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Special issue with contributions from JATAM, London Mining Network and Nostromo Research

Indonesia's coal: local impacts, global links

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Special issue newsletter with contributions from JATAM (Indonesia's Mining Advocacy Network), London Mining Network and Nostromo Research

London Mining Network

Holding the mining industry to account

The London Mining Network (LMN) is an alliance of human rights, development and environmental groups. We pledge to expose the key role of companies listed on the London Stock Exchange, London-based funders and the British Government in the promotion of unacceptable mining projects. http://londonminingnetwork.org/

Nostromo Research, based in London, specialises in independent analysis of the mining industry and its impacts.

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Above: coal crossing warning sign in Kalimantan.

Cover picture: Coal barges on the Mahakam River, East Kalimantan ship thousands of tonnes of coal out of Borneo, leaving a trail of economic, environmental and social damage. In the background Tenggarong mosque built with Kalimantan's resource wealth **Photo:** DTE/JATAM

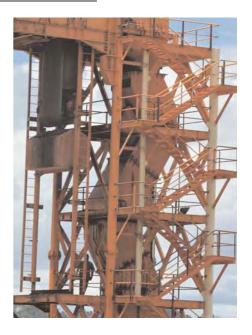
Foreword

Indonesia is now the world's largest exporter of thermal coal - supplying power stations and generating electricity in India, China Europe and many other countries around the world.

Being global number one has brought wealth for a small political and business elite. For ordinary Indonesians living in the main coal mining zones of Kalimantan, the 'coal rush' means damaged livelihoods, ruined farmland and fisheries, conflict over land and resources, plus health and social problems.

This publication brings together articles by authors from organisations inside and outside Indonesia on the different faces of Indonesia's coal: from local impacts to climate change; from UK-Indonesia connections, to Indonesia-India links.

The aim is to contribute to the efforts of international alliances against socially and environmentally damaging mining and energy projects and policies, and to support demands for a drastic reduction in coal consumption, for the sake of the people of Kalimantan and for the sake of the climate.



Deadly Coal - coal exploitation and Kalimantan's blighted generation

JATAM's new Deadly Coal report highlights the devastating impacts of coal mining in Kalimantan, where today's coal rush is undermining sustainable livelihoods and health and exacerbating poverty in order to supply export markets. The following is extracted from the full report.

Deadly Coal is the result of research from 2007 to 2009 by Indonesia's mining advocacy network, JATAM, and Friends of the Earth Indonesia(WALHI). It exposes the true costs of mining for the people of Kalimantan.

Coal is the latest in a series commodities used by the Indonesian government to boost macroeconomic growth. This is the development model pursued for thirty years under the regime of former president Suharto and is still continuing today. Timber, oil & gas, gold, and now oil palm, migrant workers and coal, are exported to generate foreign exchange, at the expense of local people who must suffer the impacts. This development path - a systematic, planned exploitation of Indonesia, island by island - is littered with corruption scandals, human rights abuses and environmental damage. There is no attention to the true social and environmental costs, or to the impact on food and energy security.

Instead of learning lessons from the unsustainable exploitation of the Suharto era, successive government have repeated the same mistakes by following a model which requires:

- social and political stability enforced by repressive tools and approaches, either subtly or with violence;
- vast areas of land easily obtained by powerful investors through land policies which deny the existence of indigenous customary law and include incentives for



Coal mining in the hills above Makroman village, East Kalimantan, once covered by villager's forests and small scale plantations. (Jatam)

A coal barge is towed downriver, East Kalimantan. (DTE)



land ownership for investment and business purposes;

- the availability of unskilled, uneducated and cheap labour acquired through the conversion of the farming population into labourers;
- the wholesale import of ready-to-install production technologies which have been reportedly proven in other countries plus the know-how needed to operate them;
- facilities and infrastructure for industrial services through the establishment of road networks, bridges, sea ports and airports to facilitate the smooth flow of raw materials to the market.
- legal certainty to facilitate more investment through policies to cut red tape and through financial incentives.

If people living in targeted 'development' areas object, they are accused of being antidevelopment and criminalised if they refuse to hand over lands. The government keeps sending out the message that people's needs will be met through exporting commodities, while carrying on with the same "sell raw, sell cheap, sell all" strategy for the country's natural riches.

A closer look at coal in Kalimantan

The two provinces in Kalimantan currently most affected by the industry are East Kalimantan and South Kalimantan.

In East Kalimantan, the timber industry has decimated the forests since the 1960s and is now in steep decline: plywood mills have stopped operating and workers have been laid off. Gold mining has also stopped in West Kutai district, where the UK-based mining company Rio Tinto has left 77 million tonnes of tailings.

Coal is now the boom commodity: In the past six years the government has issued thirty-three contracts of work (PKP2B) to large-scale foreign and Indonesian coal mining companies and 1,212 mining permits (KP) to domestic companies. East Kalimantan's development plans have set aside 3.12 million hectares of land for KP mining concessions, more than the 2.49 million hectares allocated for agriculture.

East Kalimantan has predicted coal reserves of 1.983 billion tonnes and coal has helped make make it the largest provincial economy in Kalimantan. For the central government, the province is like an ATM machine - a ready source of cash.

Yet locally, poverty is on the increase: the number of people living below the poverty line in March 2007 was around 324,800 or 11% of the total population of 2.9 million. This was an increase on the previous year of more than 10%. Unemployment is one factor: the three cities with the highest rates of unemployment are Samarinda, Balikpapan and Kutai Kertanegara. Yet between them, Samarinda and Kutai Kertanegara have the greatest number of mining concessions in Indonesia, a total of 781.

It is clear that the mining industry is not helping to address unemployment, since



the industry is capital- and technology-intensive rather than labour-intensive.

Power and electricity in East Kalimantan

East Kalimantan acts as major supplier of coal to both Indonesia and the world. It provides Indonesia with half of its domestic supply, while around 70% of the coal extracted from the province (around 120.5 million tonnes in 2008) is exported to other countries.

Yet the local population does not benefit. The local power system is only able to supply 610 villages out of a total number of 1,410 villages (43.26%). Samarinda the provincial capital, with a population of just over half a million, suffers regular blackouts. East Kalimantan's coal, it seems, is only for entrepreneurs, corporate giants and the state.

The three districts which have the lowest levels of electricity supply are East Kutai, West Kutai and Berau. Only around a third of the 475 villages in these three districts have electricity.

At the same time, there are three giant mining companies operating in these areas, PT Kaltim Prima Coal (KPC), PT Indominco Mandiri and PT Perkasa Inakakerta. Together, these companies account for most of the coal produced in East Kalimantan, with total production reaching 48.4 million tonnes in 2008.

The power injustice is most palpable in East Kutai district - the district where the KPC is located. Here only 37 out of 135 villages (50,175 households), have access to electricity. Almost half the population of East Kutai district are regarded as poor, with most living near the mine. The amount of electricity needed by the total of 50,175 households is 45 MW.

To run its operations, KPC itself has access to enough electricity to supply 21,000 households (18.9MW). This is generated by the Tanjung Bara power plant, with a capacity of 10 MW and two reserve diesel power plants (PLTD) with a capacity of 8.9 MW. The power plant consumes 96 tonnes of coal every day, plus 120,000 litres of fresh water for the boilers and at least 302,400 litres of sea water as coolant. These processes produce 2.3 tonnes of waste fly ash and 1.5 tonnes of bottom ash per day.

PT KPC plans to increase production to 70 million tonnes of coal by 2010. This will require increasing the supply of electricity to 152 MW - equivalent to three times the electricity needs of the residents of East Kutai.

Permits and corruption

East Kalimantan's Kutai Kertanegara district is rife with coal rush corruption. Up to 2009, the district had issued 687 KP permits, with 247 permits issued in 2007-2008 alone (or one permit issued every two days). The

district is known as the most corrupt in East Kalimantan Province. Eight senior district government officials have been jailed within the past six years on corruption charges. The corruption started from the top with the district head (*Bupati*), the deputy district head and included the chair and vice-chair of the district assembly. The district head for the 2005-2010 period is in jail for corruption of IDR124 billion (USD13million). In addition, 37 members of the local government (2004-2009 period) have been involved in the corruption of social welfare funds.

