Chapter 3** is a more detailed case study of the province of East Kalimantan, Indonesia's most significant coal exporting region. It details the impacts of the province's biggest coal projects, and their connections with the UK financial sector.

**Chapter 4** focuses on the province of Central Kalimantan, the less developed new frontier for the Indonesian coal industry. It draws on research carried out in the region by World Development Movement staff, and tells the personal stories of some of the communities affected by coal mining.

## 1. The UK financial sector and the fossil fuel industry

### 1.1 The UK's real carbon footprint

The UK is at the heart of the global financial sector and its economic centre, the City of London, functions as a global centre for fossil fuel investment. According to the UK's Department of Energy and Climate Change (DECC), the UK's greenhouse gas emissions in 2011 were equivalent to 0.45 gigatonnes of CO<sub>2</sub> (GtCO<sub>2</sub>e).<sup>7</sup> However, the fossil fuel companies on the London Stock Exchange (LSX), often bankrolled and facilitated by the UK financial sector, are responsible for many times more emissions, which are not reflected in the official figures unless the emissions themselves happen in the UK.

DECC's figures also exclude the 'financed emissions' resulting from loans made by the banking sector, and the 'outsourced emissions' caused by UK consumer demand for products made in other countries such as China. This means that the UK's emissions figures are not an accurate reflection of the UK's true responsibility for causing climate change.

This problem also applies to banks individually, which under-report their emissions in the same way. Banks are usually very happy to report on what are known as 'scope I and scope II emissions' - those caused directly by the institution (such as the emissions generated by cars owned by the bank) and those caused indirectly by the bank's use of purchased electricity (such as the effective carbon emissions of lightbulbs used in the bank's offices). These categories do not even begin to express the true carbon footprint of financial institutions, which lend billions of pounds to high carbon fossil fuel companies, enabling them to expand and invest in new projects. These 'financed emissions', would be part of what is called a scope III emissions reporting scheme. The financial sector companies are not in favour of such a scheme, and the UK government has ensured that scope III emissions reporting will remain voluntary after its new mandatory carbon reporting regulation for LSX listed firms comes into force on 30 September 2013.

If banks were honest about the emissions associated with their investments, we would see that the UK, with the assistance of its financial sector, is responsible for many times more emissions than it claims.



### **RBS's emission omissions**

There is a scarcity of data on the emissions that banks are associated with. Banks are not required to report any emissions resulting from their financing of fossil fuel companies or projects.

A study by the World Development Movement in August 2013 looked at the carbon intensity of the loans of one of the UK's largest financial institutions – RBS. The study examines the greenhouse gas emissions resulting from RBS's loans to five fossil fuel companies in 2012.

In 2012 RBS reported greenhouse gas emissions of 735,437 tonnes of carbon dioxide equivalent (tCO<sub>2</sub>-e) under the Carbon Disclosure Project (CDP). These emissions reflected only its scope I and scope II emissions (e.g. heating offices, running computers and business travel). However, the World Development Movement's study found that the total emissions resulting from RBS's loans to fossil fuel companies in 2012 were between 478.5 million tCO<sub>2</sub>-e and 910.7 million tCO<sub>2</sub>-e.<sup>8</sup> This is up to 1,200 times the footprint reported by the bank under the CDP.<sup>9</sup>

The estimated real carbon footprint of RBS, including these 'financed emissions', is 18 times the entire annual carbon footprint of Scotland, and 1.6 times the footprint of the whole of the UK.<sup>10</sup>

## **1.2 The carbon bubble**

Coal, oil and gas companies extract fossil fuels worth billions of pounds every year. The fossil fuel reserves that exist are more than enough to drive the world to climate catastrophe.

A look at the fossil fuel reserves of companies listed on the LSE reveals that if all the known oil, coal and gas held by these firms was extracted and burnt, the emissions released would be equivalent to 213.68 GtCO<sub>2</sub>.<sup>11</sup> This would be enough to lead us to a world of six degrees of global warming.

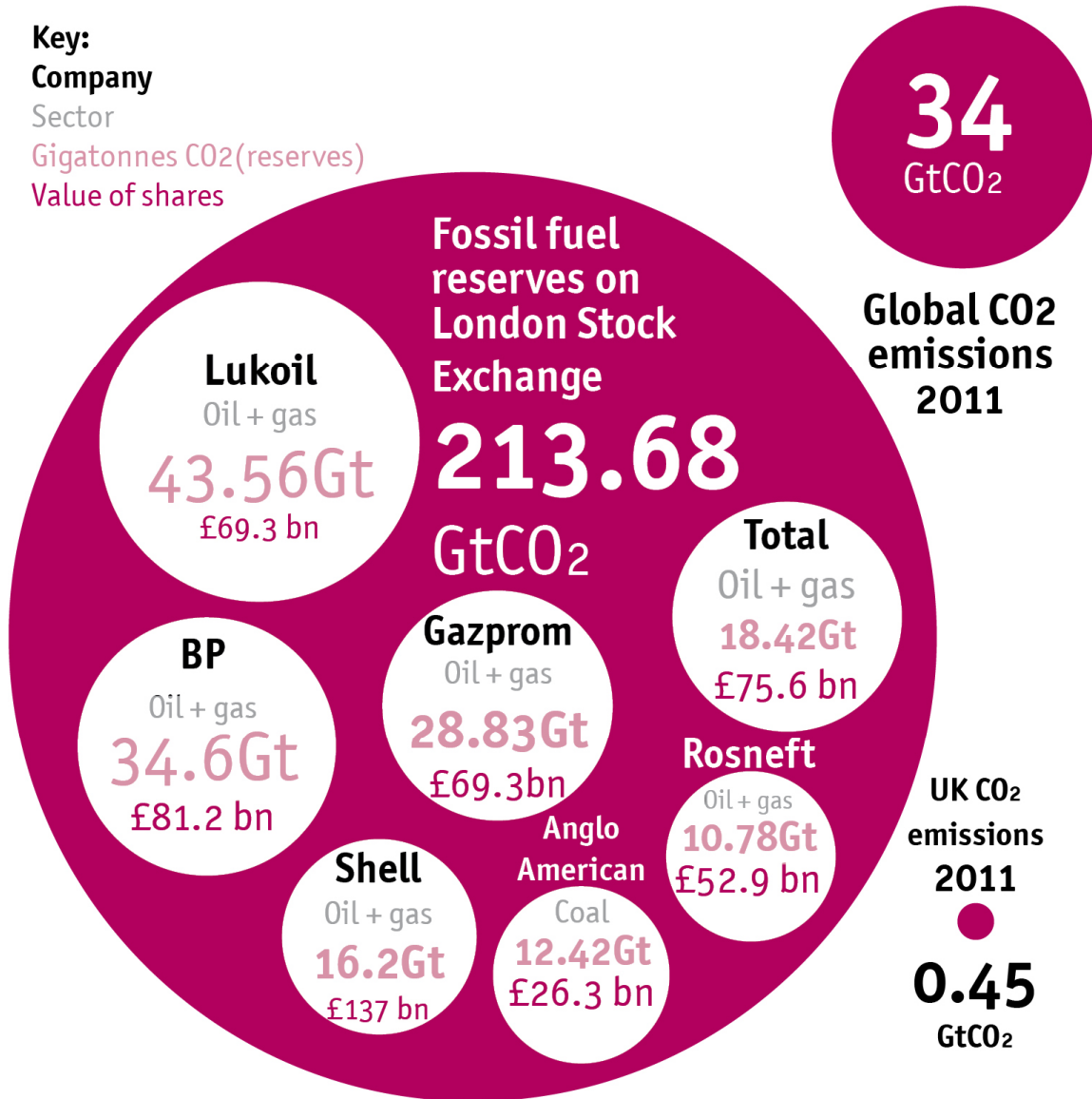
If we were to burn all proven reserves in the world, the resulting emissions would be equivalent to 2,795 GtCO<sub>2</sub>.<sup>12</sup> Research by Carbon Tracker suggests that if we are to avoid catastrophic climate change, just 20 per cent of these reserves can be burned.<sup>13</sup> The remaining 80 per cent of reserves would become 'stranded assets' - worth nothing to those that have invested in them. Our economic dependence on fossil fuels has created a financial bubble. Whilst it seems viable to invest in fossil fuels now, once it is accepted that these reserves are unburnable they will become essentially worthless. Unaddressed, this problem could lead the world into another economic crisis.

**Key:**  
**Company**

Sector

Gigatonnes CO<sub>2</sub>(reserves)

Value of shares



### The carbon bubble

Coal, oil and gas companies extract fossil fuels worth billions of pounds every year. The fossil fuel reserves that exist are more than enough to drive the world to climate catastrophe.

### 1.3 How the UK financial sector supports high carbon companies

Financial institutions and investors help perpetuate the high carbon economy in several different ways:

#### Corporate loans

Central to the financing of fossil fuel companies are the loans they receive from banks. A corporate loan is very similar to the arrangement a borrower has when taking out a loan from a high street bank. Except fossil fuel companies borrow millions (and sometimes even billions) of pounds. Between 2005 and 2011 banks lent the coal industry over 90 billion euros (about £76 billion).<sup>14</sup>

For the bigger deals, banks are often unwilling to take on a whole loan themselves and so coordinate with other banks to secure the funding. This is called a syndicated loan.

#### Project finance

Banks also invest directly in specific projects.

In project finance the lender expects the project, not the borrower, to repay. Funds go into the project during its construction phase and come out in its operation phase. Project finance often funds projects in heavily indebted southern countries that are unable to secure bank loans.

Project finance is much less common than corporate lending as a method of financing fossil fuels. Some banks that invest heavily in fossil fuels through general corporate lending seek to present comparatively low levels of fossil fuel project finance as evidence of their social responsibility. For example, RBS says that, in 2012, 68 per cent of its 'structured lending' to the energy sector was to renewable projects.<sup>15</sup> This may be true, but this kind of lending typically accounts for only a tiny fraction of a bank's overall investments, making this less significant than it appears at first glance. In a study by BankTrack, project finance was found to account for just one per cent of bank investment in the coal industry.<sup>16</sup>

Project finance does, nevertheless, support destructive projects. For example, Exxon Mobil's PNG LNG gas project in Papua New Guinea is being backed by 19 banks including the UK's Standard Chartered bank.<sup>17</sup>

#### Investment banking

Investment banks perform a very different function to high street banks, although most of the big high street banks do have an investment banking arm. Investment banks are often referred to as underwriters. They support fossil fuel companies by helping them raise money from bond or share issues.

Bonds are like 'IOUs' that companies produce when they need to raise money. A bond has a 'maturity' date (when the money will be paid back) and a 'yield' (the interest). Bonds are a

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form of debt financing but differ fundamentally from loans in that they can be traded between investors.

Companies also raise money by issuing shares. The purchase of shares does not guarantee an income in the same way that a bond does, as it is not debt and there is no maturity date. The value of shares can go up or down. Like bonds, shares can be traded. Part of an investment bank's business model is to buy shares at a low value and sell them when the share has 'appreciated', or grown. The biggest share issues occur when a private company becomes 'public' (lists on a stock exchange) and offers up shares for the first time in a Initial Public Offering (IPO), although companies can decide to issue additional shares after this at any point.

Investment banks help companies (including fossil fuel companies) raise money by underwriting their bond or share issues. This means that the bank undertakes to find investors for the new bonds and shares and theoretically risks losing money if no buyers can be found. Investment banks make money by charging a fee for this service, and also by buying the bonds and shares themselves in order to sell them on at a higher price later. Investment banks also provide advice and research to firms and investors.

Between 2010 and 2012, we estimate that the investment banking divisions of the big five UK banks (HSBC, Barclays, Standard Chartered, Lloyds and RBS) helped fossil fuel companies raise £170 billion.<sup>18</sup> This figure excludes the activities of standalone investment banks such as JP Morgan Cazanove.

### **Asset management firms and pension funds**

In essence, asset management firms manage investors' property for them. Asset management companies are also known as fund managers, money managers, wealth managers, investment managers or portfolio managers.

Some of the largest asset management firms in the UK are Legal & General, Prudential, Aviva (M&G). Many banks, like HSBC, also have an asset management division.

Asset managers invest large amounts in fossil fuel equities on behalf of their clients. The biggest clients are often pension funds, which effectively allow the asset management firm to make many of the day to day investment decisions on their behalf.

This means that asset management firms are often the biggest shareholders in large fossil fuel firms. For example, as of January 2013, Legal & General held BHP Billiton shares worth just under £1.8 billion and BP shares worth around £3.8 billion.<sup>19</sup>

The upshot of this is that almost all UK pension funds are invested in fossil fuels shares that are often held by asset management firms on their behalf. A 2009 survey of 118 UK equity portfolios by WWF and Trucost showed that, on average, 13 per cent of assets were held in the oil and gas sectors alone and that the combined greenhouse gas emissions of the companies

these funds were invested in was 10 billion tonnes - 16 times the UK's annual domestic emissions.<sup>20</sup>

### **Private equity**

Private equity is investment in companies that are not listed on a public exchange such as the London Stock Exchange. Private equity firms (which can be public companies themselves) collect money from wealthy individuals and corporate investors to be put into a collective fund that is then invested in a number of privately held companies. In the developing world, private equity investors often require far higher rates of return to justify the higher risk of investing in a poorer country. This means that even the minimal safeguards that are in place for some projects are often absent, as the investors seek to extract the maximum value from the asset before selling it on for a profit. As such, private equity investors are often keen to invest in fossil fuel projects that they can profit from within a relatively short period of time.

#### **'But we're just providing a service'**

Banks often state that they are simply offering a service to the fossil fuel sector and that the activities of the companies they lend money to is none of their business. The simple fact is that the fossil fuel industry would not exist without the financial backing of the banking sector.

If we are to avoid a global temperature rise of six degrees, we must move away from fossil fuels. Banks must make that move with us.

Most banks already have some restrictions on what they invest in. For example, Barclays screens against United Nations, European Union, UK Treasury and US Office of Foreign Assets Control (OFAC) sanctions lists.<sup>21</sup>

Some banks have policies that forbid investment in arms companies or other unscrupulous business practices. Banks obviously do take an interest in the activities of the companies they invest in and fund managers and investors who are serious about the future of their investments are already reportedly considering pulling out of coal and unconventional fuels.<sup>22</sup>

Ultimately, though, we cannot rely on banks making the right investment decisions voluntarily. It is the responsibility of governments to construct a legal and regulatory framework that at least strongly disincentivises unethical investment and preferably eliminates it.

## 2. Indonesia's fossil fuel boom and the UK

Indonesia is the world's biggest archipelago and the fourth most populous country (after China, India and the US). Home to some of the world's last great rainforests on the islands of Borneo, Sumatra and New Guinea, Indonesia is also endowed with incredible natural resources. Indonesia is home to large reserves of gold, tin, copper and bauxite as well as coal, oil and gas.

Unfortunately, this natural wealth has been more of a curse than a blessing to many Indonesians, as foreign companies and investors have systematically extracted and exported fossil fuels and other raw materials to great social and environmental cost.

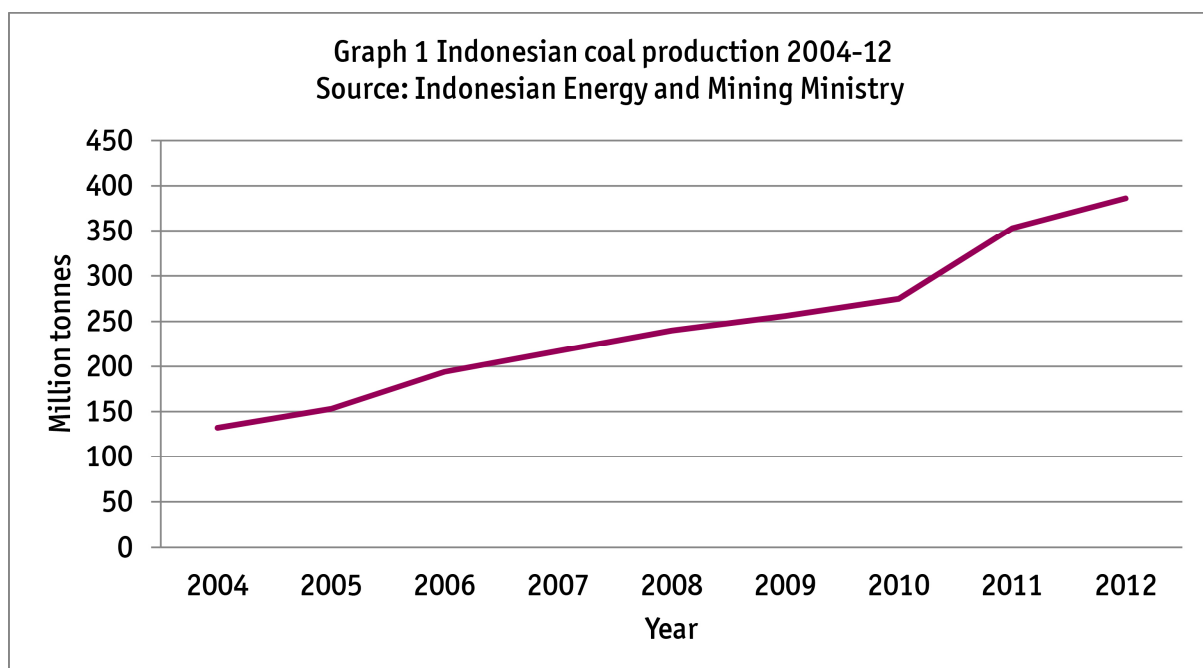
### 2.1 Indonesia's fossil fuel export boom

The last decade has seen the inexorable rise of Indonesia as a major supplier of fossil fuels to the economic giants of East Asia: Japan, Taiwan, South Korea and increasingly China and India.