These cases have accelerated changes in local government personnel: in the past four years there have been four different district heads in Kutai Kertanegara.

Human Rights Violations

An example of coal-linked abuse of citizens' rights is an incident on 20 August 2008. This involved violence by the East Kalimantan Regional Police Mobile Brigade and the Kutai Kertanegara District Police against local people who were demonstrating to demand the return of their land. The land had been allocated to PT Arkon in Semaleh Village. Bangun City District. The protesters were beaten, kicked, and even shot. One person was killed, four other people were injured and two have been maimed for life. Another 24 people were jailed with seven month sentences. The legal justification for this was that the protesters were carrying knives and creating unrest. In contrast, no trial has been held for the police officers involved in the shooting and killing.

Prostitution and health

In West Kutai district, there are 87 KP mining permits and 3 PKP2B coal contracts of work spread over 20 districts. Just three companies mine 9.7 million tonnes a year.

Prostitution is common near mining sites - sometimes as many as three brothels near each mine. In Melak District, for example, near the village of Muara Bunyut village, there are four brothels near PT Gunung Bayan Pratama Coal (an Indonesian company) and PT Trubaindo Coal Mining (a Thai company). Increasing numbers of people have sexually transmitted diseases.

Other mining-related health impacts in this district include Acute Respiratory Tract Infections (ISPA). In 2007, West Kutai Public Health Service recorded 19,375 people with ISPA. This was an increase from 17,373 in the previous year. Records in 2008 showed that 2,233 of those with ISPA were babies and 5.701 were children.

Flooding Samarinda

Since coal extraction has increased in the last four years, floods have now become routine in Samarinda, the provincial capital. This is widely linked to deforestation, making way for mining activities, and poor drainage in the area. From November 2008 until May 2009, there was widespread flooding in almost all the city's districts. In those six months there were four major floods. Each time, an area inhabited by around 10,200 families was flooded and almost all the main streets in Samarinda were affected.

In response, people have started to raise the foundations of their houses or even build stilt houses. Many have sold their homes off cheaply.

Floods also disrupt the local economy, including public transport and markets, affecting employment and earnings. While Samarinda is now called "flood city", income from the coal industry contributes very little to local revenues. In 2008, income from coal mining only amounted to IDR 399 million (USD37,000), a mere 4% of Samarinda's total regional revenue of IDR 112.5 billion.

The cost of flood prevention alone is far greater than this. Flood prevention polders (large water storage reservoirs) cost at least IDR 38 billion each. The city has built one costing IDR 63 billion and is planning to build another five.

South Kalimantan

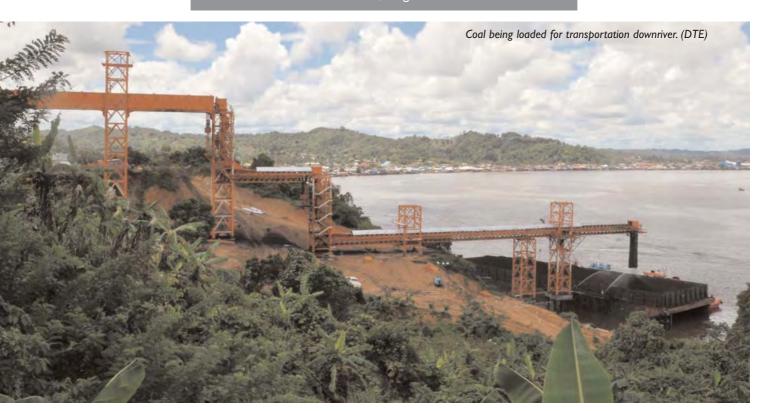
In South Kalimantan, income generated from extractive industries dominates the province's GDP. Up to 2008, there were at least 280 companies holding KP permits in the forests covering over half a million hectares. More companies were in the process of applying for 97 KP permits and 14 PKP2B contracts of work, covering another 50,279 ha.

As in East Kalimantan, local people's needs have been sacrificed to provide coal for export markets.

South Kalimantan is the second largest coal producer in Indonesia, and yet almost every day parts of the province suffer power cuts. Provincial energy needs of 270MW remain modest compared to the amount of energy being exported from the province, but the state power company is 30 MW short of this amount and 21,000 people are waiting to get electricity.

(continued on page 5)





Six companies dominating coal mining in East Kalimantan							
Company	Shareholdings	Concession	Production (millions of toni	Exports nes)	Consumers in Europe		
PT Kitadin	PT Indo Tambangraya Mega Tbk 99.9%	5,361 ha	1.6 (2006 but none in 2007 or 2008)	South Korea, Taiwan			
PT Kideco Jaya Agung	49% Samtan Co Ltd (South Korea) 49%; PT Indika Inti Corpindo (a subsidiary comp of PT Indika Energy Tbk (Indonesia) 46%; PT Muji Int Utama (Indonesia) 5%	pany	22 (estimate, 2008)	85% to Asia (South Korea, Taiwan, India) I 2% to Europe (UK 5%, Slovenia 3%, Italy 2%) 3% to other countries (New Zealand)	International Power Fuel Company Ltd (UK); Feni Industry (Slovenia)		
PT Kaltim Prima Coal	PT Bumi Resources Tbk (Indonesia) 65%; Tata Power Ltd (India) 30%; PT Kutai Timur Energi (Indonesia) 5%	90,960 ha ;	37.5 (2008), 87% of this for export)	83% to Asia (Japan, Taiwan, India) (Switzerland 6.9%, 16% to Europe Netherlands 5.6%, UK 1.5%)1% to USA	B.M.A. BV (Netherlands) 1% *		
PT Berau Coal	PT Armadian Tritunggal (Indonesia) 51%; Rognar Holding B.V (Netherlands) 39%; Sojitz Corporation (Japa	120,000 ha an) 10%.	37.5 (87% for export)	Korea 26%; China 18%; India 16%; Other countries 39% (2008 figures)			
PT Indominco Mandiri	PT Indo Tambangraya Megah Tbk, 99.99%	25,121 ha	11.5 (2007)	92% to Asia (Japan, South Korea China) 8% to Europe (Italy 7%) (2008 figures)	Enel Tradespa (Italy)		
PT Interrex Sacra Raya	PT Persada Capital Investama (Indonesia) 30%; PT Sinar Ganda Jaya (Indonesia) 30%; Multi Corporation Pte. Ltd (Singapore) 5%; Individual investor (Indonesia		0.223 (2007)	Japan			
*Domestic consumers include Freeport [in whose West Papua gold mining operations UK-based Rio Tinto has a substantial share - DTE addition]							

Three companies dominating South Kalimantan							
Company	Shareholdings	Concession	Production	Exports			
PD Baramarta	Banjar Local Government (Indonesia)	6,486 ha	3.7 million tonnes (2007)	Hong Kong, India, Thailand, Malaysia, and Japan			
PT Arutmin Indonesia	PT Bumi Resources Tbk (Indonesia) 99.99%; 0.01% PT Amara Bangun Cesta (Indonesia)	70,153 ha	15.3 million tonnes (2008)	90% to Asia, 10% to Europe (2008 figures)			
PT Adaro	PT Alam Tri Abadi (Indonesia) 60.23%; PT Viscaya Investment Indonesia (Indonesia) 28.33%; PT Dianlia Setyamukti (Indonesia) 5.84%; Indonesia Coal Pty Ltd (Australia) 4.67%; Mec Indo Coal, B.V (Netherlands) 0.93%	35,800 ha	38.5 million tonnes (2008)	Asia 69%; Europe 23%; North America 5%; Other countries 2% (2008 figures) European consumers included: Atel Energy SRL (Italy); Glencore International AG (Switzerland); Matias Gonzales Chas, S.L (Spain); Union Fenosa Generacion S.A (Spain)			

(continued from page 3)

Instead of being used for local needs, over 73% of the coal mined in South Kalimantan is exported. The remainder is for domestic use - for energy and industry in Java, Sumatra, West Nusa Tenggara and Kalimantan itself.

It is predicted that coal needs (from South Kalimantan) will increase sharply in future years, with the development of energy-hungry industries such as pulp and paper mills. The output of these new industries will also be exported.