#### Coal

Coal is Indonesia's most important fossil fuel export. Unfortunately it is also the most damaging, both in terms of climate impact and in terms of negative effects on local communities where coal mines and mining infrastructure are built.

Indonesia is currently the world's biggest exporter of thermal coal for industry and overall coal production has almost trebled since 2004 to reach 386 million tonnes in 2012.<sup>23</sup>



Outrageously, for a country in which about a third of the population do not have access to electricity, most of this coal is exported to factories and power plants in other countries. Indonesia currently exports about 77 per cent of its coal,<sup>24</sup> mostly to other East Asian countries like Japan, South Korea and China. Some Indonesian coal also ends up in European countries like the UK,<sup>25</sup> although Europe's share of Indonesian coal exports has fallen from 14.9 per cent in 2006<sup>26</sup> to around 5 per cent in 2011.<sup>27</sup>

A large part of the reason for the export led nature of Indonesia's coal boom lies in the Indonesian government's decision in 1983 to deregulate its coal sector and attract foreign investors to invest in the country's natural resources.<sup>28</sup> The first beneficiaries of this were the UK companies BP and Rio Tinto which established what would become the Kaltim Prima Coal project.<sup>29</sup> Dozens of other investors have followed them into the Indonesian coal sector to the extent that foreign companies and local companies with significant foreign involvement now control most of Indonesia's coal production.

Since foreign companies are not interested in the lower profits to be made in selling coal domestically, the vast majority of Indonesian coal is exported. Much of this comes from areas in which local people lack sufficient access to electricity.

The centre of the Indonesian coal industry is unarguably Kalimantan (Indonesian Borneo) which accounts for most of the country's coal production. The provinces of East Kalimantan and South Kalimantan are the most developed regions, but increasingly the coal juggernaut is threatening to envelop the rainforests of remote Central Kalimantan as well. Aside from Kalimantan, South Sumatra is also an area that is seeing huge growth in interest from coal mining companies, with reserves estimated to be potentially even higher than those in Kalimantan.<sup>30</sup>

## **Natural gas**

This is also a major export industry for Indonesia, which currently exports about half of its gas production.<sup>31</sup> As with coal, this is largely due to the sector being dominated by foreign investors, rather than a lack of demand from Indonesians. Currently the two biggest producers of natural gas in Indonesia are BP and Total, with the state oil and gas firm Pertamina following in third place.<sup>32</sup> But even Pertamina, financed as it is by international banks (see below), tends to prioritise the demands of its export oriented investors over the need to expand access to energy, meaning that in 2012 Pertamina exported 11.7 million tonnes of liquid natural gas (LNG) to Japan, South Korea and Taiwan while supplying just 0.8 million tonnes to the domestic market.<sup>33</sup>

There are several major sources of natural gas in Indonesia. There are many big LNG projects of which the BP-led Tanguhh project located at Bintuni Bay in West Papua is perhaps the most significant. If expansion plans go ahead, the project will produce 11.4 million tonnes per year of gas by 2018.<sup>34</sup> Local communities complain that the project has introduced social discord

and yielded only low paid jobs.<sup>35</sup> The villagers of Tanah Merah were also displaced from their land to make way for the project and three other local clans lost land to the project.<sup>36</sup>

There is also much investment being put into 'coalbed methane' (CBM) as a source of natural gas. As the name suggests, this involves the release of significant amounts of methane (a greenhouse gas) into the atmosphere.

BP in cooperation with Pertamina is currently engaged in the Kapuas CBM project in South Kalimantan<sup>37</sup> and has also been involved in exploration in Central Kalimantan.<sup>38</sup>

## Oil

Indonesia used to be known as a major oil producing country before coal became the predominant energy export. A member of OPEC until 2008, Indonesia remains the second biggest oil producer in the Asia Pacific region.<sup>39</sup>

However, unlike coal and natural gas, Indonesia is using more and more of its oil domestically, so while oil was traditionally an export industry, Indonesia has now become a net importer of oil due to falling production and rising domestic use.

Production of oil is now falling (albeit slowly). Indonesia produced 1 million barrels of oil per day in 2011, significantly lower than the 1.7 million barrels per day produced in 1991.<sup>40</sup>

## 2.2 Impacts of the fossil fuel boom

The price of the fossil fuel boom in Indonesia has been high for many poorer Indonesians. The benefits of the few jobs (almost none of which go to women) and marginal improvements in infrastructure brought by companies' corporate social responsibility campaigns are often outweighed by serious problems caused by the entry of these companies.

**Loss of land** as a result of fossil fuel exploitation is a common occurrence in Indonesia. Coal mines are a frequent cause of land loss by local communities due to their large geographical area and need for significant surrounding infrastructure that renders the immediate area uninhabitable. Some communities, like the Dayak Basap community of Segading in East Kalimantan, have experienced multiple forced evictions as a result of continuing mine expansion (see chapter 3). Even when coal mines do not require communities themselves to move, local people, especially those from indigenous communities, often lose access to common farming land or customary forest. Natural gas extraction also leads to land loss as in the case of BP's Tangguh project (see above) and, most notoriously, in the case of the Lapindo Brantas mud volcano in East Java, which led to the near total destruction of 12 villages (see box below).

**Water pollution** is another common effect of fossil fuel exploitation that affects local communities. For example, waste material from coal mines is dumped into tailings ponds located close to rivers, sometimes causing the material to pollute the river. Many communities in Indonesia use river water as their drinking water and for fishing.



**Oil spills** are a common occurrence in Indonesia and are a significant hazard. For example, on 1 August 2013 a Pertamina oil tanker carrying millions of tonnes of oil crashed near the island of Ternate in the Maluku archipelago, threatening one of the most important areas of coast for biodiversity and tourism.

**Deforestation** has been a problem in Indonesia for decades. While fossil fuel extraction is not the only driver of deforestation, coal mining activity has resulted in the clearing of new areas and often comes hand in hand with new concessions for logging companies.

A 2010 report estimated that 1.1 million hectares of rainforest are under threat from coal mining concessions, of which 85 per cent is located in Kalimantan.<sup>41</sup>

**Flooding** is a problem in some areas with large concentrations of coal mines. Mining can affect the capacity of land to absorb rainwater, and the waste products of coal mining can, as in the city of Samarinda in East Kalimantan (see chapter 3), cause drainage systems to become blocked, causing regular and hugely damaging flooding in urban areas.

**Climate change** is already affecting Indonesia. There have been changes in patterns of rainfall that may already have contributed to increased floods such as the one that occurred in Jakarta in February 2007 displacing over 420,000 people and killing 69.<sup>42</sup>

The continuation of business as usual emissions will make this situation much worse. Further increases in flooding could spell disaster for many coastal areas and small islands, especially as 25 per cent of the Indonesian economy has been estimated to be concentrated around coastal areas.<sup>43</sup>

Studies also predict that the implications for food availability could be severe. One study by the International Food Policy Research Institute has predicted that prices of rice, maize and soybeans could increase significantly as a result of climate change,<sup>44</sup> and an Indonesian scientist has predicted that the country could face a deficit of 90 million tonnes of rice by 2050 as a result of rising temperatures and changes in rainfall.<sup>45</sup>

**Health risks** are a problem where mining activities take place. In addition to the problems caused by water pollution, negative health effects primarily relate to increased reported incidences of respiratory problems from inhaling dust thrown up by the mining process. In the West Kutai regency of East Kalimantan, 19,375 people were reported to have suffered from respiratory illnesses in 2007, an increase of 9 per cent on the previous year, which is thought to be related to the inhalation of coal dust.<sup>46</sup>

**Lack of economic benefit.** Jobs are often considered the biggest benefit that fossil fuel extraction brings to local communities, but the facts speak of a less convenient truth. The two cities with the highest concentration of mining concessions in Indonesia - Samarinda and Kutai Kertanegara - are also among the top three in terms of unemployment in the province of East

Kalimantan.<sup>47</sup> If mining has created jobs in these areas, it hasn't helped them achieve a lower unemployment rate than non-mining areas.

Even where jobs are created by mining, it does not follow that this can justify the damage that extractive industries cause. Job creation is of course important. But the foreign investor centred, big business model is just one of many possible models of creating jobs in communities, a model that often brings with it dependencies and other negative impacts as we have seen. Other models – for example small scale community controlled renewable energy schemes - can also create jobs, and do so in a more equitable, empowering and sustainable way. The people we spoke to in Kalimantan do not want jobs at any cost.

### **The Lapindo mud flow: seven years of misery for local communities**

In May 2006, many people living near the town of Sidoarjo in eastern Java started to complain to each other about a curious smell. A few weeks later, whole villages had been inundated by the grey mud that had started oozing out of the location of the Lapindo Brantas gas drilling site. After two years, the crater was oozing enough mud every day to fill 50 Olympic size swimming pools.<sup>48</sup> Before long, a mud lake 600 hectares in size and on average 10 metres deep had rendered 13,000 people homeless and caused immediate health problems for 1,500 more.<sup>49</sup> A total of 33 schools, 65 mosques, 30 factories and huge areas of agricultural land were lost.<sup>50</sup> Even now, seven years later, local people say that inhaling the gas is causing deaths from lung cancer.<sup>51</sup>

The suffering that the mud flow caused has been compounded by the fact that many communities are still waiting to receive compensation for the total obliteration of their villages. The company, owned by Australian oil and gas firm Santos, Medco Energi Internasional and the Bakrie brothers' firm Energi Mega Persada, gave out very limited compensation worth just 2.5 million rupiah (about £140) per family at first,<sup>52</sup> but then claimed that an earthquake that hit Yogyakarta in central Java a few days earlier had caused the disaster.<sup>53</sup> There then ensued a long battle between the government and the company about who would be liable to pay compensation. While the government has paid money to some of those affected, when the World Development Movement visited Lapindo in 2013, we met with families who, seven years after the disaster, say they are still waiting to receive 80 per cent of the compensation they were promised.

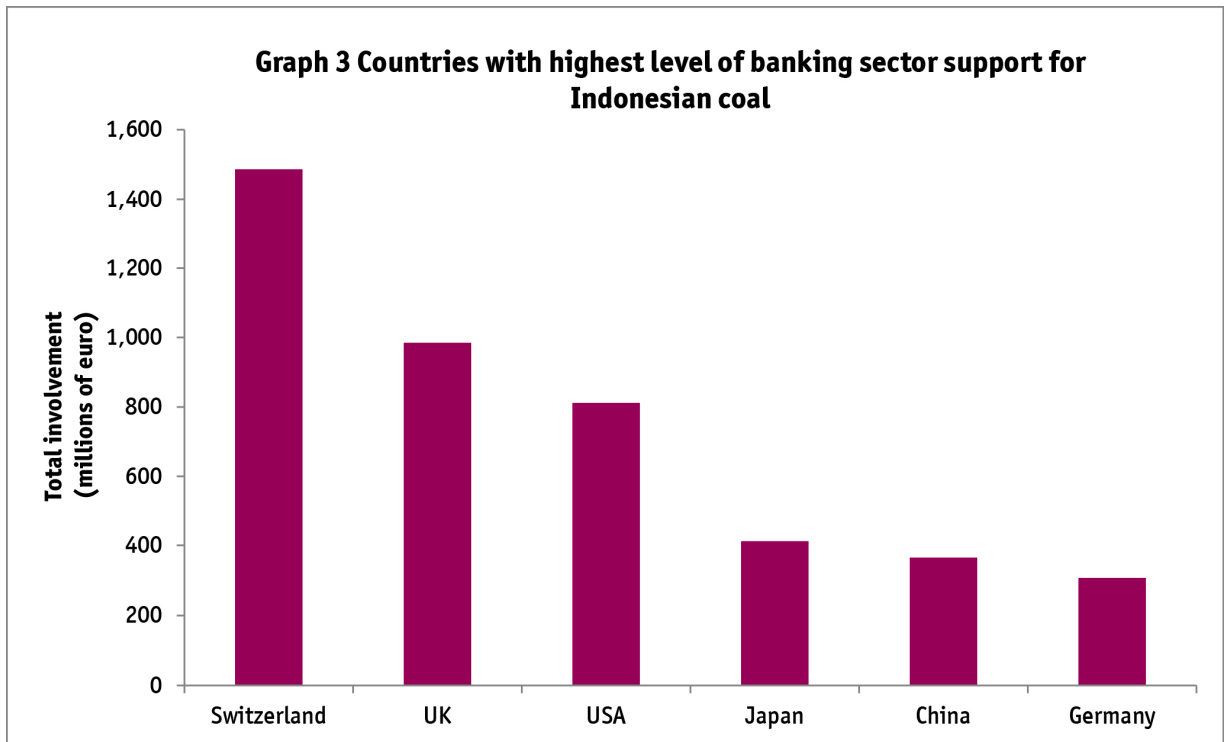
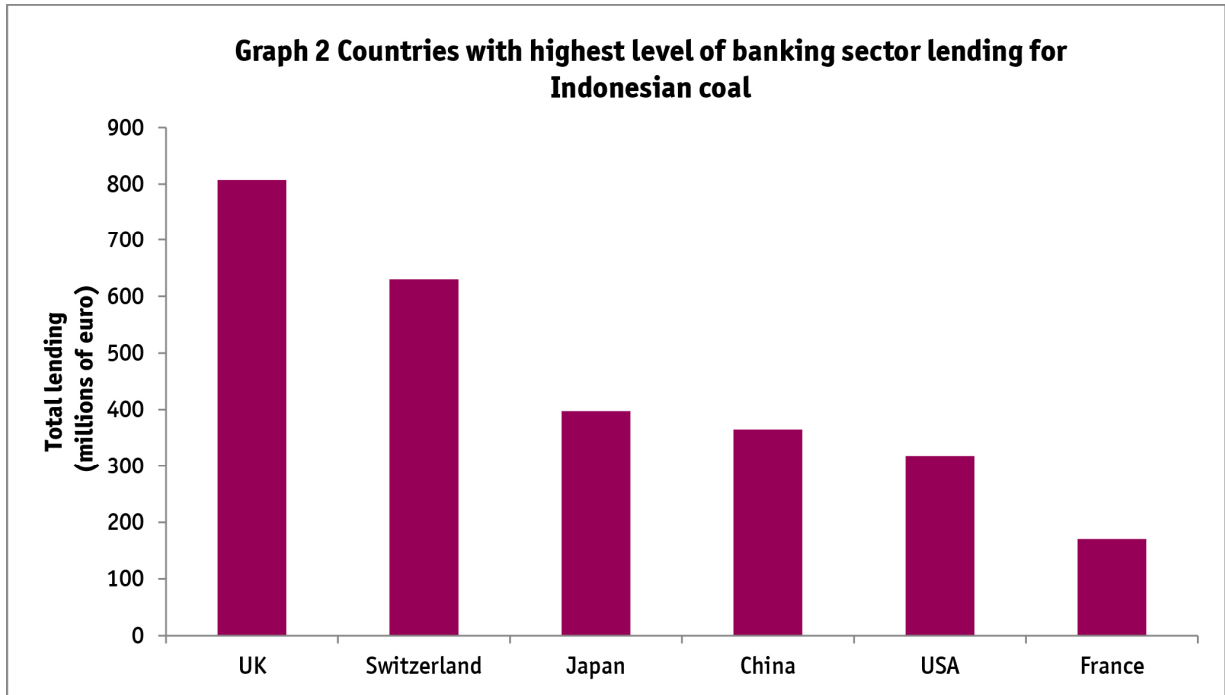
## 2.3 Indonesia and the UK financial sector

There are many ways in which the Indonesian fossil fuel boom is linked to the UK. Firstly, and most obviously, many of the big players in coal and gas are in fact UK companies. BP is involved in several natural gas projects across Indonesia. Rio Tinto, Shell and BG Group (formerly part of British Gas) have all also had some presence in the country. BHP Billiton has mining concessions in Indonesia.