High extraction, high poverty

The gap between high and low incomes in South Kalimantan is getting wider and researchers have shown that mining has not been able to bring prosperity due to the low level of revenues combined with corruption.

Again, coal does not offer much in terms of employment for local people. The current population of South Kalimantan is 3,250,100 (2008), with a labour force of 1,468,590 people, 45% of whom are actually employed. The agricultural sector absorbs almost 51% of the work force, while mining only employs 2%. Even then, most mine workers come from outside local villages or even from outside the province.

The reality behind the Envirocoal label

PT Adaro is one of South Kalimantan's three prominent coal companies (see box). While the company promotes its low sulphur coal as "Envirocoal" the impacts on the ground tell a different story. These include:

- River pollution affecting surrounding villages - local people are no longer able to use the river water for daily needs.
- One of PT Adaro's pits is one kilometre in diameter with a depth of 30-40 metres (PT Adaro has two pits). One pit is now a lake.
- Land disputes with local residents affect around 300 hectares. The process to set

compensation, and the amount of it, have been unfair. Conflicts have also arisen within the communities due to conflicting claims over land caused by the chaotic land acquisition process.

• Two villages, Lamida Atas Village and Juai Village, were displaced by the expansion of the mine in 2003. The incidence of violence against residents and environmental activists has increased as the company pushes ahead with operations. Meanwhile it seems the security forces don't want to take any responsibility for this.

In other districts of South Kalimantan a range of problems are evident. In Tanah Bumbu District, some mining is going on within a protected mountain forest. River barges have been used to transport coal since 1999 causing widespread contamination of the water with fuel oil. Previously, fisherfolk from Satui village fishing in the estuary could earn fifty thousand to two hundred thousand Rupiah a day. Now daily earnings have reduced to between thirty thousand and a hundred thousand. The Salaiuan River is drying up, the water is turning black and it can't be used by residents for their daily needs. Local people suffer from coughs, shortness of breath and eye diseases.

On Sebuku Island, Kotabaru District, the coal mining company PT Bahari Cakrawala Sebuku (BCS) has been allowed by the government to mine in the forest nature reserve. Since operations began in 1994, there have been water crises in two villages, the river has changed course and local people's rubber production has declined. Even the local cemetery and the speedboat service jetty were removed in 2003 in order to extract the coal underneath.

Two other rivers have been contaminated with coal washing waste. Fishery yields especially young milkfish and shrimp fry have declined due to pollution reaching the sea. Spilt coal and oil during loading and shipping has also reduced fishing

volumes and fry have been declining because of damage to mangroves along the Sebuku Strait. Previously people could earn two hundred thousand Rupiah a day with 3 to 4 hours of fishing. Now it takes one to two days to earn the same amount.

A call for solidarity

The community stories in *Deadly Coal* raise very serious concerns which the coal industry, the authorities governing it and consumers of coal need to take on board. To reverse the full-scale assault on Kalimantan's resources JATAM is calling for solidarity and action. The group is inviting all of Indonesian society and the world community to demand that state officials and politicians work sincerely and consistently to:

- I. Suspend all licences and licensing processes for any future investments and developments which have a dirty social and ecological footprint such as coal and mineral mining, large-scale oil palm businesses, the clearing of peat land, largescale fisheries, oil exploitation and logging concessions in the remaining natural forests.
- 2. Uphold a vision of development that guarantees:
 - People's ability to achieve and maintain their own safety and welfare;
 - People's ability to achieve and maintain productivity in order to enjoy the best quality of life they can within the local social and ecological capacity; and
 - People's ability to preserve, protect and restore the sustainability of ecological services.
- 3. Work towards a new development paradigm and the long-term effort needed to achieve intergenerational justice.

The full JATAM report can be downloaded as a PDF file from

http://english.jatam.org/dmdocuments/DC%20ingg02.pdf

UK - Indonesia coal connections

What is the coal relationship between Indonesia and the UK? How are ordinary people connected - from consumers and shareholders in the UK to communities suffering the impacts of coal-mining in Indonesia?

This article is the result of some initial investigations into those links.

By Carolyn Marr, DTE

As one of Indonesia top foreign direct investors, it is no surprise that Britain is involved in the country's coal sector. This ranges from UK-based companies developing and operating coal mines in Kalimantan, to British investment in coal-fired power stations on Java. The UK and Indonesian governments have also agreed to work together on controversial carbon capture and storage (CCS) technology, aimed at reducing carbon emissions from coal burning in power stations.

Compared to other sectors, such as oil palm and timber, there is little public awareness about the existing and potential future damaging social and environmental impacts of this promotion of coal by the UK and Indonesia

In the UK, the coal debate has centred on the need to cut carbon emissions and whether coal - the dirtiest of fossil fuels - can ever be 'clean' enough to play a part in a future energy mix. But following the failure of December's UNFCCC climate summit in Copenhagen to galvanise governments into action on climate change, the debate has slid down the government agenda. The focus of Britain's new coalition government is now firmly on dealing with the debt crisis.

In Indonesia, there is pressure to cut carbon emissions too. President Susilo Bambang Yudhoyono has pledged to reduce emissions by 26% on business as usual projections by 2020.² The strategy includes halting deforestation, one of the causes of which is coal mining. Yet Indonesia wants to increase revenues from mining - and coal is currently the biggest revenue earner among the minerals³ - meaning expansion, not reduction of coal mining.

The international policy contradictions are clear too: countries like the UK want to carry on using coal (including imports from Indonesia) as well as cutting carbon emissions at home. They also want Indonesia to cut its emissions: The UK recently pledged GBP50million to support forest carbon conservation in Indonesia over the next five years - though there are serious doubts as to whether schemes to reduce emissions through deforestation and forest degradation (REDD) can succeed.⁴

Where do local communities fit into to all this? The impacts of climate change are already hitting poor people in the South - including Indonesia - harder than the richer

industrialised countries.⁵ On top of that, the appalling social and environmental impacts of coal are affecting the lives of ordinary Indonesians. These impacts are all too often ignored in the coal and climate debates, yet they are a key part of the argument against coal. As this special issue of the DTE newsletter highlights, coal mining is currently blighting a whole generation of Indonesians in Kalimantan. It is time that consumers of Indonesian coal and shareholders of companies investing in the Indonesian coal sector become more aware of the damaging consequences of their involvement and take action to prevent yet more damage.

Which companies import Indonesia coal?

The UK gets most of its coal from other countries (see box). Coal from Indonesia amounted to just under 5% of total imports in 2008, (or around 3% of the UK's total coal supply). Other imports came from Russia (35% of the total supply); Colombia (9%), South Africa, Australia and USA (7%) along with 28% from within the UK.

So, although Indonesian coal represents a relatively small proportion of coal used in the UK, this still amounted to over two million tonnes in 2008.

Information on who ordered this coal and where it went once it arrived in the UK is hard to track down.⁶ Of twenty coal importers listed on the Association of UK Coal Importers website, only seven specifically mention Indonesia in relation to coal, while only one mentions a specific Indonesian mine.

Drax Power Ltd, owner of the UK's largest coal-fired power station, reported successful test burning of Indonesian coal in 2006, but did not mention which mines produced the coal.⁷

ScottishPower is an electricity company, with a number of power plants totalling 6,400MW, fuelled mainly by coal and gas. The company website lists Indonesia as a source for coal (for example in 2004-2005).⁸ It mentions a specific Indonesian mine, but only as a potential source of coal.

In its performance summary 2007, the company says its coal and biofuels trading

Coal in figures

- The UK imports over 70% of its coal requirements.¹⁴
- In 2008, the UK consumed 58.2 million tonnes of coal.¹⁵
- Of this 47.8 million tonnes was used in power stations. 16
- Coal imports to the UK were 43.9 million tonnes in 2008.
- Almost a third of the UK's electricity was produced from coal (32.1%) in 2008¹⁸ and 27.7% in 2009.¹⁹
- Coal's share of the UK's total energy supply in 2009 was 14.2%. ²⁰
- Just under 5% of the UK's coal imports come from Indonesia, or 3.7% of the total UK coal supply, comes from Indonesia (2008 figures)²¹
- The total tonnage in 2008 was 2,162,000. 22
- All imports into the UK from Indonesia were of thermal coal (for power generation and heat). There were no imports of coking coal for steel making.
- Indonesia is the world's largest producer of thermal coal. It has exported more than 75% of production in recent years.²³
- Indonesia produced 254 million tonnes of coal in 2009 and expects to increase production to 270 million tonnes this year, of which 64 million tonnes is expected to be for domestic consumption.²⁴
- ullet Around forty mines produce thermal coal, in East and South Kalimantan and Sumatra 25 , but the industry is dominated by the big players.
- In 2007 the four largest producers Bumi Resources, Adaro Indonesia, Banpu and Kideco
 Jaya Agung accounted for more than two thirds of total thermal coal exports that year.²⁶
 (see also separate box on the main coal producers in Indonesia).



Coal being loaded onto river barge, East Kalimantan (DTE)

manager visited a coal mine called Gudang Hitam near the city of Samarinda in East Kalimantan to see if the mine operated to acceptable standards, in terms of employee welfare, health and safety, terms and conditions and environmental stewardship. The findings - which are minimal especially as far as environmental stewardships is concerned - were reported as follows:

"This initial visit found that the mine was well-run with an on-site medical centre and canteen. Employee terms and conditions included health insurance, a pension plan and a range of welfare provisions that included family members"

"Environmental stewardship, including transportation of the coal was also scrutinised. Coal is taken a short distance by lorry and then shipped on barges 50 km down the Sanga Sanga River to the coast, where it is placed onto bulk carriers for delivery to customers around the world."9

This report gives no information about the impacts of the mining, coal transport or shipping. Yet Samarinda is one of the areas worst affected by coal mining, where impacts include flooding and loss of local livelihoods due to pollution from the many coal operations in the area (see previous article).

A separate corporate responsibility report for the same year included an 'Independent Assurance Statement' from a company called CSR Network Ltd. This remarked upon the fact that the company had

included information about potential procurement from an Indonesian mine, but recommended that more details were needed:

"We recommend that consideration be given to providing more systematic information on these issues in future reports, including where possible, reporting on the findings of independent verification of social and environmental impacts and supplier management standards."

ScottishPower also states it is a member of a group called the Basic Services Human Rights Network, which is facilitated by Human Rights Consultancy Twenty Fifty. According to the company, its representatives worked with a consortium of UK generators to examine the key issues relating to ethical coal procurement and a report was due to be published in early 2008. This report does not appear to have materialised, however. 12

Rudrum Holdings runs a fuel procurement company with three import, storage and preparation facilities for coal in Redruth, Cornwall; Avonmouth, Bristol; and Grassmoor, near Chesterfield. It lists Indonesia as a source of coal. The company website states that it pays visits to, and holds regular dialogue with, most of the world's key coal producers, including Indonesia 13 but does not mention which mines produce the coal.

UK-based mining companies

UK-based mining companies directly involved in coal exploration and mining include the mining multinational giant BHP-Billiton and the lesser known Churchill Mining. Two other UK-based multinationals, Rio Tinto and BP, played a major role in developing coal mining in Kalimantan until 2003.

The Australian-British multinational mining company **BHP Billiton** holds seven mining concessions covering 355,000 hectares in Central Kalimantan.²⁷ The company is also exclusive marketing agent for PT Arutmin Indonesia, which operates six mining locations in South Kalimantan (see box, next page).

The company announced it would sell off the Central Kalimantan project in late 2009, but reversed the decision earlier this year. Then, in March 2010, BHP Billiton announced an agreement to create a new joint venture for its Indonesian Coal Project with a subsidiary of PT Adaro Energy TBK (see also box). Adaro will hold a 25% interest in the joint venture with BHP Billiton retaining 75%. ²⁸

According to press reports, the project is expected to start commercial production in 2014, with output reaching 6 million tonnes of both thermal and coking coal within five years.²⁹ Allegedly high proportions of metallurgical grade coal could well be a major attraction for BHP.

What will be the impact of the project? There is scant public information about the indigenous and local communities living in and around the concession area. Instead, the attention has focused on the biodiversity impacts.

In 2007, the UK's Sunday Times newspaper reported that the BHP Billiton planned to exploit mining rights in the Heart of Borneo conservation area and that it had lobbied for the protected status of some of its concession areas to be lifted.³⁰ Previously, a study for WWF confirmed that BHP's concessions overlapped with the Heart of Borneo area.³¹ Meanwhile, the company's Sustainability Report for 2008 paints a benign picture of BHP, working to protect biodiversity in its concessions areas, (without referring to the Heart of Borneo).

The company estimates that the total 'disturbed area' within its concessions will be around 15,000 hectares, from the total concession area of 355,000 hectares. The report states the area had been under 'considerable threat from changes in land use, such as forestry and the rapid growth of palm oil plantations, plus 'poorly managed mining practices and illegal mining'. BHP does not appear to include itself as one of these threats.

The report also says that, should the project proceed, the plan is to start by creating 'small mines'.

Coal mining companies in Indonesia

I) **Bumi Resources**, is an Indonesian company controlled by the Bakrie Group. It has two coal-mining subsidiaries, **PT Kaltim Prima Coal (KPC)** and **PT Arutmin Indonesia.** India's **Tata Power** has a 30% stake in each subsidiary. KPC's operations include the Bengalon and Pinang coal mines.⁴³ Arutmin's operations include the Mulia, Asam-asam, Batulicin, Satui and Senakin mines.⁴⁴

KPC is Indonesia' biggest coal mine and one of the world's biggest too, producing 55-60 million tonnes a year. 45

- 2) **PT Adaro Indonesia**, another Indonesian company, operates the Tutupan mine in South Kalimantan, Indonesia's second biggest coal producer after KPC.⁴⁶
- 3) **Banpu Public Co. Ltd**, a Thai company, operates four open pit mines in South and East Kalimantan: Jorong, Indominco Bontang, Kitadin-Embalut and Trubaindo.⁴⁷
- 4) **PT Kideco Jaya Agung,** owned by South Korean and Indonesian companies, operates the Roto mining complex in East Kalimantan. Roto North supplies South Korean power generators while Roto South produces coal for export and domestic markets.⁴⁸

In 2006, the first three companies accounted for 69% of the country's coal exports, worth a total of US\$6.2 billion. 49

Other large thermal coal producers are:

PT Berau Coal, an Indonesian, Dutch, Japanese joint venture (Binungan, Lati, Sambarata mine, East Kalimantan)

Straits Asia Resources, a Singapore listed company, including Australia's Straits Resources among its shareholders (Sebuku mine operated by PT Bahari Cakrawala Sebuku subsidiary, Sebuku Island, South Kalimantan; and Jembayan mine, East Kalimantan).

PT Tanito Harum, an Indonesian company, (mines in the Mahakam River area of East Kalimantan)

PT Bayan Resources Tbk, an Indonesian company, with six operating coal mines and two exploration projects in East and South Kalimantan, including operations in East Kalimantan by PT Gunung Bayan Pratama Coal (GBP).⁵⁰

"By starting small, our aim is to develop further understanding of and experience in how to manage the environmental and biodiversity impacts within the region before large scale operations commence." 32

Can BHP be trusted? The company's association with human rights abuses, environmental destruction and climate change was highlighted in an alternative annual report produced by civil society groups for last year's BHP Billiton AGM in London. The report highlights cases from eight countries where the company operates. These, along with other information in the report undermine the company's claims of sustainability. The report's introduction says:

"A number of recurring issues are prominent ... including human rights abuses, labour rights, relocation of communities, mistreatment of Indigenous Peoples, destruction of sacred sites, devastating impacts on food and water, climate change, use of paramilitaries, health concerns, irresponsible tailings disposal procedures and questionable corporate social responsibility".³³

Churchill Mining PLC, listed on the Alternative Investment Market (AIM) of the London Stock Exchange, is a British company whose activities are centred on a thermal coal project in East Kutai district, East Kalimantan. Plans for the East Kutai Coal Project (EKCP) include an annual production rate of 20 million tonnes, construction to start this year (2010) and start up in two years time. The project has a resource of 1.4 billion tonnes of thermal coal.³⁴

East Kutai is already one of the most intensively mined districts (see previous article).