There is also involvement at government level - the UK has been engaged in a charm offensive centred on the Indonesian president, Susilo Bambang Yudhuyono, to secure UK investment in Indonesian natural resources. In November 2012, Yudhuyono visited the UK and signed a £7.5 billion deal to expand BP's Tanguuh project in Papua, a deal Prime Minister David Cameron is said to have been 'delighted' about.<sup>54</sup>

Less attention has been paid to the UK financial sector's involvement in Indonesian fossil fuel extraction. A drive through central Jakarta is sufficient to see how important Indonesia is to the main UK banks. The logos of HSBC, Barclays, RBS and Standard Chartered shine on top of the huge skyscrapers that house the banking giants' local headquarters. Of course, their activities are not focussed on fossil fuels alone, but it is certainly true that UK banks see the exploitation of Indonesia's natural resources as an enormous opportunity.

The UK banking sector is among the biggest backers of Indonesian coal, although the UK banks are certainly not alone in their support for the Indonesian fossil fuel industry. Using data on the financing of eight mining companies<sup>55</sup> involved in Indonesian coal, we have compared the extent of financial support given to these companies from banks of different countries and estimated that, since 2009, UK banks have lent more for Indonesian coal than banks from any other country (graph 2).<sup>56</sup> If investment banking services and equity and bond holdings are included in the equation, the UK banks come second behind the Swiss banks for overall financial support for Indonesian coal (graph 3).<sup>57</sup>



The five big UK banks have all loaned money to firms engaged in Indonesian fossil fuels and have underwritten bond and share issues through their investment banking arms. UK institutional investors buy these shares and bonds (especially when the issuing companies have a listing on the London Stock Exchange) ensuring that money invested on behalf UK pension plan holders helps fund unsustainable energy projects in Indonesia.

**HSBC** has a large Indonesian operation based out of its Jakarta branch. HSBC Indonesia's annual financial statement for 2012 reveals that the local branch lent 7.7 trillion Indonesian rupiah (about £430 million) in 2011 and 2012 to the 'agriculture, forestry and mining' sector.<sup>58</sup> As HSBC Indonesia does not disclose how this breaks down further, it is not possible to say how much of this was lent to coal mining companies. But as mining in general (and coal mining specifically) is currently experiencing a boom, it is likely that a significant proportion of this sum will have ended up financing extractives. For example, we know that HSBC granted Indika Energy, which runs several coal mines including the large Kideco project in East Kalimantan,<sup>59</sup> a loan facility worth \$53 million (around £34 million) in 2009.<sup>60</sup>

The £430 million figure does not include HSBC's investment banking activities or loans granted by other branches. Nor does it include financing granted in general corporate lending to multinationals based abroad, like BP and BHP Billiton, which have projects ongoing in Indonesia. HSBC has also lent Dart Energy, an Australian gas firm involved in three coalbed methane projects in South Sumatra and East Kalimantan, \$100 million (£64 million).<sup>61</sup> In terms of investment banking, HSBC has helped BHP Billiton raise £1.863 billion in bond issues between 2009 and 2012.<sup>62</sup>

**Standard Chartered** has one of the biggest operations in Indonesia of the UK banks. Our research suggests that, since 2009, it has loaned more money for Indonesian coal than any other major bank in the world.<sup>63</sup> Its financial statement states that in 2011 and 2012, the bank's Jakarta branch loaned the Indonesian 'mining and excavation' sector over 7 trillion Indonesian rupiah (about £400 million)<sup>64</sup> a significant proportion of which is likely to be in coal mining. These figures for Standard Chartered's local branch do not appear to include the \$1 billion (about £640 million) loan granted to coal mining company Borneo Lumbung in 2012 (see chapter 4) and certainly does not include the £230 million<sup>65</sup> it has lent to UK listed mining firm BHP Billiton between 2009 and 2012 for general corporate purposes (which could include the Indonesia project).<sup>66</sup> It was one of the two UK banks involved with the Lapindo mud flow, with involvement in several loans and a bond issue for Medco Energi Internasional.<sup>67</sup> It also lent \$15 million (about £9.3 million) to PT Indominco, a subsidiary of East Kalimantan mining company Toba Bara Sejahtera.<sup>68</sup> The bank has also been involved in providing investment banking services to a number of other Indonesian fossil fuel firms.

**RBS** is another important investor in Indonesian mining and fossil fuels. The bank's financial statement<sup>69</sup> for its Indonesia branch states that loans to the Indonesian 'mining and quarrying' sector, at 1.1 trillion Indonesian rupiah (approximately £61 million), accounted for 42.56 per cent of branch lending in 2012, making mining<sup>70</sup> by far the branch's most important sector last

year. It is also one of the biggest financial backers of Pertamina, the state oil and gas company. The World Development Movement's August 2013 report into RBS revealed that the bank had active loans to Pertamina worth around £827 million at the end of 2012, which translates to a financial carbon footprint equivalent to over 8 million tonnes of CO<sub>2</sub>, which would be 16 per cent of the annual emissions of Scotland in 2011.<sup>71</sup> RBS also backed BHP Billiton with loans worth £230 million in general corporate lending between 2009 and 2012.<sup>72</sup>

**Barclays** pulled out of retail banking in Indonesia in 2010, leaving just its investment banking arm, Barclays Capital, at its Jakarta office. Barclays is one of the least transparent of the UK banks in terms of its Indonesian activities and doesn't disclose detailed financial information on its Indonesian operation on its website. Barclays has provided Bumi Resources with loan facilities.<sup>73</sup> Barclays also managed 8.27 per cent of shares in one of the companies (Santos) behind the Lapindo mud flow.<sup>74</sup> Barclays has also backed BHP Billiton with loans and underwritten bonds worth over £2 billion for BP.<sup>75</sup>

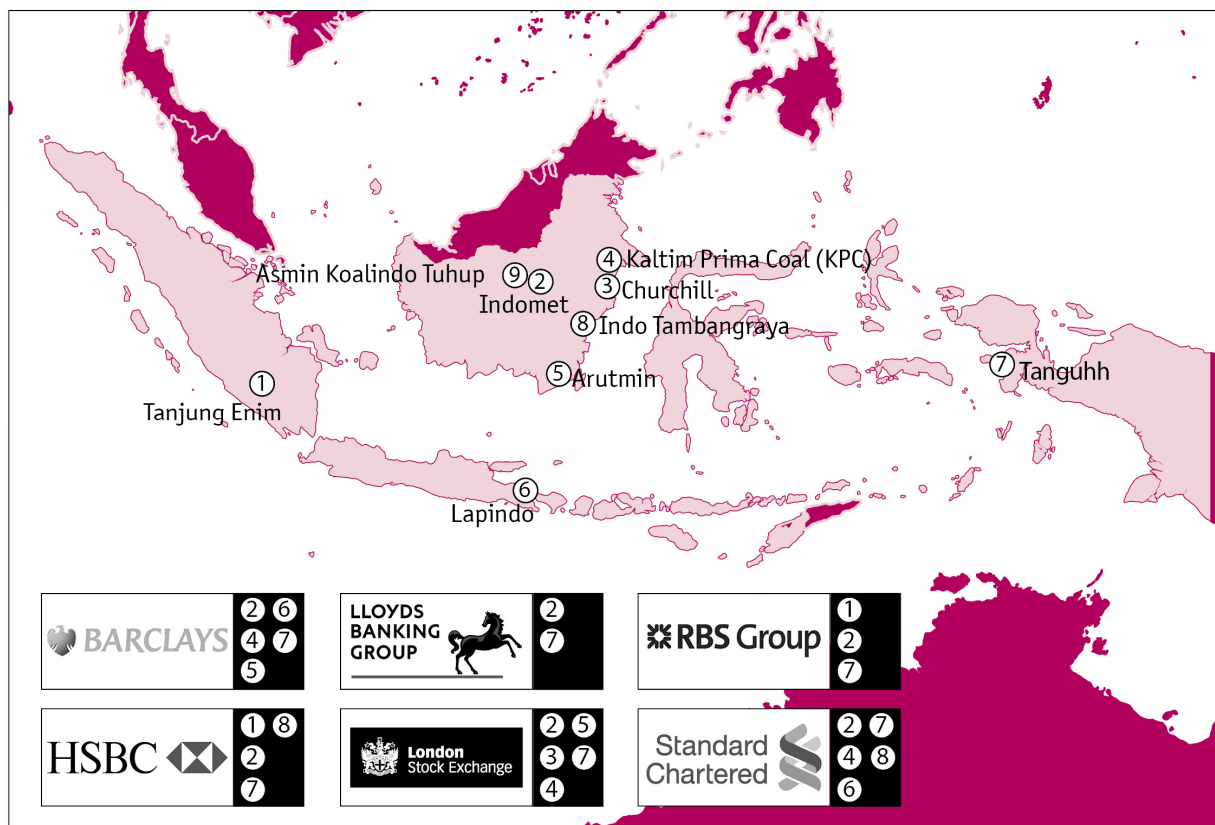
**Lloyds** is the only major UK bank that does not have an on the ground presence in Indonesia. We have not found any Indonesian fossil fuel company with financing from Lloyds. However, Lloyds has granted corporate loans to BHP Billiton, and has backed £515 million of bonds for the mining company since 2009.<sup>76</sup>

Banks are not the only financial link between the UK and the Indonesian fossil fuel sector. Equity investment is, if anything, more important than debt to fossil fuel companies.<sup>77</sup> The status of the **London Stock Exchange** as a world centre for coal means that billions of pounds raised from UK institutional investors eventually ends up in Indonesian fossil fuels.

Securing a listing on a major exchange like London is an important aspiration for big companies based in the 'emerging' markets of the global south. It is the key to securing billions of pounds of equity investment from big, more risk-averse institutional investors like pension funds, which are wary of investing in companies from riskier countries without a certain level of confidence that the foreign company operates standards of corporate governance and reporting equivalent to that of a UK company.

In theory, the London Stock Exchange provides these guarantees. When a UK or foreign company is allowed to list, the company commits to maintain certain standards of reporting and corporate governance. This means that UK pension funds and other investors feel confident when investing in these foreign equities.

But the Financial Conduct Authority (FCA), which is in charge of the criteria for allowing companies to list on the London Stock Exchange, does not take social, environmental or climate impact of companies applying to list into account in its regulatory activities. As long as a company's corporate governance and reporting is in order, companies with poor human rights records or hugely negative social impacts are free to raise money in London without official scrutiny on the effects of their activities.



### Major fossil fuel projects linked to the UK financial sector

This means that a listing on the London Stock Exchange says nothing about a company’s social and environmental impacts and standards.

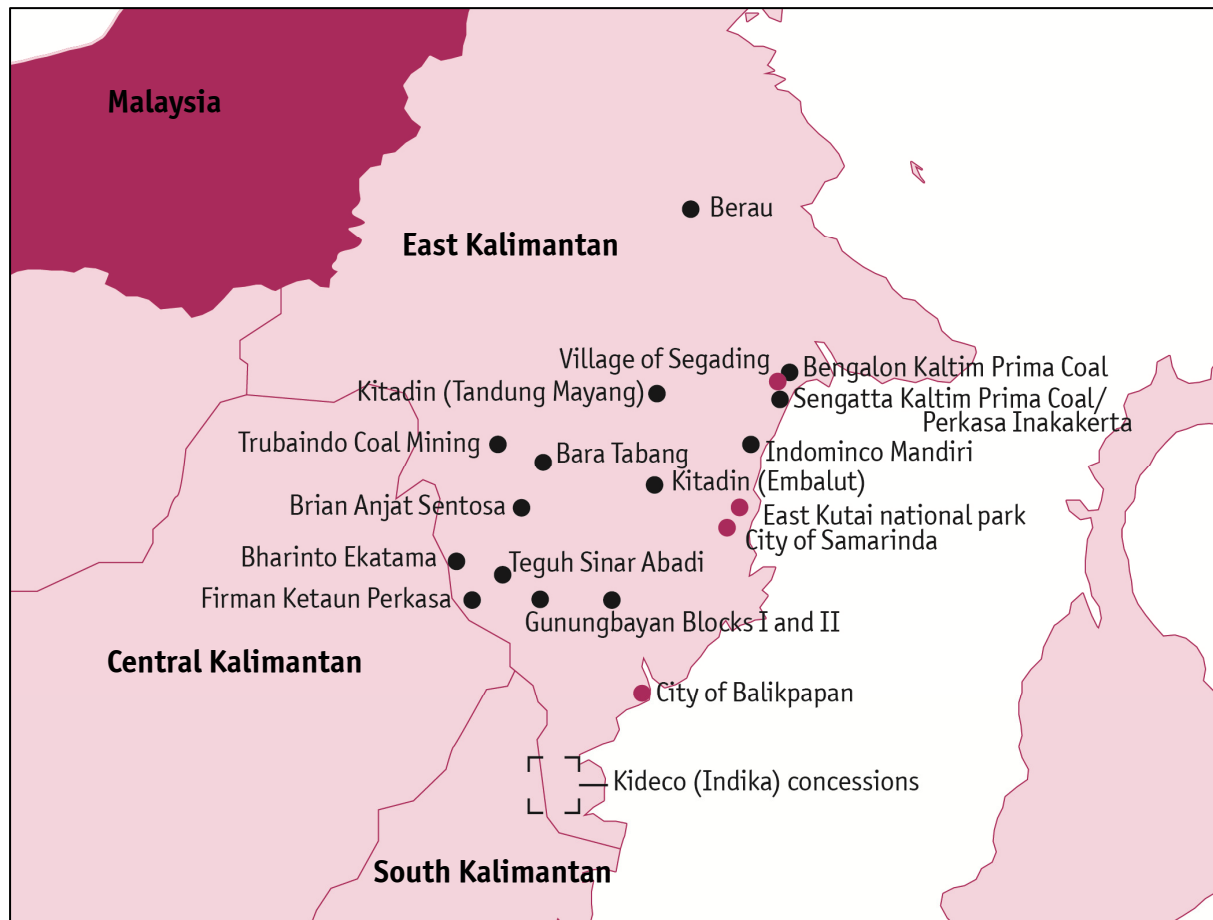
In addition to the highly controversial example of Bumi plc, whose assets are almost entirely Indonesian coal, Churchill Mining, whose East Kutai Coal Project is potentially the biggest in Asia (see chapter 3) is also listed in London, as is FTSE 250 firm Salamander Energy, which has natural gas projects in Greater Kerendan and North Kutei.<sup>78</sup> There are also the London-listed multinationals, whose global reach encompasses Indonesia. BHP Billiton’s IndoMet Project in Central Kalimantan threatens to open up a whole new area to coal exploitation (see chapter 4) and BP is engaged in coalbed methane gas extraction and is the leading partner in the massive Tanguh LNG project in Papua. Both companies loom large in the portfolios of the vast majority of UK pension funds, meaning that pension scheme holders’ money is inevitably invested in these Indonesian projects. Much of this money is filtered through the big UK asset management firms such as Legal & General, Prudential (M&G), Aviva and Standard Life.

The involvement of **private equity** in Indonesia is far more opaque and less easy to penetrate. The inherent secrecy and multiple levels of intermediation (often through subsidiaries based in tax havens) make it very difficult to pin this down. Indonesia is definitely being seen in private equity circles as a major up and coming investment destination, with one investor recently quoted as calling the country ‘the sexiest destination in the emerging markets’ for private

equity.<sup>79</sup> Although WDM could not find any current<sup>80</sup> major UK private equity investment in Indonesian fossil fuels specifically, private equity firms from other countries are rather more active in this regard, with firms like TPG Capital,<sup>81</sup> Pine Brook<sup>82</sup> and First Reserve Corporation<sup>83</sup> holding equity investments in companies involved in Indonesian fossil fuels.