Three open pits are planned with the coal transported away from the mine using a 160 km conveyor system. The conveyor will be powered by a 75MW coal-fired plant using EKCP coal. A new deepwater port will also be built and the projected loading rate is 6,000 tonnes per hour.³⁵

The company has another project called Sendawar, also in East Kalimantan, which it describes as a highly prospective area for coal bed methane.³⁶

Until 2003, two of the UK's most powerful multinational companies, **Rio Tinto** and **BP**, were joint operators of one of the world's biggest coal mines: the **Kaltim**

Prima (KPC) open-cast mine in East Kalimantan. This project has a long association with evictions, livelihood loss, pollution, strikes, use of the Indonesian security forces and dubious dealings with Indonesia's business and political elite. ³⁷

JATAM recently confirmed that local communities have experienced human rights violations since the KPC mine was opened. For example, in 1986, the company displaced 73 families from their land in Sangatta district, without compensation, to make way for employee housing. Four years later, a further 32 hectares of land owned by twenty families in Muara Bengalon was seized to make room for the coal storage area. There was no compensation and local people were banned from entering the area. 38 Local protests later forced a lifting of the ban.

KPC was sold to Bumi Resources in 2003, a company controlled by the Bakrie Group. This conglomerate is owned by Aburizal Bakrie, chairman of Golkar (former dictator President Suharto's political vehicle) and recently appointed by current president Susilo Bambang Yudhoyono as head of a new secretariat to oversee the governing coalition parties (which includes Golkar).³⁹ Bakrie was listed as Indonesia's richest person in 2008 by Globe Asia.40 His companies have been embroiled in legal disputes over tax evasion,⁴¹ and another Bakrie company is also responsible for an an ongoing 'mud volcano' disaster associated with one of its oil operations in East Java. The Lapindo disaster claimed 14 lives and has people forced tens of thousands of local people to abandon their villages.⁴² (See also separate article on KPC and corruption,)

Investment in the coal sector

British banks are involved in financing Indonesian coal mines. They include:

- Royal Bank of Scotland (RBS), which is now 84 % owned by the public, 51 following massive government bailouts in 2008-2009. Before the financial crisis, in July 2007 RBS and nine other banks loaned USD 1,200 million to the Hong Kong-based Noble Group, which owns coal production assets in Australia and Indonesia. 52
- Barclays and one other bank loaned USD950 million to India-based Tata Power in June 2007. Tata has a stake in Bumi Resources, Indonesia's biggest coal producer (see box). The following year (March 2008) Barclays joined nine other banks in loaning USD845 million more to Tata.⁵³
- Standard Chartered a major UKbased global investment bank - was the issued the shared to the market and was

original lead manager for capital raised by Straits Asia Resources for its projects in Indonesia in 2007.⁵⁴

 PT Adaro lists among its own lenders, UK banks HSBC and Standard Chartered, along with France's Credit Agricole and the Asian financial services group, DBS.

Investment in Indonesia's coal-fired power stations

British companies are involved in several coalfired power station projects in Indonesia. These include the existing Paiton and Paiton II plants in East Java, plus Paiton III plant (under construction). The first two Paiton projects were notoriously expensive and reportedly mired in the corrupt practices of the last years of the government of former president Suharto.⁵⁵

International Power PLC is a UK-based electricity generating company with interests in 21 countries, including Indonesia and the UK. In Indonesia it holds interests in the Paiton power station which started operations in 1999 with a gross capacity of 1,365MW and is also involved in the 815MW Paiton III plant now under construction next to the original plant in Probolinggo, East Java. ⁵⁶

International Power owns PT Paiton Energy along with two Japanese companies (Mitsui, Tokyo Electric Power Company) and one Indonesian partner (PT Batu Hitam Perkasa).⁵⁷ International Power's shareholding in PT Paiton is 40.5%.⁵⁸ The new Paiton III plant's operator will be IPMOMI (operator of the existing Paiton plant) in which International Power holds a 59.9% interest.⁵⁹

Paiton III will be a 'supercritical' coal plant. According to the company, supercritical technology can achieve efficiencies of between 42 and 44% in

comparison to around 40% for a subcritical coal plant. The company also says it is investing in low carbon technologies, including a pilot carbon capture and storage (CCS) project in Australia which started up in April 2009 and has been capturing 25 tonnes of CO_2 per day. As far as costs of future environmental restrictions are concerned, the company indicates that it does not expect this to cause additional costs as there is no major imminent legislation expected in Asia and - under its long-term agreements with state electricity company PLN - it won't be responsible for future carbon costs. 61

Meanwhile, Paiton I is a huge ${\rm CO}_2$ emitter, pumping almost 9 million tonnes of the greenhouse gas into the atmosphere each year.⁶²

As far as human rights are concerned, International Power's policy talks about the application of the Universal Declaration of Human Rights principles throughout its workforce.⁶³ There is no mention of the human rights of people affected by procurement of coal, or impacts in communities living near the power station project. Instead its 'Communities' web page commits to playing a 'positive role' by providing local employment, supporting the local economy; acting as a responsible neighbour and employer and contributing towards the improvement of local health and education services.⁶⁴

PowerGen, now the Germany based energy giant **E.ON**, was previously involved in Paiton II, a 1,220MW power station which began operation in 2000. The company held a 35% stake but disinvested in 2004. ⁶⁵

Powergen said that it addressed the issue of human rights throughout its operations around the world through its commitment to equal opportunities and treating people "fairly, with dignity and respect".66

IFIs

International Financial Institutions like the World Bank Group and the Asian Development Bank are another component of the UK-Indonesia coal relationship.

Despite international criticism of its continued funding for fossil fuel projects, the UK remains one of the top five shareholders in the **World Bank.**⁶⁷

Analysis last year by the US-based think tank, the Bank Information Center, showed that the World Bank Group is continuing to spend on the extractive industries⁶⁸ while simultaneously adopting a leading role in the management of global climate change mitigation and adaptation funds.

BIC showed that the Bank's private lending arm, the **International Finance Corporation (IFC)**, increased lending for fossil fuel projects by a substantial 165% during July 2007-June 2008.

The UK was joint third biggest shareholder in the IFC in 2009 (with 5% of IFC shares).⁶⁹

A survey by the US NGO Environmental Defense, found that in 2009 Indonesia was the highest recipient of public funds (including World Bank Group funds) for coal-fired power stations.⁷⁰

In Indonesia, recent IFC lending approvals in the extractives and fossil fuel-based power generation sectors, amount to over USD 240 million. They include loans to a coal-fired power plant in South Kalimantan to be operated by an Indonesian company called PT Makmur Sejahtera Wisesa, (a subsidiary of PT. Adaro Energy Tbk) approved 21st June 2007.

IFC provided \$25 million for its own account and arranged a \$96.8 million syndicated facility with five international banks (Calyon [France], Cordiant Capital [Canada], DBS [Singapore], ING Bank [Netherlands], and KBC [Belgium]) to help build this 60-megawatt coal-fired power plant. According to IFC, Makmur Sejahtera Wisesa





Fish: part of the local diet, under threat from coal mining (DTE)

will sell the generated electricity to PT Adaro Indonesia, while excess electricity from the plant will be sold to the state electricity firm, PLN, "to help stabilize the local power grid for other commercial and residential users."

The power plant is expected to be completed by 2010. The new electricity supply will save Adaro \$100 million annually in foreign exchange from diesel oil imports, as well as substantially reduce the company's operation costs.

In other words, public money is being used to help save money for this powerful mining company which is Indonesia's second biggest coal producer.

Another channel for UK public funds is the **Asian Development Bank** (**ADB**), where the UK is 14th largest investor.⁷³ The ADB is part of an international group providing USD1.8 billion to finance Tata Power's Mundra power stations in Gujarat, India. According to Tata, almost half of the dry fuel required for the 1,600 MW project will be sourced from Indonesian mines. ⁷⁴ (See also separate article on Indonesia-India coal links.)

Government to government cooperation

What are the UK-Indonesia government-to-government links on coal? Given the substantial private sector links outlined above and the fact that the UK still relies on coal for almost a third of its electricity, it is not surprising that the UK is keen to develop further coal links with Indonesia. Meanwhile, the international pressure on both countries to cut carbon emissions has helped direct government-to-government

towards the technical fix of carbon capture and storage (CCS). (See also separate Coal and Climate Change article.)

In 2008, the UK and Indonesia governments signed a memorandum of understanding on environmental cooperation and climate change to strengthen mutual cooperation in these areas. As well a paragraphs on Reducing Emissions from Deforestation and Forest Degradation (REDD) and oil palm, the MoU included a commitment to "continuing bilateral cooperation on studying of Carbon Capture and Storage (CCS) potential for Indonesia."

In May 2009, DTE wrote to the UK Department of Energy and Climate Change (DECC) expressing concern about measures to study CCS as a possible future option for Indonesia's coal-fired energy sector. This, argued DTE, would mean "support for an industry which is associated with serious resource rights conflicts, forest destruction and air and water pollution in coal mining areas in Indonesia, as well as being one of the dirtiest means of energy generation in terms of GHG emissions."

The letter said:

"We believe that efforts need to be focused now on moving away from fossil fuel generation to renewable alternatives (both in Indonesia and the UK), rather than supporting this industry in the hope that as yet unproven CCS technology can eventually clean it up. "75

DTE never received a reply.

A new UK-Indonesia group, (the UK-Indonesia Working Group on Environment and Climate Change), which was set up under the MoU, had its first meeting in June 2009. The second meeting will be held in July 2010. The core members of the working group are DECC, the UK's Department for Environment, Food and Rural Affairs (DEFRA) and the Indonesian Ministry of Environment as co-signatories of the memorandum. Representatives from other government departments and agencies from both the UK and Indonesia also participate in meetings as appropriate.

According to Joan Ruddock, a minister in the previous Labour government, outcomes of the working group to date include the exchange of information on the EU renewable energy directive; CCS; sustainable palm oil; and forestry and land use issues. In March this year the UK government also hosted a two-week placement for an Indonesian Government official at DECC and DEFRA.⁷⁶

Debunking 'clean coal'

The British government remains committed to coal as an important part of the UK's energy mix, despite the pressing need to cut carbon emissions, and despite high profile public campaigns against its continued use by major civil society groups. Like the previous Labour government, the new Conservative-Liberal Democrat coalition government is putting its faith in CCS. It says it will continue public sector investment in CCS for four coal-fired power stations and establish an emissions performance standard that will prevent coal-fired power stations being built



Polluted water damages local liveihoods. (DTE)

unless they are equipped with sufficient carbon capture and storage..."77 A new government office for CCS was launched in March this year to support such initiatives.

The same month a new government report was launched: 'Clean coal: an industrial strategy for the development of carbon capture and storage across the UK'.78

The very title of this report highlights the limited nature of the debate around coal and CCS. Even if all the carbon was captured, coal would still not be 'clean', as evidence from Indonesia's coal-blighted communities shows.

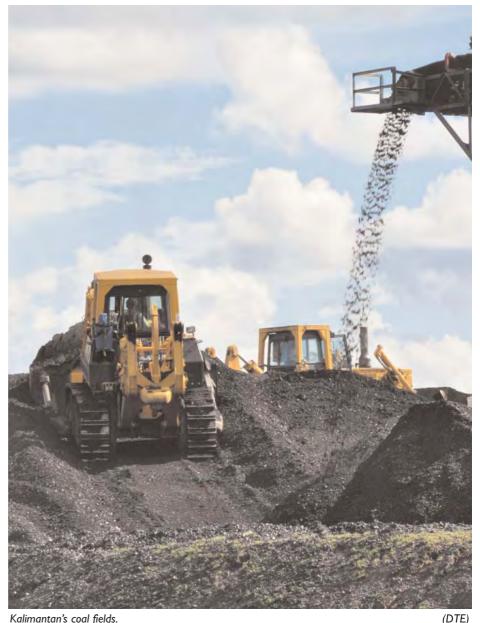
The British government, as well as the private sector and company shareholders need to recognise the implications of their continued support for coal through UK energy policies that encourage coal imports from Indonesia; public money for government-to-government assistance on CCS; public funding for IFI involvement in Indonesia-based coal projects or for projects in other countries which rely on Indonesian coal; and private sector investment in Indonesian coal mining and power generation.

While local people continue to suffer the damage to their health and livelihoods inflicted by such coal connections, coal will remain both dirty and deadly.

Thanks to Roger Moody for editorial advice

Notes

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Heavy trucks use local roads (DTE)

Food, coal and Makroman Village

Voices from an East Kalimantan village tell what it's like to live in a major coal-mining area.

By Siti Maimunah (Working Team on Women and Mining, JATAM) and Merah Johansyah (JATAM East Kalimantan).

Makroman, a village in Samarinda municipality - the capital of East Kalimantan province - is encircled by mines. For the past five years coal mining operations have been excavating the land around Makroman. This is something that worries Sugianto, a transmigrant farmer from Java, Indonesia's most densely populated island. The morning we spoke to him, Sugianto had just finished planting the last section of his rice paddy. His face was rolling with sweat and his clothes were covered in mud, as he stood ankle-deep in the paddy field.

"This rice field has provided a living for three generations, but coal...once it's gone, it's cut and run", he says, annoyed. "My grandfather, my father and now I live from the paddy fields, and in future, so will my children", he says.

Sugianto's family moved to Makroman around 1975 as part of the transmigration programme. At the time he was just a baby. Now Sugianto is thirty-five and has married a Kenyah Dayak woman. Their eldest child is in the third year of primary school. The family mainly harvests rice and other crops from their small plantation. "But my plantation is bankrupt. I had hundreds of rambutan and durian trees, but they died after being repeatedly swamped by mud from the coal mine, since CV Arjuna started extracting coal," he says angrily. He used to earn Rp12 million from one fruit harvest. Today, only a few trees which escaped the mud can still be harvested.

Sugianto's family has 3 hectares of rice fields and some rubber trees. But the paddy fields, which can produce 5 tonnes per season, are under threat too. In January 2010, the fields, which are only a few hundred metres from the open-cast mine, were inundated with mud. The harvest failed. Sugianto was not the only one: his neighbours were affected too.

One neighbour, Sulistianingsih, aged 36, remembers being swamped by coal mud. "This was the first flood the whole time I've been living here. It started when they began mining coal in the hills up there," she says. Sulis is a poultry farmer. She and her husband have different roles: he manages the fish ponds while she looks after the chickens. More than a hundred chickens were killed in the flood. "It rained all day and then at night our house was hit by the mud. The fishpond vanished, buried in mud and the fish were killed," she adds. Sulis' family have several fishponds where they raise freshwater catfish, *mujair*, goldfish and *nila*.

The same thing has happened to Nurbaety, 67, a white-haired mother of ten, whose youngest is now in the sixth year of primary school. "My house has been hit by mud floods many times. You can tell from the damaged walls," she says. Nur's house is very close to the mine and she is the first one to be hit when the floods come. Her paddy fields too, have been swamped by mud.

Uncontained

It seems that when it rains heavily all day, it is too much for the poorly constructed containment ponds that are supposed to cope with mine waste. The ponds consist of four linked sections measuring 2 by 3 metres, whose channels contain *ijuk* or palm fibres, which are meant to catch the sediment. Clearly this waste management method is irresponsible and dangerous.

"In the end we protested at the CV Arjuna mine site, demanding a stop to operations so there would be no more floods", said Nur. Around 70 families in two groups - fisherfolk and farmers - held repeated protests and forced the company to halt mining operations. They demanded that the company leave the area. The company didn't know how to react and neither did the provincial and district government officials.

The head of the mining service stepped in. The people demanded compensation for around 50 hectares of paddy fields and fishponds that had been swamped by mud. They succeeded and the company paid Rp10 million for each hectare affected.

New problems

Unfortunately, the resolution of this case brought more dangers. Four months after the flood, the company agreed to widen the irrigation ditches feeding the paddy fields. They also bought up some of the villagers' rice fields saying they needed the land to build reservoirs to prevent future flooding. Recently local people have learned that the company has dug new channels and is channelling waste directly into the newly widened irrigation ditches. Today the water in the paddy channels is a milky coffee colour, containing brownish-black sediment from the mine.