### 3. East Kalimantan: 35 years of UK financing of coal



#### East Kalimantan mines and towns

#### 3.1 An overview of coal mining in East Kalimantan and its impacts

East Kalimantan is a province dominated by the coal industry. In 2009, over 98 million tonnes of coal was shipped out of the province,<sup>84</sup> accounting for a very large proportion of the province's exports. If East Kalimantan were a country, it would be the eighth biggest coal producer in the world.<sup>85</sup>

Here, the power of the coal industry dominates economic life and reaches deep into the political establishment.<sup>86</sup> A visitor need only go to the city of Samarinda, where huge barges carrying thousands of tonnes of coal float down the Makhakam River every few minutes, to appreciate the sheer scale of the coal extraction going on in this province.

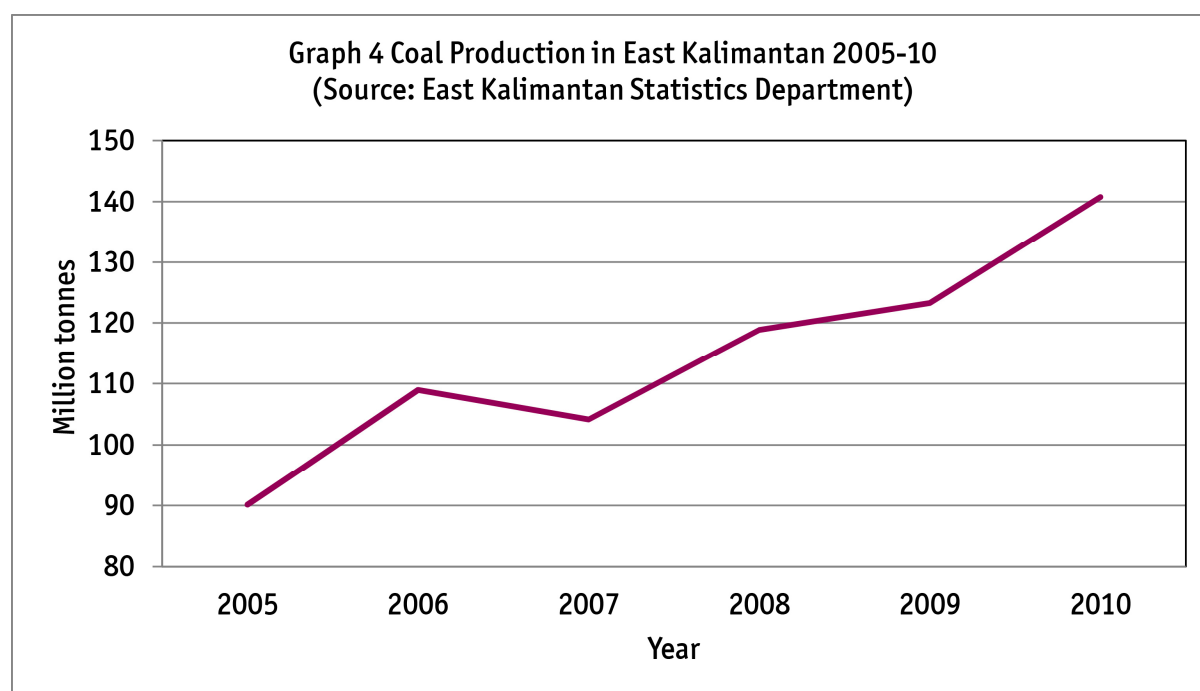
As little as 10 years ago, things were very different in East Kalimantan. Then it was logging, not coal, that dominated the local economy.

It was during this period that some of the problems, such as deforestation, that continue to afflict the whole of Borneo began to reach levels that elicited concern internationally. East

Kalimantan lost over 16 per cent (over 1.8 million hectares) of its forest in just 6 years between 1997 and 2003.<sup>87</sup>

Since then, coal mining has taken over from logging as the major economic activity. But the social and environmental impacts of mining have been, if anything, worse than those of the logging companies. The coal mines have caused widespread water pollution, flooding and loss of land in addition to deforestation. Even a 2011 moratorium declared by the Indonesian government on deforestation has been undermined by a number of major exceptions that have allowed mining, oil and gas companies to proceed largely unhindered.<sup>88</sup> This has contributed to a situation in which, according to some reports, there are only 4 million hectares of forest left in East Kalimantan,<sup>89</sup> just over a third of the 1997 level.

Coal production in East Kalimantan more than doubled from 90 million tonnes in 2005 to 205 million tonnes in 2011.<sup>90</sup> Although there are hundreds of Indonesian coal mining companies, this huge expansion of coal production has been largely led by foreign investors (the first of which were Rio Tinto and BP, which secured their concessions in 1978) seeking to profit from the huge global demand for Indonesian coal.



The biggest coal project in East Kalimantan is **Kaltim Prima Coal (KPC)** in the East Kutai Regency.

The project is currently owned by Bumi Resources, an Indonesian firm established by the billionaire Bakrie brothers. Bumi plc, a company listed on the London Stock Exchange owns 29 per cent of the shares in Bumi Resources.<sup>91</sup> Bumi bought KPC from BP and Rio Tinto, which won the original concession in 1978 and started production at the Sangatta mine in 1991 but were

forced to relinquish control of the project by a clause in their agreement with the Indonesian government obliging them to hand ownership over to an Indonesian company.<sup>92</sup>

The KPC project produces just under 40 million tonnes a year,<sup>93</sup> more than double the coal consumption of France.<sup>94</sup>

The KPC concession areas cover a vast 90,000 hectares, encompassing several villages, and border on the East Kutai National Park, which has been compromised by the presence of the mines. By 2008, an estimated 75 per cent of the forest area supposedly 'protected' as part of the national park had already been destroyed, a process exacerbated by the presence of mining companies.<sup>95</sup>

The human impact of the KPC project has also been stark. Villages such as Segading, Sepaso and Sekerat in the Bengalon mining concession have experienced serious problems as a result of the mining. While families of those directly employed by the mine have benefitted from jobs, the communities as a whole have had to deal with significant water pollution, loss of land and other problems. One study supported by the KPC mining company and funded by the World Bank found that even the small amount of money received in compensation and jobs has gone almost completely to the men, with local women seeing almost no benefit and, in cases where they lose their farming role, becoming economically dependent on their husbands.<sup>96</sup>

The older Sangatta mine has also caused a lot of damage since it became operational in 1992. For example, in 2001, farmers from the village of Kabojaya near the Sangatta pit protested the fact that they could no longer use the local water supply or grow crops as a result of pollution from the mine.<sup>97</sup> Protests against KPC from farming communities led the company to hire Group 4 Securicor (now G4S) to provide security.<sup>98</sup>

The Dayak Basap tribe depend on the forest but the company destroys it. We used to be hunters in the forest but now we can't do that because there are less animals since the company came. Our traditions are fading. We cannot hunt anymore but we cannot work for the company either as we don't have enough education

*Gagay, customary leader of the indigenous Dayak Basap tribe in Segading village*

### The village moved three times by coal mining

The village of Segading is home to a community of indigenous people called the Dayak Basap. When the KPC coal mining company first arrived in the region, the members of community decided to agree to move from their ancestral land in order to take advantage of the benefits the mining company promised. Unfortunately for the Dayak Basap, not only did these benefits fail to materialise but, as the mine expanded, the community was then forced to move twice more against their will. Currently, the leader of the village, Gagay, is fighting to prevent the KPC mining company from forcibly displacing them for a fourth time to a plot of land that is much smaller than the land they are being told to leave.

The **Kideco** project, owned by Indonesian firm Indika Energy, is the second biggest coal mining project in the province,<sup>99</sup> producing about 32 million tonnes a year.<sup>100</sup> The Indonesian mining advocacy network JATAM has reported that the indigenous Dayak Paser people have been evicted from their homes as 27,000 hectares of their land was cleared to make way for the Kideco mine.<sup>101</sup>

The third biggest coal project in East Kalimantan is **Berau Coal**, another company controlled by UK listed Bumi plc.

Thai company Banpu's Indonesian subsidiary Indo Tambangraya Megah controls the **Indominco Mandiri, Trubaindo Coal** and **Kitadin** projects which collectively produce around 27.5 million tonnes a year.<sup>102</sup>

In addition to the big projects mentioned above there are hundreds of smaller coal companies jostling for a slice of the coal cake.

There are also projects that have not yet reached the production phase, that threaten to cause further destruction.

**The East Kutai Coal Project** (EKCP) claimed by London listed company Churchill Mining is the most important of these. Churchill Mining is currently engaged in a dispute with the Indonesian government over the revocation of its permit to mine the area, which has estimated reserves of 2.730 billion tonnes of coal.<sup>103</sup> This makes the EKCP project potentially the biggest in the whole of Kalimantan.

Despite the dispute, which Churchill has taken to the International Centre for Settlement of Investment Disputes for arbitration, at the time of writing (summer 2013) shares in the company were gaining value on the London Stock Exchange's Alternative Investment Market (AIM). Churchill, a relatively small firm, has managed to raise over £32 million since it listed on AIM in 2005. Clearly investors are betting that Churchill will win their dispute and have control over the huge coal resources of the EKCP project.

This would be a disaster for the environment and local people. While the East Kutai National Park has already been compromised by coal mining concessions on its periphery and illegal logging, the EKCP project concessions are situated very close to the park's territory. This would essentially mean the end for this important area of protected forest, home to one of Indonesia's largest remaining orangutan populations.

### **Samarinda: Flood City**

The city of Samarinda, capital of East Kalimantan province, has a serious problem with flooding. Almost every time it rains in the city (which is very often, as Samarinda gets more than four times the rainfall of London every year), almost all the main streets of the city become affected. According to the Indonesian mining advocacy network, JATAM, the homes of over 10,000 people were flooded in just one year in 2008-9.

Coal mining is thought to have contributed to increased flooding in two ways. Firstly, the waste products often find their way into the river and city's drainage system, blocking it up and reducing its capacity to drain away excess water from Samarinda's streets. Another contributory factor is thought to be replacement of forest and swampland with open pit mines, which undermines the natural drainage that the land used to provide.

Unlike its southern neighbour Balikpapan, which has become something of a natural resources boom town, Samarinda has seen little benefit from the coal industry that has wrecked the lives of many living in the city. While 71 per cent of land in the city has been handed out to coal companies as concessions, the city's budget only receives four per cent of its revenue from coal mining.<sup>104</sup>

## **3.2. A serious problem of energy access**

East Kalimantan province may be at the heart of Indonesia's coal boom but local people get very little of the energy generated by the coal. Around 82 per cent of all coal produced in the province is for export,<sup>105</sup> mostly to Japan, Korea, Taiwan, China and India, with ten per cent of Kalimantan coal exports ending up in Europe.<sup>106</sup>

This is a serious injustice for local people, many of whom do not have access to reliable electricity. In fact, around a third of households in East Kalimantan currently lack electricity access from the national grid.<sup>107</sup> Some of the most coal rich parts of the province are also the worst off in terms of energy access. For example, 80 per cent of households in coal rich West Kutai do not have grid electricity access.<sup>108</sup> But even in Samarinda, the capital of East Kalimantan, where the provincial government says all settlements have access to some form of electricity, 39 per cent of households have no electricity access.<sup>109</sup>

Even those towns and villages lucky enough to have some electricity provision often do not enjoy a reliable supply. When the World Development Movement visited the town of Bengalon, situated right next to some of the biggest mines in Indonesia, we witnessed several blackouts. In Bengalon and elsewhere in the province, power is overwhelmingly supplied through diesel generators that provide unstable currents that can damage electrical equipment.

But while many people do not have enough electricity to power the basics of everyday life, the coal companies ensure that they have enough to power their operations.

For example, Kaltim Prima Coal uses three times as much electricity as the whole of the 250,000 strong population of East Kutai Regency in which the mines are located.<sup>110</sup>

East Kalimantan demonstrates everything that is wrong about the coal industry's investment in Indonesia. Coal mining operations consume huge amounts of energy to extract resources that are not used to increase energy access for local people, who have to deal with the pollution mining causes and, in many cases, will ultimately bear the brunt of the effects of climate change.

### **3.3 The UK financial sector and the East Kalimantan coal boom**

UK banks, asset managers and institutional investors have significant involvement in the East Kalimantan coal industry. Of the top five coal projects<sup>111</sup> in terms of production, our research has revealed that all have some level of financial involvement by a UK bank or asset manager. Indeed, we have found that at least 83 per cent of East Kalimantan coal production in 2009 was mined by companies with a financial link to the UK.<sup>112</sup> UK finance is also prominent in the financing of the currently frozen Churchill Energy project, which is potentially East Kalimantan's biggest.

Together, the five biggest coal projects accounted for 77 per cent of East Kalimantan's coal production of 123 million tonnes<sup>113</sup> in 2009. There are hundreds of other smaller local mining concerns which are concerned with lower scale mining operations. But it is the large scale operators, bankrolled by foreign banks and investors (including those from the UK), which are most responsible for the East Kalimantan coal export boom.

There are some big UK financial sector names involved (either directly or indirectly) in East Kalimantan coal. Bumi plc's listing on the London Stock Exchange and status as a FTSE 250 company means that many big UK asset management firms such as Aviva and Prudential's M&G hold stakes for dozens of UK pension funds and other investors (e.g. the Hampshire County Council Pension fund holds £564,032 in Bumi plc shares).<sup>114</sup> HSBC is the trustee owner of shares worth over £47.7 million<sup>115</sup> in Thai firm Banpu which is behind both the Indominco Mandiri and Trubaindo coal projects. HSBC, alongside Standard Chartered and a group of other international banks, has also loaned money to Indika Energy which controls the Kideco coal project.<sup>116</sup> UK investment bank JP Morgan Cazanove was also involved in Bumi plc's (then Vallar) London floatation,<sup>117</sup> and Barclays Capital has also provided Bumi Resources with loan

facilities and acted as a corporate broker.<sup>118</sup> Bayan Resources, a smaller mining company, has also been financed by UK banks HSBC and Standard Chartered.<sup>119</sup>

### *UK financial sector involvement in five biggest coal projects in East Kalimantan*

	<b>Loans from UK banks</b>	<b>Investment banking</b>	<b>UK equity investments</b>
<b>Kaltim Prima Coal, Bumi Resources</b> (part owned by Bumi plc)	✓ Bumi Resources has received loans from Barclays.	✓ UK investment bank JP Morgan Cazanove was joint bookrunner of Bumi plc's IPO. Barclays Capital has also acted as corporate broker for Bumi plc.	✓ Bumi plc is a FTSE 250 company. Investors include asset managers Aviva and M&G (Prudential)
<b>Berau Coal</b> (controlled by Bumi plc)	✗ No evidence of loans from UK banks found	✓ UK investment bank JP Morgan Cazanove was joint bookrunner of Bumi plc's IPO. Barclays Capital has also acted as corporate broker for Bumi plc.	✓ Bumi plc is a FTSE 250 company. Investors include asset managers Aviva and M&G (Prudential)
<b>Kideco</b> (controlled by Indika Energy)	✓ Indika has loan facilities with both HSBC and Standard Chartered.	✗ No UK firms involved in providing investment banking services to Indika found	? No major UK shareholders revealed in research. There may be small amounts invested from the UK.
<b>Indominco Mandiri</b> (controlled by Banpu)	✗ No evidence of loans from UK banks found	✓ Standard Chartered Bank underwrote Banpu's bond issue in 2003.	✓ HSBC holds 3.17% of shares in Banpu as nominees (fourth biggest shareholder).
<b>Trubaindo Coal</b> (controlled by Banpu)	✗ No evidence of loans from UK banks found	✓ Standard Chartered Bank underwrote Banpu's bond issue in 2003.	✓ HSBC holds 3.17% of shares in Banpu as nominees (fourth biggest shareholder).

Of course, it is not only UK financial institutions that are responsible for bankrolling the destructive coal industry in East Kalimantan. Many international banks from Switzerland, USA, Germany, Japan and other countries have provided finance to coal mining companies in the province. Credit Suisse in particular is said to have a close financial relationship with the Bakrie family, with the Swiss bank lending large sums to the family firm PT Bakrie & Brothers Tbk.<sup>120</sup>

### 3.4 Bumi plc and the London Stock Exchange

Of the big players in East Kalimantan's coal industry, two Indonesian companies: PT Bumi Resources Tbk (which controls Kaltim Prima Coal) and PT Berau Coal together control over 40 per cent of East Kalimantan's coal production. And it is in these companies specifically that the role of UK investors and institutions is clearest cut.

The story of the listing of Bumi plc on the London Stock Exchange is well known among City watchers in the UK as one of the biggest scandals of the last decade that threatened to undermine the reputation of London as a financial centre.