These ditches serve as a source of water for people's livestock and fish as well as for the rice fields. "My fish are no longer feeding and have grown weak because of the cloudy water. I used to get Rp I.5 million a week from the fishpond," said Wagiman, who leads the fisherfolk group.



Waste ponds near Makroman. From here mine waste runs down to villagers' ricefields.

(JATAM)

This area's water comes from the rivers flowing down from the mountains and from springs trickling out of the thickly forested hills. Near the edges of the forest, it's easy to find sources of water near the paddy fields. Small wells of about half a metre, filled with clear water, are dug by farmers near their field huts. These huts are used by farmers as a place to eat and to take shelter during their work in the paddies, as well as for storing tools. But since the rivers have been blocked off, and their lower reaches dredged for coal, they can no longer provide clean water. The springs are also threatened as mining takes over more areas, levelling the forests - and the hills themselves - to the ground.

CV Arjuna has a mining permit covering 695.5 hectares. Currently there are two large, gaping pits almost 100 metres deep, which have now turned into large green-coloured lakes. There has been no effort to rehabilitate the area, or even just grow trees on it. There are no warning signs indicating that the area is dangerous and should not be entered: no security fences; no public notices. Instead local traffic crosses the area unrestricted.

The situation in the mine site is worse. Several hills have been stripped of their forests and abandoned as they don't contain any viable coal deposits. In active mining locations, the excavation is done at random. Waste rocks are piled up all over the place, rivers are blocked off, hills are levelled to the ground. Water from the mining pits is pumped into the inadequate containment ponds, carrying the waste downstream straight towards the local villagers' paddy fields. There clearly isn't any point in widening the irrigation ditches: in the space of just one month the ditches are half-filled with mud from the mine.

The villagers predict the dry season will be even harder - a water crisis is on the way. In early January this year, some people had to plant their rice on dry land - using sticks to make holes for the seed in a method called mendugal - because there was not enough water. The once fertile land is becoming hard to plant. The villagers had to choose between using water pumps, or leaving their fields unplanted. Using pumps adds to the costs of farming, already high enough as government subsidies have been cut. As a result, the farmers face the threat of not being able to grow their own food.

Makroman used to be well-known as a fertile transmigration site, for growing rice and producing fish. The fields were opened in the 1980s and the site's fertile land and plentiful water attracted transmigrants from other areas too. But since the rising global demand for coal and the government's eagerness to hand out mining licences, Makroman has become encircled by mines. Two companies operate these mines: CV Arjuna and PT CEM (Cahaya Energi Mandiri). CV Arjuna's permit covers 695.5 hectares while PT CEM covers 680.8 hectares.

don't know surrounded by coal mines...even our paddy fields are included in mining concessions. We don't know where the boundaries are. If those hills are destroyed, we'll be finished", says Sugianto, pointing to two hills very close to the area currently being mined. The noise of the vehicles and machines at the mine can be heard clearly from Sugianto's paddy field.

Permit mania This portrait of Makroman and Sugianto's

story, are typical of East Kalimantan today. It is as if people there are stateless, with no government to protect them. As if driven by profit alone, government officials in this province are issuing coal mining permits like there's no tomorrow. The number of permits has reached 1.269. Samarinda is the area with the second highest number of permits issued - 76 permits - after Kutai Kertanegara district. The daily newspaper Kompas has reported that every year, 12,000 hectares of farmland is being taken over by mining.

In Kutai Kertanegara district there are now 749 mining permits. Compare this to the number of villages in the district and it means there is almost one permit per village. The authorities are issuing them at a rate as high as one every two days. East Kalimantan has more coal than anywhere else in Indonesia and, it seems, every inch of the land is being dug up to get at it.

Permits no longer function as a legal management tool, but have become a means of economic exchange. It comes as no surprise that crime and corruption are rife in East Kalimantan. The provincial governor has just been named as a suspect in the embezzling of Rp 576 billion funds from shares in PT Kaltim Prima Coal (PT KPC), held by PT Kutai Energy. The majority shareholding was previously held by Rio Tinto and BP. This case of flawed divestment, which has been dragging on until today, is the legacy left behind by these UK-based companies. (See also separate article on KPC and corruption.)

The great coal rush has brought anything but prosperity for ordinary people: it is as if Kalimantan is cursed. Its rich energy resources, exploited by greedy officials, have brought misery to the people who live there. They endure sustained electricity crises, floods, and inter-community conflict due to land use changes and overlapping claims. In another few years, East Kalimantan will face a serious water and food crisis.

Neglected agenda

But these crises brought about by coal mining and the accompanying corruption in Kalimantan - which holds one of world's biggest coal reserves - do not feature in global politics. They aren't on the agenda for discussions about climate change - at local, national or international level, even though coal, along with oil and gas, is the biggest contributors to global warming and mining is an industry which consumes huge amounts of energy itself. Instead, the demand for coal from China, India, Japan and Europe keeps rising steadily.

If climate change is a global problem, where is the global morality and responsibility of these countries towards Makroman and Kalimantan?



Rice paddies with coffee coloured water from mine waste. (JATAM)

(Translated from the original Indonesian by DTE)

Dark Materials - a global glimpse

The following is extracted from a special report by Roger Moody of Nostromo Research, for Mines and Communities, on social, environmental and economic aspects of global coal dependency - with specific reference to Indonesia and India. The full report is at http://www.minesandcommunities.org/article.php?a=10299.

Thermal, or steam, coal accounts for around 70% of global output of the fossil fuel. It is burned to create steam that propels turbines. The majority of the world's electrical power currently relies on the burning of thermal coal.

The remainder of mined coal is used primarily for manufacturing steel and cement. This Metallurgical, or Coking, variety is usually of a higher quality than that used to generate electricity; and its market price reflects the fact.

Since 2008, Indonesia has been the world's leading exporter of thermal coal: its estimated share of that market in 2007 was just over a quarter of the total (25.5%).

The global coal trade as a whole is virtually certain to expand in the short term. So will domestic mining in some countries. The longer-term (2012 - 2020) prospects of an expansion in output hinge on a number of, as yet, undetermined factors.

In May this year, the US Energy Information Administration said that, "assuming no [global] energy policy changes" (a critical qualification), coal will continue to fuel the largest share of global electricity output in 2035, generating more than 30 trillion kilowatt hours. China and India, between them, would account for 85% of this increase, with the rest of the world consuming little more than it did in 2010.²

However, if a global political consensus were finally reached to slash global greenhouse gas emissions to 1990 levels (at the very minimum) the days of the dependence on the black stuff will be numbered. The substitution of thermal coal for liquid natural gas and so-called "renewables" (solar, wind, wave power) is already happening, albeit far too sluggishly and with little immediate impact. Ministers for each of Earth's three greediest carbon-eating states - China, the US and India - are on record as intending to reduce reliance on coal. However this won't happen yet.

On present evidence it will take at least another 10 years before the coal production starts to decline. This is a "decade of grace" that the planet simply hasn't got.

Main types of coal - and consequences of mining them

Coal's rank - or quality - is calculated according to the degree to which the original plant material has been transformed over time into carbon.

The older the coal, usually the higher its carbon content. Generally speaking, the higher that content, the cleaner the coal;

and the more heat created per unit of the raw material burned. Anthracite - with the highest carbon content - gives out more heat than any other type. Bituminous Coal (so-called because of its bitumen content) is generally dirtier than anthracite, while Sub-Bituminous coals are dirtier still. At the bottom of this sprawling heap lies Lignite - the dirtiest fuel of all (see Box).

Critical to calculating the potential damage inherent in various coal bodies is knowing the proportion of sulphur within them. This may differ widely - even within specific, apparently discrete, deposits. If they are not safeguarded from contact with oxygen and water, high sulphur stock piles and related wastes will produce sulphuric acid (SO₂). This then leaches out toxic heavy metals within the ore, or surrounding soils, which may be highly poisonous to marine life. If these poisons bio-accumulate and biomagnify through the food chain, they will become harmful to human life itself.

Sulphur fumes, emitted from power stations, unless adequately captured at the plants themselves, are also a major contributor (together with ammonium, nitrogen and carbon) to "Acid Rain" that has already wreaked havoc on forest growth.