The idea was to attract hundreds of millions of pounds of investment in Indonesian coal through a listing on the London Stock Exchange. Nat Rothschild, heir to the international Rothschild banking dynasty, created Bumi plc (then called Vallar) in 2010 and listed the shell company on the basis that investors would be attracted by the proposition of investing in Indonesian coal through a 'safe' investment vehicle listed in London.

The experiment was initially a great success for those involved in the deal. The flotation raised £707 million, money that ended up financing the two big Indonesian coal companies: Bumi Resources and Berau Coal. The deal also gave the Indonesian Bakrie family's coal empire access to UK investment which could be ploughed into more of the coal extraction that is causing such untold misery to the people of East Kalimantan. But a boardroom falling out between Rothschild and the Bakrie family, ostensibly over a lack of corporate governance standards at the Indonesian firms revealed how lax the listing criteria had been allowed to become. Angry exchanges at the company's AGM and exchanges of allegations of corruption and misconduct eventually led to the freezing of Bumi's shares and a collapse in Bumi plc's share price, making a mockery of the supposed 'safe' status of Bumi plc as a FTSE 250 company holding a 'premium listing'<sup>121</sup> in London.

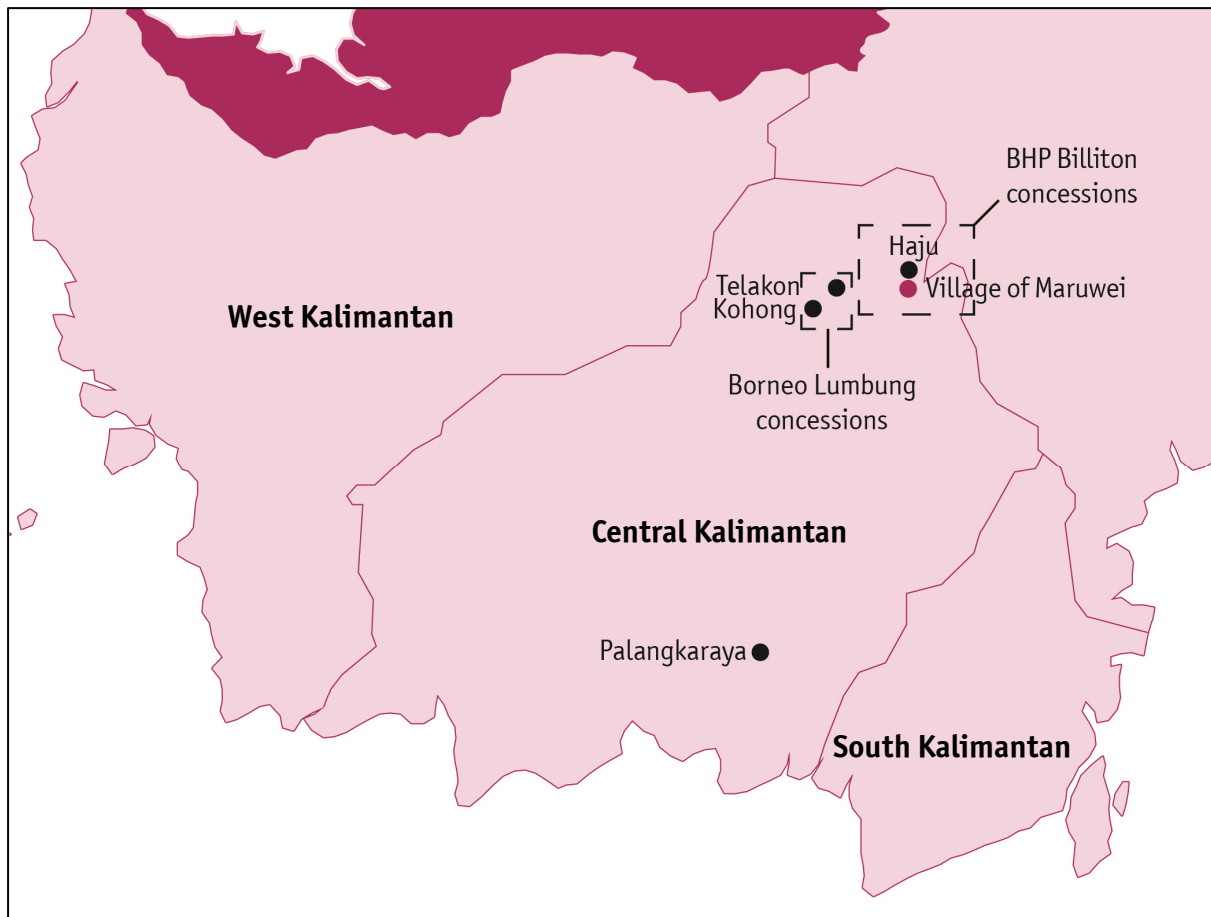
All of the chatter in the City about the need for the UK's listing authority, the Financial Conduct Authority (FCA), to introduce higher standards to protect investors from these sorts of losses completely misses the real, far bigger scandal of Bumi plc - the £707 million that ended up financing highly damaging coal in East Kalimantan.

Bumi is just one of many foreign<sup>122</sup> fossil fuel companies listed on the London Stock Exchange. Increasingly, London is becoming a centre for both UK and foreign companies to gain the credibility necessary to attract big money. The problem with this is when the company in question, as in the case of Bumi, Lukoil, Coal of Africa, Madagascar Oil and many others, is attracting investment to socially or environmentally damaging projects.

The FCA, as the UK's listing authority and main financial sector regulator, shares much of the responsibility here. The status of the London Stock Exchange as a global coal centre is not inevitable and has arisen as a direct result of a regulatory environment that doesn't take the social, environmental or climate impacts of companies into account. For this reason, campaigners have called for the FCA to introduce social and environmental listing criteria.<sup>123</sup>



## 4. Central Kalimantan: New frontier in the Indonesian coal rush



### Central Kalimantan mines, mine concessions and the village of Maruwei

#### 4.1 The threat to the heart of Borneo

Central Kalimantan province feels very different to its neighbour to the east. Although still heavily compromised by logging and mining activity, Central Kalimantan's relatively remote geography has so far protected it from the full ravages of extraction that afflict populous East Kalimantan. Here, once you leave the provincial capital Palangkaraya and drive north, it is possible to drive for hours without coming across a single town, although there are many small settlements populated by indigenous Dayak tribes.

There is a lot of logging and palm oil activity in the province, with these activities currently driving most of the deforestation currently occurring in Central Kalimantan. This area of the country is also a key pilot area for the controversial REDD+ carbon trading scheme, which claims to be a market based mechanism for protecting areas of rainforest that would otherwise be felled, but which has been met with sharp criticism from civil society organisations globally for justifying emissions in rich countries while failing to bring significant benefit to countries in the developing world.<sup>124</sup>

Palm oil and logging are the biggest current threats in Central Kalimantan, but coal production is picking up rapidly, albeit starting from a much lower base than in East Kalimantan, with several medium sized coal mines already operational. Already, coal production from Central Kalimantan has increased more than tenfold from just 829,141 tonnes in 2005 to 8,582,758 tonnes in 2012<sup>125</sup>.

The biggest company currently extracting coal in the province is **PT Borneo Lumbung Energi & Metal Tbk**, which owns the Asmin Koalindo Tuhup (AKT) project in the Murung Raya Regency. The AKT mine produced about 3.2 million tonnes of coal in 2012,<sup>126</sup> which it exports through a river port located at Damparan in the Barito Utara Regency. The coal then sails down the Barito river for hundreds of miles in huge coal vessels to leave Indonesia from Taboneo, close to the city of Banjarmasin in South Kalimantan. The project was granted its concession in 1999, with production beginning in 2008. Borneo Lumbung, a company owned by Indonesian tycoon, Amin Tan, bought a controlling stake in AKT in 2007.<sup>127</sup>

The second biggest project in the province that is currently operating is the **PT Marunda Graha Mineral (MGM)** project, also located in the Murung Raya Regency near Laung Tuhup in close proximity to the AKT mine. Partly owned by Japanese company Itochu, which holds 20 per cent of the shares, the mine produced 2.5 million tonnes of coal in 2012.<sup>128</sup>

Aside from these two projects, there are few other big coal projects currently at the extraction stage in Central Kalimantan Province. PT Telen Orbit Prima produces just under 2 million tonnes<sup>129</sup> and the next biggest coal mines, Senamas Energindo Mineral (owned by Hong Kong listed Agritrade Resources),<sup>130</sup> and Padang Anugerah produce less than 1 million tonnes of coal a year.<sup>131</sup>

However, this is all about to change. Big foreign investors, led by UK-listed multinational BHP Billiton, are lining up for their slice of the Central Kalimantan coal pie.

**BHP Billiton** is by far the largest mining company to get involved in Indonesian coal since Rio Tinto sold its stake in the KPC mine in East Kalimantan in 2003. The company holds a 75 per cent stake in Indo Met Coal, which was established with Indonesian coal firm Adaro Energy to oversee coal mining activities in the seven concessions that have been granted by the Indonesian government. The seven concessions span an area of 350,715 hectares and straddle the provinces of Central Kalimantan and East Kalimantan. Of these, only one concession, PT Lahai, is expected to start production out of the Haju Mine in autumn 2013, but it is likely that development at other concessions will follow (most likely the Juloi concession).

The Indo Met Coal project has estimated coal reserves of 774 million tonnes<sup>132</sup> and while production at Haju will begin at just 500,000 tonnes for the first year, the target is to reach 5 million tonnes a year by 2017 and 10 million tonnes a year in the longer term.<sup>133</sup> This will make the Indo Met Coal project the biggest in Central Kalimantan. If other pits are opened in the rest of the concession areas, it is likely that this figure will rise further in the future, opening up the deepest interior of Borneo to coal mining to an extent that is so far unprecedented.

BHP Billiton and Adaro Energy are not the only big investors seeking to open up Central Kalimantan as a new frontier in coal mining.

**Cokal** is an Australian company that is developing coal mines in Central Kalimantan. Cokal, in partnership with local firms, has six coal concessions in Indonesia, including the Bumi Barito Mineral project,<sup>134</sup> located close to BHP Billiton's Juloi concession, with reserves estimated at 77 million tonnes of coal.

**Realm Resources**, another Australian firm, has a 51 per cent stake in the Kantingan Ria coal project, located 175 km northwest of Palangkaraya in the Katingan Regency. Production is due to start in early 2014, with a target of reaching 2.5 million tonnes of production by 2017<sup>135</sup> and the eventual aim of producing up to 6 million tonnes of coal per year.<sup>136</sup> The project is a joint venture with Indonesian firm PT SMAA.

PT Multi Tambangjaya Utama is a project set to produce a million tonnes of coal a year and is owned by **Indika Energy**<sup>137</sup>

These projects are potentially just the tip of the iceberg. A total of 449 coal exploration concessions<sup>138</sup> in Central Kalimantan have been granted by local and national governments. Extractives concessions in Central Kalimantan cover 39,662 square km, over a quarter of the total area of the province.<sup>139</sup>

### All aboard the Deforestation Express

Sometimes, the accompanying infrastructure of coal mining can be just as damaging as the coal mines themselves. The sharp increase in interest in Central Kalimantan coal has led to the development of the idea of a cross-Kalimantan railway network to allow for the easy export of coal from the region. Across Kalimantan, there are now 10 railway projects planned to be constructed under public-private partnerships (PPPs) as part of the Trans Kalimantan Railway Master Plan, meaning that the companies involved in extracting coal are also likely to be in substantial control of the railway infrastructure. One project which is to link Puruk Cahu in Murung Raya Regency to Lupak Dalam and Bangkuang is to be completed in 2017 and is the subject of bids from a number of companies including Itochu (which owns a stake in MGM), PT Bakrie (the same family that controls Bumi Resources coal interests), China Railway Group and Thyssen Krupp.<sup>140</sup> BHP Billiton's local subsidiary is also a signatory to the PPP declaration.<sup>141</sup> In 2012, another deal was signed with Russia's state railway to construct a railway line from the city of Balikpapan in East Kalimantan to the Murung Raya Regency of Central Kalimantan. Local activists worry that the railway projects will cause additional deforestation and upheaval for local people, who will get no benefit from it as the railway will not serve passengers and be used exclusively to transport coal and other natural resources.

## 4.2 Mining in Central Kalimantan: community views on early impacts

In June 2013, the World Development Movement visited the Murung Raya Regency of Central Kalimantan Province, specifically the area around the village of Maruwei, which is situated close to the AKT, MGM and the BHP Billiton coal concessions. The visit set out to ascertain the position of the local community on the activities of the coal mining taking place in the area and see for ourselves the effects that coal mining is having on the communities and rainforest by visiting several of the mine sites, including the main AKT pit and the site for BHP Billiton's planned Haju mine.

Interviews were conducted with the indigenous people living in the village, including the head of the village of Maruwei I and the traditional leader of the Dayak Murung tribe. While not intending to produce a quantitative assessment of opinion in the village, we did aim to get a broad qualitative picture of the problems facing the local community.

Many residents said that they had seen no benefits from the presence of the mine and were generally opposed to the further expansion of mining in the area.

We receive all the negatives of the mining but very little of the benefits. Only those that work for them get the benefits. We will receive the full impact of the waste when BHP start dumping. The forest will be gone and we will lose our rubber trees.

*Erly Aisha, resident of Maruwei village*

**Water pollution** was the most common complaint of local people. Although, we witnessed one family using the river for drinking water as a result of a lack of access to alternatives, most people the World Development Movement talked to said that felt that they could no longer safely drink the water coming from the river since the coal mining began. One villager said that when used for bathing, the river water caused a 'burning sensation'. The mining companies, especially the AKT mine, were blamed for this situation, as waste products from the mine ended up polluting the river. When we visited the AKT mine, we saw a tailing pond which is located in close proximity to the river. We also saw waste material from mining in a local river tributary.

When we visited the site of the planned BHP Billiton Haju Mine, we saw that the mine will be located just metres away from a tributary of the Barito River, which the local villages use for fishing. We saw local people in canoes catch large amounts of fish from this river that appears so far unpolluted. There would appear to be a significant risk of pollution from the mine getting into this river if the Haju project goes ahead.

The water is now dark and dirty, it has lots of mud in it and makes your skin itch. The water used to be clean and clear but we can't drink it now... The new [BHP] mine is not operating yet but the company already has our land. We feel afraid and worried for our next generation, for our children and grandchildren. We are vulnerable.

It is enough and we don't want mining companies to come to our village anymore. We have had enough.

*Yesmaida, wife of the head of the village of Maruwei*

**Loss of land** is also a problem in the Maruwei area. While the coal mining concessions in Central Kalimantan are by and large located away from where people are actually living, the mines have encroached on the forests and customary land traditionally used by the indigenous population of the area. In Maruwei village, there was controversy around the use of land by BHP Billiton that is seen by the community as their customary forest. Local people spoke of land they had cultivated being taken by BHP Billiton, which paid them just 100 Rupiah (about half a penny) per square metre. If the square mile of the City of London was valued at the same price, it would be worth just £16,000.

The local community did not possess formal deeds to the land, meaning that the company was able to claim that the paltry amounts given to local people were goodwill payments rather than compensation, and to take possession of the land without the informed consent of the community. However, under international law, indigenous peoples have the right to recognition of ownership of customary land, even if they have no formal deeds to it. Furthermore, any project or development happening on indigenous customary land can only occur with the prior, informed consent of the community. In May 2013, Indonesia's constitutional court upheld this principle when it declared that customary forest could not be categorised as state land and therefore that the Forestry Ministry no longer has the right to grant mining concessions in these areas without the consent of local people.<sup>142</sup>

The local indigenous community of Maruwei claim they were told by a BHP Billiton representative that their ownership of the land would not be recognised unless it was being cultivated. Local people interviewed by the World Development Movement, said that the company representative told them that in order to be given compensation for their customary land, they would have to show visual evidence of use of the land by the community.

After this, keen to receive compensation for what they considered to be their forest, local people cleared the land of the smaller trees and shrubs and started cultivating it. Controversy arose when one villager asked a company representative whether they should also cut down the taller trees, something that would be illegal without a permit. According to the villagers interviewed, the company representative responded in a way that, the villagers claim, implied

they would get a higher compensation payment if they cut down the trees illegally. Having cut down these trees, some of the villagers, including the leader of the local Dayak Murung tribe, were arrested and put in jail for a short period for illegal logging. The villagers did not receive compensation for their land apart from the 100 Rupiah payment. Far from being given the opportunity to give free, prior and informed consent, the local population feel they were misled.

We signed the agreement about the land with BHP but honestly didn't understand. The compensation was 1 million rupiah per hectare of land. The communities didn't agree this price and there was no process of negotiation. They just came and asked us to sign the form and then gave us the cash. Someone who had three hectares of land got three million, two hectares got two million...we don't want BHP to operate along the Beriwit.

*Yesmaida, wife of the head of the village of Maruwei*

**Income inequality** is another evident result of the coal mining activity around Maruwei. A walk around the village revealed a few houses that were in good condition and recently renovated, while most of the others appeared to be in an almost derelict condition. Local people told the World Development Movement that any jobs the mine generated went to a small proportion of the population (several local people put the split at 30 per cent receiving jobs to 70 per cent left facing only the negative impacts of the mining). While the companies did engage in some corporate social responsibility (CSR) projects, many of these, such as BHP Billiton's supplying of water to some parts of the village, also benefitted only a minority of people in the village, with others left to either drink polluted water from the river or purchase bottled water at great expense.

**Health issues.** We were told there have been more cases of people getting respiratory problems from the dust from the mines.

**Flooding.** A villager also reported that flooding has increased since the arrival of the mining companies and the deforestation that they have caused. The villager said that floodwater never used to reach her house but that it now does regularly.

‘Before the companies came, communities in villages were all safe and well and nobody disturbed us. We were free to hunt and carry out other traditional practices. But now, after the companies came, it is much more difficult. This is not only for those that live in our village, but also people who live further away and hunt in the forests. The things that the companies give us are not an adequate replacement for the natural disasters that they are causing.’

*Robinson Jumat, traditional leader of the Dayak Murung tribe in Maruwei village*

**Energy access** is still a huge problem in Maruwei, and the coming of the mining companies has done little to improve the minimal access to electricity that people in the village have. There is a local village generator which provides highly unstable electricity irregularly for a few hours every evening, but most of the village spends most of the day without electricity.

The villagers who were more measured in their criticism were those from families with members employed by one of the companies, who were less comfortable openly criticising their employers. However, even the more moderately disposed villagers were highly critical of the mining companies’ behaviour in terms of pollution and recognised that the community as a whole had not necessarily benefited from the mines, repeating the 70/30 split talked about by the most negatively disposed respondents.

Overall, the interviews we conducted with local people revealed the quandary that so many communities affected by mining face. On the one hand, most people we talked to in the community were angry at the incursion of the mining companies into their land and the negative effects that this entailed. But on the other hand, many families had also become dependent on the mining companies for their wages and were wary of being too openly critical. Indeed, a couple of villagers working in mining who were quite fiercely critical of mining companies when talking informally ‘off the record’ were far more measured and careful to avoid outright criticism when being recorded, suggesting that they feared consequences if they spoke too openly.

### 4.3 Coal mining in Central Kalimantan and the UK financial sector

As large scale coal mining is at an embryonic stage in Central Kalimantan, the role of big financial institutions in financing coal mining projects in the province is currently more limited than in East Kalimantan. Nevertheless, the situation in Central Kalimantan is a strong example of money from the UK financial sector finding its way even to the most remote of projects in the Borneo rainforest, where it is contributing to the opening up of a new region of Kalimantan to coal extraction.

**Borneo Lumbung**, for example, which controls the AKT mine, received a loan of \$1 billion (about £640 million) from the UK bank Standard Chartered in 2012.<sup>143</sup> Most of the loan was reportedly used to acquire shares in Bumi plc, the London listed firm that owns large stakes in some of the biggest mining projects in East Kalimantan.<sup>144</sup>

Both companies involved in the Indo Met Coal project, BHP Billiton and Adaro Energy, are also in receipt of finance originating in the UK.

**Adaro Energy**, which is Indonesia's second biggest producer of thermal coal, received \$380 million (about £243 million) in a syndicated loan in June 2013 from a coalition of banks including UK banks HSBC and Standard Chartered.<sup>145</sup> This was a partial refinancing of a previous \$500 million (£320 million) loan granted in 2009 in which HSBC and Standard Chartered were also involved.<sup>146</sup> Adaro Energy has a 25 per cent stake in the Indo Met Coal project in Central Kalimantan.

The bulk of UK finance finds its way into Central Kalimantan through FTSE 100 UK company **BHP Billiton**, and its 75 per cent stake in the Indo Met Coal project. As BHP Billiton does not disclose how it financed this particular project, we have assumed that it has done so out of general corporate funds, reflecting the overall balance of finance within BHP Billiton. Based on this assumption, it is possible estimate that £110 million (or about 13 per cent) of the Indo Met project has been financed with funds originating in the UK or facilitated by UK institutions.<sup>147</sup>

Furthermore, it is also possible to give a rough estimate of a single investor's financing of the project. For example, Legal & General which own or manage 4.17 per cent of the shares in BHP Billiton plc, are responsible for an estimated £3 million.<sup>148</sup>



## Conclusion

This report has provided a snapshot of the devastating effects of the foreign funded Indonesian fossil fuel boom on the livelihoods of local people. It has revealed some of the financial links that connect the coal mines of Kalimantan with the financial heart of the City of London.

Whilst the financial sector is shrouded in secrecy, it will be very difficult to do anything more than estimate the true extent of involvement that UK financial and investment institutions have in fossil fuel projects in places like Indonesia.

This report has been produced from the scraps of information that have entered the public domain: news reports of big investment banking deals, financial databases, reports that disclose big loans and investments and the vague and overly general disclosures of the institutions themselves in annual reports and financial statements. Before the UK's financial institutions can be truly accountable to the public, there needs to be much more transparency - especially with regard to high carbon investment that fuels dangerous climate change and threatens to create a carbon bubble that could cause the next financial crisis.

For this reason, the following measures are needed as a first step to ensure that financial sector institutions are held to account for their bankrolling of climate change:

- **Extend mandatory carbon reporting to financed emissions.** The UK has recently passed a new regulation on mandatory carbon reporting that obliges all quoted companies on the main market of the London Stock Exchange to disclose their carbon emissions. However, the fact that this excludes indirect emissions caused by financial investments means that banks and other financial institutions are let off the hook. The introduction of mandatory scope III emissions reporting would force banks and big institutional investors to face up to their true climate impact.
- **More regulation to achieve greater transparency of banks' lending and investment banking activities.** At the moment, researching the activities of banks is fraught with difficulty. Without access to expensive propriety databases, most people are currently unable to see what their bank is investing in. Banks must be forced to disclose more about their specific investments in the fossil fuel sector.
- **Transparency of institutional investors' holdings of equity and debt securities in fossil fuel companies.** At the moment, pension funds, asset management firms and other institutional investors are not obliged to disclose information about their investments to the public, or even their own members. This has to change to enable greater public scrutiny of the investment practices of the biggest investors.

There are also other steps that can be taken to help put a stop to London acting as a world centre for the fossil fuel industry.

- **Reform of listing criteria for the London Stock Exchange** would be one such step. At the moment, the UK's listing authority, the Financial Conduct Authority is charged only with ensuring that companies' corporate governance and reporting meets certain standards before allowing them to list on the London Stock Exchange. In a world in which runaway climate change threatens the lives of millions, and local people in places like Kalimantan are paying the price of the developed world's thirst for resources, it is not enough for regulators to claim that this is not their problem. Listing rules should be expanded to include social, environmental and climate criteria to prevent firms with dubious records from using London as a base to raise money for their destructive activities.

Essential as the above measures are in terms of increasing transparency and discouraging investment in fossil fuels, they are not enough. Only radical regulatory reform and a fundamental reorientation of the working of the financial sector will truly turn the system away from its dependency on high carbon. Indeed, there must be a fundamental reorientation of the entire economy in order for the UK to reduce emissions by 80 per cent by 2050. Where market based carbon trading schemes and voluntary codes of conduct have failed, it is time for a bold reappraisal of the basic assumptions that underlie the post-1980s world of blanket deregulation and the unfettered flow of global capital. Such fundamental change requires more than a few specific policy solutions can provide. Nevertheless, steps should be taken now to tighten the regulatory framework and eliminate high carbon investment.

## Appendix

### List of coal mining pits linked to UK finance Sector

Name of pit	Name of project/company	UK financial involvement
<b>EAST KALIMANTAN - 30</b>		
Sangatta (Prima)	Kaltim Prima Coal (Bumi Resources)	Equity investment, loans, investment banking
Sangatta (Pinang)	Kaltim Prima Coal (Bumi Resources)	Equity investment, loans, investment banking
Sangatta (Melawan)	Kaltim Prima Coal (Bumi Resources)	Equity investment, loans, investment banking
Bengalon (Pit A)	Kaltim Prima Coal (Bumi Resources)	Equity investment, loans, investment banking
Bengalon (Pit B)	Kaltim Prima Coal (Bumi Resources)	Equity investment, loans, investment banking
Bengalon (Pit C)	Kaltim Prima Coal (Bumi Resources)	Equity investment, loans, investment banking
Fajar Bumi Sakti (Loa Ulung)	Bumi Resources	Equity investment, loans, investment banking
Fajar Bumi Sakti (Tabang)	Bumi Resources	Equity investment, loans, investment banking
Roto North	Kideco (Indika Energy)	Loans
Roto South	Kideco (Indika Energy)	Loans
Roto Middle	Kideco (Indika Energy)	Loans
Susubang	Kideco (Indika Energy)	Loans
Samarangau	Kideco (Indika Energy)	Loans
Santan	PT Santan Batubara (Indika Energy)	Loans
Lati	Berau Coal (Bumi plc)	Equity investment, investment banking
Binungan	Berau Coal (Bumi plc)	Equity investment, investment banking
Sambarata	Berau Coal (Bumi plc)	Equity investment, investment banking
Indominco	Indo Tambangraya (Banpu)	Equity investment, investment banking
Trubaindo	Indo Tambangraya (Banpu)	Equity investment, investment banking
Kitadin (Tandung Mayang)	Indo Tambangraya (Banpu)	Equity investment, investment banking
Kitadin (Embalut)	Indo Tambangraya (Banpu)	Equity investment, investment banking
Bharinto	Indo Tambangraya (Banpu)	Equity investment, investment banking
Gunungbayan	Bayan Resources	Loans
Perkasa Inakakerta	Bayan Resources	Loans
Teguh Sinar Abadi	Bayan Resources	Loans
Firman Ketaun Perkasa	Bayan Resources	Loans
Fajar Sakti Prima	Bayan Resources	Loans
Bara Tabang	Bayan Resources	Loans
Brian Anjat Sentosa	Bayan Resources	Loans
Indomining (Sangasanqa)	Indomining (Toba Bara Sejahtra)	Loans
<b>SOUTH KALIMANTAN - 11</b>		
Jorong	Indo Tambangraya (Banpu)	Equity investment, investment banking
Senakin	Arutmin (Bumi Resources)	Equity investment, loans, investment banking
Kintap	Arutmin (Bumi Resources)	Equity investment, loans, investment banking
Satui	Arutmin (Bumi Resources)	Equity investment, loans, investment banking
Batulicin	Arutmin (Bumi Resources)	Equity investment, loans, investment banking
Mulia	Arutmin (Bumi Resources)	Equity investment, loans, investment banking
Asam Asam	Arutmin (Bumi Resources)	Equity investment, loans, investment banking
Tutpan	Adaro Energy	Loans, investment banking
Wara	Adaro Energy	Loans, investment banking
Paringin	Adaro Energy	Loans, investment banking
Wahana	Bayan Resources	Loans
<b>CENTRAL KALIMANTAN -3</b>		
Haju Mine	IndoMetCoal (BHP and Adaro)	Equity investment, loans, investment banking
Kohong	AKT (Borneo Lumbung)	Loans
Telakong	AKT (Borneo Lumbung)	Loans
<b>SOUTH SUMATRA -8</b>		
Air Laya	Tanjung Enim (Bukit Asam, Dart Energy, Pertamina)	Loans
Muara Tiga Besar	Tanjung Enim (Bukit Asam, Dart Energy, Pertamina)	Loans
Banko Barat	Tanjung Enim (Bukit Asam, Dart Energy, Pertamina)	Loans
Banko-Tengah Blok Barat	Tanjung Enim (Bukit Asam, Dart Energy, Pertamina)	Loans
Banko-Tengah Blok Timur	Tanjung Enim (Bukit Asam, Dart Energy, Pertamina)	Loans
Banjarsari/Kungkilan..	Tanjung Enim (Bukit Asam, Dart Energy, Pertamina)	Loans
Bukit Kendi	Tanjung Enim (Bukit Asam, Dart Energy, Pertamina)	Loans
Pendopo	Pendopo Energi Batubara (Bumi Resources)	Equity investment, loans, investment banking
<b>Total - 52</b>		

### Banking whilst Borneo burns

How the UK financial sector is bankrolling Indonesia's fossil fuel boom

## References

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- <sup>1</sup> This is a reference to individual pits rather than mining projects. See appendix for full list
- <sup>2</sup> See note 112
- <sup>3</sup> Estimate based on analysis of the financing of eight coal mining companies active in Indonesia. See note 5 for more information.
- <sup>4</sup> McKinnon, Matthew. (2012). Climate Vulnerability Monitor. Dara. <http://www.daraint.org/wp-content/uploads/2012/09/EXECUTIVE-AND-TECHNICAL-SUMMARY.pdf> [Accessed 12 September 2013]
- <sup>5</sup> IPCC (2007) Fourth Assessment Report, IPCC
- <sup>6</sup> World Development Movement (2013). Web of power - The UK government and the energy-finance complex fuelling climate change. London. p1  
<http://www.wdm.org.uk/sites/default/files/Carbon%20Capital%20Media%20Briefing5.pdf>
- <sup>7</sup> Department of Energy and Climate Change (2011), Annual Statement of Emissions, Department of Energy and Climate Change
- <sup>8</sup> World Development Movement. (2013). RBS's true carbon emissions 2012. World Development Movement. p4. Aug 2013.  
[http://www.wdm.org.uk/sites/default/files/rbs\\_true\\_carbon\\_emissions\\_2012.pdf](http://www.wdm.org.uk/sites/default/files/rbs_true_carbon_emissions_2012.pdf)
- <sup>9</sup> Ibid
- <sup>10</sup> Ibid
- <sup>11</sup> World Development Movement (2013), Carbon Capital: How the City Bankrolls Climate Change, World Development Movement, London, p 5  
[http://www.wdm.org.uk/sites/default/files/Carbon\\_Capital%20%282%29.pdf](http://www.wdm.org.uk/sites/default/files/Carbon_Capital%20%282%29.pdf)
- <sup>12</sup> Leaton, J. (2013). Unburnable Carbon – Are the world's financial markets carrying a carbon bubble?. Carbon Tracker Initiative. London. p2. [www.carbontracker.org/wp-content/uploads/downloads/2011/07/Unburnable-Carbon-Full-rev2.pdf](http://www.carbontracker.org/wp-content/uploads/downloads/2011/07/Unburnable-Carbon-Full-rev2.pdf) [Accessed 20 September 2013]
- <sup>13</sup> Ibid. p6.
- <sup>14</sup> Schuking, H. et al (2011) Bankrolling Climate Change. Banktrack. December 2011. p 12.  
[http://www.banktrack.org/download/bankrolling\\_climate\\_change/climatekillerbanks\\_final\\_0.pdf](http://www.banktrack.org/download/bankrolling_climate_change/climatekillerbanks_final_0.pdf) [Accessed 15 September 2013]
- <sup>15</sup> See: <http://www.rbs.com/news/2013/04/two-thirds-of-rbs-structured-finance-of-energy-sector-for-renewa.html> [Accessed 7 September 2013]

- 
- <sup>16</sup> Schuking, H. et al (2011) Bankrolling Climate Change. Banktrack. December 2011. p 12. [http://www.banktrack.org/download/bankrolling\\_climate\\_change/climatekillerbanks\\_final\\_0.pdf](http://www.banktrack.org/download/bankrolling_climate_change/climatekillerbanks_final_0.pdf) [Accessed 15 September 2013]
- <sup>17</sup> [http://www.banktrack.org/show/dodgydeals/liquified\\_natural\\_gas\\_lng\\_project#tab\\_dodgydeals\\_finance](http://www.banktrack.org/show/dodgydeals/liquified_natural_gas_lng_project#tab_dodgydeals_finance) [Accessed 2 August 2013]
- <sup>18</sup> Research commissioned by WDM from Carbon Tracker
- <sup>19</sup> Research commissioned by WDM from Profundo
- <sup>20</sup> Trucost. (2009). Carbon Risks in UK Equity Funds. Trucost. July 2009. [http://www.trucost.com/\\_uploads/downloads/Carbon\\_Risks\\_in\\_UK\\_Equity\\_Funds.pdf](http://www.trucost.com/_uploads/downloads/Carbon_Risks_in_UK_Equity_Funds.pdf) [Accessed 15 July 2013]
- <sup>21</sup> Barclays Bank. Statement of Anti-Money Laundering (AML) and Counter-Terrorist Financing (CTF) Policies and Principles. <http://group.barclays.com/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobheadname1=Content-Disposition&blobheadname2=MDT-Type&blobheadvalue1=inline%3B+filename%3DAML-Policy-Statement-PDF.pdf&blobheadvalue2=abinary%3B+charset%3DUTF-8&blobkey=id&blobtable=MungoBlobs&blobwhere=1330687519315&ssbinary=true> [Accessed 25 July 2013]
- <sup>22</sup> Hickman, L. (2013). Jeremy Grantham on how to feed the world and why he invests in oil. The Guardian. 16 April 2013. <http://www.theguardian.com/environment/blog/2013/apr/16/jeremy-grantham-food-oil-capitalism> [Accessed 14 July 2013]
- <sup>23</sup> Indonesian coal production figures for 2004-2011 sourced from presentation by the Indonesian Ministry of Energy and Mineral Resources (ESDM) available online at <http://prokum.esdm.go.id/Publikasi/Statistik/Statistik%20Batubara.pdf> [Accessed 31 July 2013]. 2012 figures sourced from article on Kontan.co.id entitled 'Produksi batubara 2012 mencapai 386 juta ton' <http://industri.kontan.co.id/news/produksi-batubara-2012-mencapai-386-juta-ton> [Accessed 8 August 2013].
- <sup>24</sup> Calculated from 2011 figures in Indonesian mining ministry (ESDM) presentation <http://prokum.esdm.go.id/Publikasi/Statistik/Statistik%20Batubara.pdf> [Accessed 31 July 2013]
- <sup>25</sup> The Indonesian mining ministry (ESDM) website says that a total of 6,562,550 tonnes of coal was exported to 'England' between 2001-2007. See: [http://dtwh2.esdm.go.id/dtwh3/mod\\_pri/index.php?page=detail\\_bb\\_eks\\_negara\\_tahun\\_ft&tblstart=72](http://dtwh2.esdm.go.id/dtwh3/mod_pri/index.php?page=detail_bb_eks_negara_tahun_ft&tblstart=72) [Accessed 8 September 2013]
- <sup>26</sup> Dadang Ardiansyah, Helmi. (2012). Ekspor Batubara Indonesia ke Luar Negeri. 29/12/2012. <http://helmidadang.wordpress.com/2012/12/29/ekspor-batubara-indonesia-ke-luar-negeri> [Accessed: 13 July 2013]
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- <sup>27</sup> Calculated from Verein der Kohlenimporteure. (2012). Annual Report 2012. Verein der Kohlenimporteure. p75. May 2012. [http://www.verein-kohlenimporteure.de/download/2012/VDKI\\_JB\\_2012\\_GB.pdf?navid=15](http://www.verein-kohlenimporteure.de/download/2012/VDKI_JB_2012_GB.pdf?navid=15) [Accessed: 1 July 2013]
- <sup>28</sup> Before deregulation, almost all coal in Indonesia was mined by two state owned companies that were later merged into PT Tambang Coal Bukit Asam.
- <sup>29</sup> See chapter 3 for more information on this project.
- <sup>30</sup> See presentation by the Indonesian Ministry of Energy and Mineral Resources (ESDM). Map on slide 2. <http://prokum.esdm.go.id/Publikasi/Statistik/Statistik%20Batubara.pdf> [Accessed: 1 July 2013]
- <sup>31</sup> US Energy Information Administration. (2013). Indonesia – Analysis. 9 January 2013. <http://www.eia.gov/countries/cab.cfm?fips=ID> [Accessed: 21 Aug 2013]
- <sup>32</sup> Azwar, Amahl S. (2013). Pertamina eyes US-based Hess assets in Indonesia, Thailand. Jakarta Post. 04 July 2013. <http://www.thejakartapost.com/news/2013/07/04/pertamina-eyes-us-based-hess-assets-indonesia-thailand.html> [Accessed: 21 Aug 2013]
- <sup>33</sup> Pertamina Annual Report 2012 pp 104-5  
[http://www.pertamina.com/App\\_Themes/Images/investor\\_relation/AnnualReport/PDF/AR%2019%20mar%202013.pdf](http://www.pertamina.com/App_Themes/Images/investor_relation/AnnualReport/PDF/AR%2019%20mar%202013.pdf) [Accessed 1 Aug 2013]
- <sup>34</sup> See: [http://www.downtoearth-indonesia.org/story/bintuni-bay-communities-want-accountability-tanggung#\\_edn4](http://www.downtoearth-indonesia.org/story/bintuni-bay-communities-want-accountability-tanggung#_edn4) [Accessed 16 Aug 2013]
- <sup>35</sup> Ibid
- <sup>36</sup> See: <http://www.downtoearth-indonesia.org/story/tanggung-bp-and-international-standards> [Accessed 18 August 2013]
- <sup>37</sup> <http://www.bp.com/en/global/corporate/press/press-releases/bp-accesses-four-coalbed-methane-production-sharing-contracts-in-indonesia.html> [Accessed: 15 August 2013]
- <sup>38</sup> <http://www.reuters.com/article/2011/03/18/cbm-indonesia-idUSL3E7EIOV520110318> [Accessed: 1 Aug 2013]
- <sup>39</sup> BP (2013). BP Statistical Review of World Energy 2013, p8.  
[http://www.bp.com/content/dam/bp/pdf/statistical-review/statistical\\_review\\_of\\_world\\_energy\\_2013.pdf](http://www.bp.com/content/dam/bp/pdf/statistical-review/statistical_review_of_world_energy_2013.pdf) [Accessed 20 Sep 2013]
- <sup>40</sup> US Energy Information Administration. (2013). Indonesia – Analysis. 9 January 2013. <http://www.eia.gov/countries/cab.cfm?fips=ID> [Accessed: 21 Aug 2013]
- <sup>41</sup> Fiyanto, A *et al* (2010). Batubara Mematikan. The high price of cheap coal - How Indonesians are paying the price for the world's dirtiest fuel. Greenpeace Southeast Asia. Jakarta. October 2010. p10
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<http://www.greenpeace.org/seasia/PageFiles/164212/ENG-Batubara-mematikan18Oct2010.pdf>  
[Accessed 1 Aug 2013]

<sup>42</sup> Case, M, Ardiansyah, F, Spector, E (2007). Climate Change in Indonesia - Implications for Humans and Nature. 14 November 2007.

[http://assets.panda.org/downloads/inodesian\\_climate\\_change\\_impacts\\_report\\_14nov07.pdf](http://assets.panda.org/downloads/inodesian_climate_change_impacts_report_14nov07.pdf)  
[Accessed 1 September 2013]

<sup>43</sup> Dahuri, R. and I.M. Dutton (2000), 'Integrated coastal and marine management enters a new era in Indonesia', *Integrated Coastal Zone Management*, 1 : 11-16. p1.

[http://www.crc.uri.edu/download/2000\\_Dahuri\\_CP\\_Integrated\\_Coastal\\_Marine.pdf](http://www.crc.uri.edu/download/2000_Dahuri_CP_Integrated_Coastal_Marine.pdf) [Accessed 1 September 2013]

<sup>44</sup> Oktaviani, R et al (2011). The Impact of Global Climate Change on the Indonesian Economy. International Food Policy Research Institute. December 2011.

<http://www.ifpri.org/sites/default/files/publications/ifpridp01148.pdf>

<sup>45</sup> Syaukat, Y. The Impact of climate change on food production and security and its adaptation programs in Indonesia. *Journal of the International Society for Southeast Asian Agricultural Sciences*. Vol. 17, No.1:40-51 (2011) [www.issaas.org/journal/v17/01/journal-issaas-v17n1-07-syaukat.pdf](http://www.issaas.org/journal/v17/01/journal-issaas-v17n1-07-syaukat.pdf)

<sup>46</sup> Fiyanto, A *et al* (2010). Batubara Mematikan. The high price of cheap coal - How Indonesians are paying the price for the world's dirtiest fuel. Greenpeace Southeast Asia. Jakarta. October 2010. p12.

<http://www.greenpeace.org/seasia/PageFiles/164212/ENG-Batubara-mematikan18Oct2010.pdf>  
[Accessed 1 Aug 2013]

<sup>47</sup> JATAM (2010) Deadly Coal – Coal Extraction and Borneo Dark Generation. Jakarta. p13

<http://english.jatam.org/dmdocuments/DC%20inggo2.pdf> [Accessed: 23 July 2013]

<sup>48</sup> <http://news.bbc.co.uk/1/hi/sci/tech/7699672.stm> [Accessed 15 Aug 2013]

<sup>49</sup> Pohl, C (2007). Lapindo Brantas and the mud volcano Sidoarjo, Indonesia. Friends of the Earth International. 15 June 2007. pp 3,4 [www.profundo.nl/files/download/FoEI0706a.pdf](http://www.profundo.nl/files/download/FoEI0706a.pdf) [Accessed 6 Sep 2013]

<sup>50</sup> Richards, JR (2011). Report into the past, present and future social impacts of Lumpur Sidoarjo. Humanitus. March 2011. p42. [http://www.humanitus.org/kada/HSF\\_Social\\_Impact\\_Report\\_Eng.pdf](http://www.humanitus.org/kada/HSF_Social_Impact_Report_Eng.pdf)  
[Accessed 28 Aug 2013]

<sup>51</sup> <http://www.thejakartapost.com/news/2013/03/04/lapindo-mudflow-victims-cite-cancer-hardships.html> [Accessed: 13 Aug 2013]

<sup>52</sup> Pohl, C (2007). Lapindo Brantas and the mud volcano Sidoarjo, Indonesia. Friends of the Earth International. 15 June 2007. p6. [www.profundo.nl/files/download/FoEI0706a.pdf](http://www.profundo.nl/files/download/FoEI0706a.pdf) [Accessed 6 Sep 2013]

<sup>53</sup> <http://news.bbc.co.uk/1/hi/sci/tech/7699672.stm> [Accessed 15 Aug 2013]

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<sup>54</sup> <https://www.gov.uk/government/news/president-yudhoyono-of-indonesia> [Accessed 30 July 2013]

<sup>55</sup> These are Adaro Energy, BHP Billiton, Banpu, Bayan Resources, Borneo Lumbung, Bumi Resources, Indika and Toba Bara Sejahtera

<sup>56</sup> Dataset provided by Profundo in cooperation with Banktrack.

<sup>57</sup> Ibid

<sup>58</sup> HSBC Indonesia's Annual Report 2011-2. p59. Rupiah figure is 7,654,110,000,000:  
[http://www.hsbc.co.id/1/PA\\_ES\\_Content\\_Mgmt/content/indonesia/about\\_us/financial\\_report/pdf/H\\_SBC\\_Audited\\_Report\\_2011-2012.pdf](http://www.hsbc.co.id/1/PA_ES_Content_Mgmt/content/indonesia/about_us/financial_report/pdf/H_SBC_Audited_Report_2011-2012.pdf) [Accessed 9 September 2013]

<sup>59</sup> <http://www.indikaenergy.co.id/business.php?solid=res> [Accessed 20 September 2013]

<sup>60</sup> HSBC loan reported by Reuters in 'Indonesia Market factors to watch Sept 28'. 28 Sep 2009.  
<http://ru.reuters.com/article/idUKJAK50227220090928> [Accessed 30 July 2013].

<sup>61</sup> <http://www.heraldscotland.com/business/company-news/dart-secures-100m-loan-for-gas-extraction-projects.18723057> [Accessed 1 September 2013]

<sup>62</sup> Figures from WDM research commissioned from Profundo

<sup>63</sup> Calculated from data provided by Profundo on the financing of the coal activities of eight mining companies active in Indonesia (Adaro Energy, BHP Billiton, Banpu, Bayan Resources, Borneo Lumbung, Bumi Resources, Indika and Toba Bara Sejahtera)

<sup>64</sup> Standard Chartered Indonesian financial statement 2012. p49. Rupiah figure is 7,059,128,000,000.  
[http://www.standardchartered.co.id/id/\\_documents/fin/SCBI%20Audited%20Financial%20Statement%2031%20Dec%202012.pdf](http://www.standardchartered.co.id/id/_documents/fin/SCBI%20Audited%20Financial%20Statement%2031%20Dec%202012.pdf)

<sup>65</sup> Standard Chartered lent a total of £1.573 billion in this period, but a majority of this went to specific projects and could not have been used for Indonesian coal (figures from WDM research commissioned from Profundo).

<sup>66</sup> Figures from WDM research commissioned from Profundo

<sup>67</sup> Van Gelder, JW and Denie, S (2007). The financing of the three Brantas PSC companies. Friends of the Earth International. 19 June 2007. [www.profundo.nl/files/download/FoEI0706b.pdf](http://www.profundo.nl/files/download/FoEI0706b.pdf)

<sup>68</sup> <http://www.tobabara.com/UserFiles/File/press/Siaran%20Pers%20-%20%20Indomining%20dan%20SCB-English.pdf> [Accessed 18 Sep 2013].

<sup>69</sup> RBS Indonesia Financial Statement 2011-12. p37. Rupiah figure is 1,058,273,000,000  
[.http://mib.rbs.com/docs/MIB/Country-sites/indonesia/shared/Financial\\_Statement\\_Independent\\_Auditors\\_Report\\_2012.pdf](http://mib.rbs.com/docs/MIB/Country-sites/indonesia/shared/Financial_Statement_Independent_Auditors_Report_2012.pdf)



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<sup>70</sup> The exact proportion of this finance that goes to coal is unknown as this information is not disclosed by the bank.

<sup>71</sup> World Development Movement (2013). RBS's true carbon emissions 2012. August 2013. p8 [http://www.wdm.org.uk/sites/default/files/rbs\\_true\\_carbon\\_emissions\\_2012.pdf](http://www.wdm.org.uk/sites/default/files/rbs_true_carbon_emissions_2012.pdf)

<sup>72</sup> Information from WDM research commissioned from Profundo. RBS lent a total of £1.573 billion in this period, but a majority of this went to specific projects and could not have been used for Indonesian coal.

<sup>73</sup> <http://uk.reuters.com/article/2011/11/01/bumi-barclays-idUKL4E7M129220111101> [Accessed 1 September 2013]

<sup>74</sup> Van Gelder, JW and Denie, S (2007). The financing of the three Brantas PSC companies. Friends of the Earth International. 19 June 2007. p15 [www.profundo.nl/files/download/FoEI0706b.pdf](http://www.profundo.nl/files/download/FoEI0706b.pdf)

<sup>75</sup> Information from WDM research commissioned from Profundo

<sup>76</sup> Ibid

<sup>77</sup> For example, as of the end of June 2012, 51 per cent of BHP Billiton's assets were financed by shareholders as opposed to just 1.2 per cent from bank loans (WDM research commissioned from Profundo).

<sup>78</sup> See: <http://www.salamander-energy.com/operations-map/where-we-operate.aspx#/home> [Accessed 23 September 2013]

<sup>79</sup> <http://www.bloomberg.com/news/2012-01-25/tpg-partner-paves-way-for-newcomers-to-indonesian-private-equity.html> [Accessed 15 August]

<sup>80</sup> However, 3i, the UK's biggest private equity firm has invested in Salamander Energy, an oil and gas firm that later listed on the London Stock Exchange (<http://www.3i.com/news/corporate-news/3i-backed-salamander-energy-405m-ipo-london-stock-exchange>). 3i also invested in Pearl Energy, a Singapore based oil and gas firm with assets in Indonesia ([http://www.rigzone.com/news/oil\\_gas/a/15624/3i\\_Invests\\_US15m\\_in\\_Singapores\\_Pearl\\_Energy](http://www.rigzone.com/news/oil_gas/a/15624/3i_Invests_US15m_in_Singapores_Pearl_Energy))

<sup>81</sup> <http://www.ft.com/cms/s/0/922edb96-0a09-11e0-9bb4-00144feabdc0.html#axzz2dg4oWJEn> [Accessed 1 September 2013]

<sup>82</sup> [http://pinebrookpartners.com/beta/portfolio/e\\_asia\\_pacific\\_exploration\\_consolidated\\_lp](http://pinebrookpartners.com/beta/portfolio/e_asia_pacific_exploration_consolidated_lp) [Accessed 5 July 2013] and <http://www.energy-pedia.com/news/indonesia/apec-acquires-interest-in-bunga-mas-psc--onshore-south-sumatra--from-greenfields> [Accessed 5 July 2013]

<sup>83</sup>

[http://krisenergy.com/default/assets/KrisEnergy%20Ltd\\_Corporate%20Presentation%2025Jan2013.pdf](http://krisenergy.com/default/assets/KrisEnergy%20Ltd_Corporate%20Presentation%2025Jan2013.pdf) [Accessed 15 July 2013]

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<sup>84</sup> See: Statistik Pertamben Dan Energi Kaltimantan Timur 2010.  
<http://pertambangan.kaltimprov.go.id/in/buku-elektronik.html> [Accessed 23 July 2013]

<sup>85</sup> East Kalimantan coal production in 2010 was 140,753,374 tonnes according East Kalimantan coal production figures sourced from East Kalimantan Statistics Department, *Kalimantan Timur Dalam Angka* (2011). p305. <http://kaltim.bps.go.id/web/KDA11/bab%20vi/> [Accessed 1 August 2013]. This would make East Kalimantan eighth in the World Coal Association's top 10 coal producers in 2011 listed on its website <http://www.worldcoal.org/resources/coal-statistics/> [Accessed 27 August 2013].

<sup>86</sup> Certain political parties are often seen to be linked to the owners of certain mines. For example, the Bakrie brothers' interest in Bumi Resources which owns the Kaltim Prima mine links the company to the Golkar party of former president Soeharto for which Aburizal Bakrie is running for the Indonesian presidency in 2014.

<sup>87</sup> Harris, N.L *et al* (2008) Identifying optimal areas for REDD intervention: East Kalimantan, Indonesia as a case study. *Environ. Res. Lett.* 3. 035006. p4. <http://iopscience.iop.org/1748-9326/3/3/035006/fulltext/> [Accessed 1 July 2013]

<sup>88</sup> [http://www.daemeter.org/wp-content/files/Daemeter\\_Moratorium\\_Analysis\\_20110527\\_Final.pdf](http://www.daemeter.org/wp-content/files/Daemeter_Moratorium_Analysis_20110527_Final.pdf) [Accessed 30 Aug 2013]

<sup>89</sup> Mattangkilang, T (2012). East Kalimantan is third largest carbon emitter. Jakarta Globe. 16 May 2012. <http://www.thejakartaglobe.com/archive/east-kalimantan-is-third-largest-carbon-emitter> [Accessed 1 Aug 2013].

<sup>90</sup> East Kalimantan coal production figures for 2005 sourced from East Kalimantan Statistics Department, *Kalimantan Timur Dalam Angka* (2011). p305. <http://kaltim.bps.go.id/web/KDA11/bab%20vi/> [Accessed 1 August 2013]. 2011 figures from Jakarta Post article available at: <http://www.thejakartapost.com/news/2013/01/17/escaping-resource-curse-e-kalimantan-tipping-point.html> [Accessed 31 July 2013].

<sup>91</sup> See: <http://www.bumi-plc.com/about-us> [Accessed 20 September 2013]

<sup>92</sup> The clause is outlined in International Centre for the Settlement of Investment Disputes, Award Jurisdiction for case No. ARB/07/3.pp 3, 4  
[https://icsid.worldbank.org/ICSID/FrontServlet?requestType=CasesRH&actionVal=showDoc&docId=DC1791\\_En&caseId=C93](https://icsid.worldbank.org/ICSID/FrontServlet?requestType=CasesRH&actionVal=showDoc&docId=DC1791_En&caseId=C93) [Accessed 30 Aug 2013]

<sup>93</sup> <http://www.minerba.esdm.go.id/public/38477/produksi-batubara/.produksi/2009/2012> [Accessed 17 Sept 2013]

<sup>94</sup> France's coal consumption in 2012 was 16.8 million tonnes.  
<http://www.argusmedia.com/pages/NewsBody.aspx?id=834208&menu=yes> [Accessed 30 July 2013]

<sup>95</sup> <http://www.thejakartapost.com/news/2008/11/21/csr-programs-east-kutai-039ineffective039-helping-environment.html> [Accessed 2 July 2013]

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- <sup>96</sup> Lahiri-Dutt, K and Mahy, P. Impacts on women and youth in Indonesia: two mining locations. Australian National University  
[https://crawford.anu.edu.au/pdf/staff/rmap/lahiridutt/CR3\\_KLD\\_Mahy\\_Impacts\\_Mining\\_Indonesia.pdf](https://crawford.anu.edu.au/pdf/staff/rmap/lahiridutt/CR3_KLD_Mahy_Impacts_Mining_Indonesia.pdf)
- <sup>97</sup> <http://www.downtoearth-indonesia.org/story/bps-coal-interest-kaltim-prima> [Accessed 20 Sep 2013]
- <sup>98</sup> Ibid
- <sup>99</sup> According to 2009 figures available in *Statistik Pertamben Dan Energi Kaltimantan Timur 2010*.  
<http://pertambangan.kaltimprov.go.id/in/buku-elektronik.html> [Accessed 23 July 2013]
- <sup>100</sup> <http://www.kideco.com/about/pasir.asp> [Accessed 5 Sept 2013]
- <sup>101</sup> Fiyanto, A *et al* (2010). Batubara Mematikan. The high price of cheap coal - How Indonesians are paying the price for the world's dirtiest fuel. Greenpeace Southeast Asia. Jakarta. October 2010.  
<http://www.greenpeace.org/seasia/PageFiles/164212/ENG-Batubara-mematikan18Oct2010.pdf>  
[Accessed 1 Aug 2013]
- <sup>102</sup> Indo Tambangraya Annual Report 2012. [http://itmg.co.id/\\_uploadedfile/files/itm-file-1364977459-itmg-2012ar-final-190313.pdf](http://itmg.co.id/_uploadedfile/files/itm-file-1364977459-itmg-2012ar-final-190313.pdf) p2. [Accessed 1 Aug 2013]
- <sup>103</sup> <http://www.churchillmining.com/projects/> [Accessed 1 Sep 2013]
- <sup>104</sup> As of 2008. See JATAM (2010) Deadly Coal – Coal Extraction and Borneo Dark Generation. Jakarta. p24  
<http://english.jatam.org/dmdocuments/DC%20ingg02.pdf> (Accessed 23 July 2013)
- <sup>105</sup> According to 2009 figures available in *Statistik Pertamben Dan Energi Kaltimantan Timur 2010*  
<http://pertambangan.kaltimprov.go.id/in/buku-elektronik.html> [30 July 2013]
- <sup>106</sup> JATAM (2010) Deadly Coal – Coal Extraction and Borneo Dark Generation. Jakarta. pp 10,11  
<http://english.jatam.org/dmdocuments/DC%20ingg02.pdf> [Accessed 23 July 2013]
- <sup>107</sup> Dinas pertambangan dan energi provinsi Kalamantan Timur (2011). Data Rasio Desa Berlistrik Dan Elektrifikasi S/D Tahun 2010. Report on electrification by Kaltim statistics department:  
[pertambangan.kaltimprov.go.id/in/download/category/5-listrik-dan-pengembangan-energi.html?download=14%3Adata-rasio-desa-berlistrik-a-rasio-elektrifikasi-kaltim-2010](http://pertambangan.kaltimprov.go.id/in/download/category/5-listrik-dan-pengembangan-energi.html?download=14%3Adata-rasio-desa-berlistrik-a-rasio-elektrifikasi-kaltim-2010) [Accessed 23 July 2013]
- <sup>108</sup> Ibid
- <sup>109</sup> Ibid
- <sup>110</sup> JATAM (2010) Deadly Coal – Coal Extraction and Borneo Dark Generation. Jakarta. pp 18-19  
<http://english.jatam.org/dmdocuments/DC%20ingg02.pdf> (Accessed 23 July 2013)
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<sup>111</sup> As of 2009 in terms of coal production - more recent figures broken down by company could not be procured from the East Kalimantan government.  
<http://pertambangan.kaltimprov.go.id/images/stories/pdf/STATISTIK%20PERTAMBANGAN%20DAN%20ENERGI%20KALTIM%202010.pdf> [Accessed 1 July 2013]

<sup>112</sup> Calculated from the total 2009 production of top five companies named above and the Bayan Resources projects PT Firman Ketaun Perkasa, PT Gunung Bayan Pratama, PT Perkasa Inakarkerta and PT Teguh Sinar Abadi in <http://pertambangan.kaltimprov.go.id/in/buku-elektronik.html> [Accessed 23 July 2013]. Bayan Resources lists these projects on its website <http://www.bayan.com.sg/index.php/business-info/operation-locations> [Accessed 20 Sep 2013]. Total East Kalimantan coal production figures sourced from East Kalimantan Statistics Department, *Kalimantan Timur Dalam Angka* (2011). p305. <http://kaltim.bps.go.id/web/KDA11/bab%20vi/> (Accessed 1 August 2013).

<sup>113</sup> East Kalimantan coal production figures sourced from East Kalimantan Statistics Department, *Kalimantan Timur Dalam Angka* (2011). p305. <http://kaltim.bps.go.id/web/KDA11/bab%20vi/> [Accessed 1 Aug 2013]. Individual coal production figures for top five producers in 2009 calculated from <http://pertambangan.kaltimprov.go.id/in/buku-elektronik.html> [Accessed 23 July 2013]

<sup>114</sup> WDM research. Information procured by email directly from Hampshire County Council in August 2013.

<sup>115</sup> As of 27 August 2013. Calculated from shareholder information page on Banpu's website. [www.banpu.com/en\\_investor\\_list.php](http://www.banpu.com/en_investor_list.php) [Accessed 30 July 2013] Calculation accessed on market capitalisation of 77,714.55 million Thai Baht [as of the 16 Sept 2013]

<sup>116</sup> HSBC loan reported by Reuters in 'Indonesia Market factors to watch Sept 28'. 28 Sep 2009. <http://ru.reuters.com/article/idUKJAK50227220090928> [Accessed 30 July 2013]. Standard Chartered loan reported on the News IDX website in article entitled 'Indika Energy pays off bank loans worth USD 235 million'. 27 Feb 13. <http://www.newsidx.com/en/news/1879/indika-energy-pays-off-bank-loans-worth-usd-235-million> [Accessed 30 July 2013]

<sup>117</sup> <http://uk.reuters.com/article/2010/07/09/uk-vallar-idUKTRE6681ZX20100709> [Accessed 30 July 2013].

<sup>118</sup> <http://www.bloomberg.com/news/2012-01-12/rothschild-says-bakrie-ties-mended-after-sparring-over-bumi-debt.html> [Accessed 26 July 2013].

<sup>119</sup> <http://www.thejakartaglobe.com/archive/indonesias-bayan-eyes-2-billion-in-sales-for-2012/> [1 Aug 2013]

<sup>120</sup> <http://uk.reuters.com/article/2008/10/22/bakrie-idUKSP17719420081022> [20 Aug 2013]

<sup>121</sup> Premium listings are theoretically only given to companies that meet a higher standard. For more information, see: <http://www.londonstockexchange.com/companies-and-advisors/main-market/companies/primary-and-secondary-listing/listing-categories.htm>

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<sup>122</sup> Bumi plc itself is nominally a UK company but the underlying assets are all Indonesian coal companies, essentially meaning that all equity investments in Bumi plc is to all intents and purposes investments in foreign assets.

<sup>123</sup> London Mining Network (2012). UK listed mining companies and the case for stricter oversight. London Mining Network. London. <http://londonminingnetwork.org/docs/lmn-the-case-for-stricter-oversight.pdf>

<sup>124</sup> For more information on REDD+ and its problems see <http://www.redd-monitor.org/>

<sup>125</sup> <http://kaltengmining.com/Produksi%20Batubara.htm> [Accessed 02 August 2013].

<sup>126</sup> See: <http://www.minerba.esdm.go.id/public/38477/produksi-batubara/.produksi/> [Accessed 12 September 2013]

<sup>127</sup> <http://borneo.co.id/index.php/about/milestone> [Accessed 29 July 2013]

<sup>128</sup> Information from Central Kalimantan Energy and Mining Office (received by email)

<sup>129</sup> Ibid

<sup>130</sup> [http://www.agritraderesources.com/index.php?option=com\\_content&view=article&id=46&Itemid=29](http://www.agritraderesources.com/index.php?option=com_content&view=article&id=46&Itemid=29) [Accessed 21 Sep 2013]

<sup>131</sup> Information from Central Kalimantan Energy and Mining Office (received by email)

<sup>132</sup> BHP Billiton (2013) Coal Overview briefing. Calculated by adding up the measured, indicated and inferred reserves for 2012 in table on slide three of a 29 May 2013 presentation entitled BHP Billiton Coal Review published online at [http://www.bhpbilliton.com/home/investors/reports/Documents/2013/130529\\_CoalBriefing.pdf](http://www.bhpbilliton.com/home/investors/reports/Documents/2013/130529_CoalBriefing.pdf) [Accessed 17 Sept]

<sup>133</sup> Fickling, D. and Winning, D. (2011). BHP go-ahead for IndoMet coalmine. *The Australian* (online), 4 Nov 2011. Available at: <http://www.theaustralian.com.au/business/mining-energy/bhp-go-ahead-for-indomet-coalmine/story-e6frg9df-1226185118942> [Accessed: 30 July 2013].

<sup>134</sup> Cokal website [http://www.cokal.com.au/?page\\_id=238](http://www.cokal.com.au/?page_id=238) [Accessed 03 Aug 2013]

<sup>135</sup> <http://www.realmresources.com.au/IRM/Company/ShowPage.aspx/PDFs/1424-17978194/KATINGANRIACOALPROJECTUPDATE> [Accessed 20 Sep 2013]

<sup>136</sup> Realm Resources [http://www.realmresources.com.au/IRM/content/ourbusiness\\_coal.html](http://www.realmresources.com.au/IRM/content/ourbusiness_coal.html) [Accessed 01 Aug 2013]

<sup>137</sup> <http://www.thejakartapost.com/news/2012/09/19/indika-eyes-1m-tons-coal-new-venture.html> [Accessed 20 Jul 2013]

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<sup>138</sup> Kalteng Mining <http://kaltengmining.com/Perusahaan%20Tambang%20Batubara.htm> [Accessed 27 July 2013]

<sup>139</sup> Calculated from <http://www.kalteng.go.id/userfiles/file/DINAS/DISTAMBEN/PENGUSAHAAN%20PERTAMBANGAN.pdf> [10 Sep 2013]

<sup>140</sup> Indonesia Infrastructure Initiative. Four Consortiums Compete for US\$ 2.3-Billion Coal Railway Project. [http://www.indii.co.id/news\\_daily\\_detail.php?id=4272](http://www.indii.co.id/news_daily_detail.php?id=4272) [Accessed 17 July 2013] and The Jakarta Post. Central Kalimantan's \$2.8b coal railway to kick off early next year. <http://www.thejakartapost.com/news/2012/11/14/central-kalimantan-s-28b-coal-railway-kick-early-next-year.html> [Accessed 23 July 2013]

<sup>141</sup> Railway Gazette. PPP model to fund Kalimantan coal network. <http://www.railwaygazette.com/news/single-view/view/ppp-model-to-fund-kalimantan-coal-network.html> [Accessed 31 July 2013]

<sup>142</sup> Full verdict available in English at [http://www.aman.or.id/wp-content/plugins/downloads-manager/upload/Constitutional\\_Court\\_Ruling\\_16\\_May\\_2013.pdf](http://www.aman.or.id/wp-content/plugins/downloads-manager/upload/Constitutional_Court_Ruling_16_May_2013.pdf) [Accessed 22 Sept 2013]

<sup>143</sup> [http://dealbook.nytimes.com/2012/09/27/standard-chartered-next-worry-a-1-billion-indonesian-loan/?\\_r=0](http://dealbook.nytimes.com/2012/09/27/standard-chartered-next-worry-a-1-billion-indonesian-loan/?_r=0) [Accessed 27 August 2013]

<sup>144</sup> Ibid

<sup>145</sup> <http://www.thejakartapost.com/news/2013/06/04/adaro-bags-380m-loans-pay-debts.html> [Accessed 30 July 2013]

<sup>146</sup> Ibid and <http://www.thefreelibrary.com/Adaro+Group.-a0246834298> [Accessed 30 July 2013]

<sup>147</sup> Calculations based on research commissioned from WDM by Profundo.

<sup>148</sup> Ibid