Contrary to common perception, the higher-quality coking coal required for steel manufacture may also contain significant quantities of sulphur (2% or more). Although traditionally burned in European steel furnaces, this type of coal is now less sought after by the region's customers. Nonetheless, steel mills in China are reportedly now entering the market for this high-sulphur variety and mixing it with consignments previously destined for power stations ³

Indonesia - leading the export pack

The six principal thermal coal exporting countries are Indonesia, Australia, Russia, South Africa, Colombia and - until last year -

Significantly, Indonesia doesn't feature among the top ten coal consuming states. Its domestic consumption of coal in 2009 (at 30. 5 mte* oil equivalent) was barely more than that of the United Kingdom (with an output of just 195 mte).⁵

The disproportion between using this indigenous fuel to serve domestic power

* In this particular report, "mte" = million metric tonnes, while "mt" = million short tons.



One of the largest open-pit coal mines in the world, operated by Kaltim Prima Coal (JATAM)

From the most dirty to the somewhat less

LIGNITE (also known as Brown Coal) is inherently the most contaminated, and potentially polluting, of mined coals. Its carbon content ranges between 20% and 40%; its moisture content can amount to 70% by volume; and its ash content may rise to as high as 20%. Lignite customarily contains more sulphur than any other coal types.

This fuel is also susceptible to spontaneous combustion, creating dangers from transporting and storing it (MM May 2010). Strip-mined by the biggest excavators, shovels, draglines and crushers on earth (some with the capacity to scoop out 12,000 tons of the material every hour)(WC 5/2010) lignite is a cocktail of potential toxicity, including mercury, other heavy metals, radioactive isotypes and particulate matter.

Although located in many countries, brown coal was historically the staple fuel for the massive 20th century industrialisation of Europe - notably by Germany, Poland, Serbia, Bosnia, Bulgaria, Greece, Romania, Italy, Hungary, the Czech Republic, Russia and Turkey.

However, civil society movements in many of these countries have compelled the imposition of tougher air, water, and soil quality standards - thus significantly curbing Europe's lignite extraction.

Nonetheless, China, Thailand, Indonesia and Pakistan host significant lignite deposits, as well as mining some of them. So does Australia's LaTrobe Valley and a number of mid-west and southern US states US (MM 5/2010).

SUB-BITUMINOUS coals (sometimes called "black lignite") are of a higher grade than lignite, containing less moisture (between 25%-30%), less sulphur, and generally (though not always) used for thermal power generation. Their heating potential is higher than that of lignite - ranging from 8,300 to 11,500 BTU/lb (19,306 - to-26,749 kl/kg). But, like lignite, these coals are susceptible to spontaneous combustion, if not packed densely enough to exclude air flows. In Indonesia, sub-bituminous coals are produced by KPC at its Pinang and Bengalon mines, both for domestic and foreign consumption (WC 5/2009) and are in demand mainly because of their low (0.2%) sulphur content (WC, ibid).

PT Adaro also extracts subbituminous coals from its Titupan mines, for their medium heat and "ultra low" sulphur, ash, and NOx (nitrogen oxides) content. Again, these are used within Indonesia itself and also despatched to overseas customers (Adaro at a Glance: www.adaro.com/content/).

Similarly, Banpu's Torong mine supplies lower-heat, sub-bituminous, products, allegedly with a very low sulphur content, destined for an onshore power station and to foreign markets (WC 5/2009).

BITUMINOUS COAL is soft, dense, and black, with a moisture content less than 20%, used for generating electricity, making into coke, and in space heating (essentially, the blowing of warm air into buildings).

The heat potential of this product ranges between 6.8 and 9 kW/kG, and it has a lower sulphur and ash content than the sub-bituminous variety. However, coking coal, supplied by Indonesia to Japan, does have a significant ash content of 8% (Asia Energy, 4/4/2010).

Such coals are mined in Indonesia at PT Arutmin's Satui and Senakin mines in South Kalimantan (information from PT Arutmin - see also Thiess, next section). KPC earmarks this higher grade of coal solely for export, from its Pinang and Bengalon mines (WC 5/2009).

Banpu's Bontang and Trubaindo mines in Indonesia also deliver mid-to-high heat bituminous steam coals exclusively for export.

ANTHRACITE (aka Hard Coal) is black, lustrous and hard. Low in sulphur, high in carbon (between 86-98%), with a moisture content generally lower than 15%, it possesses the highest heat value of the four main coal varieties (9kW/kg) of coal. Employed mainly for power generation, anthracite's share of the world market is minor compared with that of the other three main varieties of coal.

Note: MM: Mining Magazine (monthly)
WC: World Coal magazine (monthly)

and industry and providing it to other states, is even more marked in the case of Colombia. The Latin American state consumed only 3.1 mte last year, while the country's mined output was 15 times as great (nearly 47 mte).6

Thus, Indonesia and Colombia are surrendering far more of the domestic value of their coals to foreign exploitation, than any other major coal-endowed economy.

In stark contrast, Japan and South Korea (which together mined less than 2 mte of coal in 2009) currently feature as the 4th and 10th most coal consumptive states in the world. 7

Moreover, by the end of last year, the amount of Indonesia's coal-in-the-ground stood at a mere 4,328 mt. The country's chief competitors in grabbing coal export contracts host sufficient reserves to sustain sales for years to come. But Indonesia currently ranks just 19th, in terms of its own reserves and resources - a mere 0.5% of the global total.8

It should be borne in mind that figures for proven coal reserves and inferred resources may be revised upwards following expanded exploration,

At present, however - and to put it bluntly - Indonesia is disposing of its "family silver" at a rate, and to a degree, unrivalled by any administration on our planet.

Behind the figures - some stark realities

Statistics often appear flat and become tedious to digest. Nonetheless, they can tell important tales. Knowing how much heat (BTU) is contained within the raw material shows how much of it will have to be extracted to deliver a given branded "product". Calculating moisture content enables even a "non-expert" to roughly estimate the amount of treatment required turn a wet coal into a drier one. Similarly, if the ore is high in sulphur other potentially hazardous materials, we will have at least a thumb-nail indication of the likely environmental and health impacts - all along the mining to end-use chain - of failing to separate out these elements and reduce their toxicity.

Even when these heavily-contaminated coals are "washed" - and not to ignore the toll in water usage, required for this to be effective - there remains the

challenge of disposing permanently of the acidic wastes.

A recent (May 2010) investigation by this author and Indonesian colleagues of Kaltim Prima Coal (KPC)'s vast opencast operations in East Kalimantan produced evidence that, in only one or two cases, had dumped washings been covered with impermeable sheets, protected from heavy rainfall, and separated from contact with adjacent water bodies.

Indeed, the team identified several instances of direct leaching of toxic spoils into lagoons within the concession areas; and of run-off being piped into a pond which, though purportedly treated with lime to reduce its high acidity, was then siphoned directly into a river used by villagers.

Once we make ourselves aware of the method of extraction and the coal "strip ratio" (how much overburden, in the form of rock, soil and vegetation, needs to be removed in order to access the ore body) we can conjecture what will be a mine's likely impacts on human habitation; the capacity of local people to continue growing crops, to rear livestock, breed fish, gathering other foodstuffs, or to sustain a variety of other livelihoods.

All mining imposes what's dubbed a "footprint" - one encompassing not only the mine's own infrastructure, but much else besides: transport routes, sea or river ports, facilities for workers, units for sewage disposal, and generating power needed for the extraction operation itself. Habitually these installations may come to affect the availability and use of endemic natural resources over a far greater area than has been projected in the initial mine construction plan. In fact they may sequester, and profoundly damage, up to thirty times more territory than the mine itself.

Of the two main methods used to dig out coal, underground extraction customarily requires far less land than does a strip, or open-cast, mine. However, due to the ever-present risk of a release of potentially highly-explosive methane, workers' lives are continually placed in danger.

Surface mining (employed in Indonesia and the commonest practice throughout the world with the marked exception of China) may prove less hazardous to workforces (although injuries still occur from blasting and using of unsafe equipment.). Nonetheless, methane will also be released, or pumped into the air from deposits exposed to the open air, thus increasing the contribution of this very potent greenhouse gas to global warming.

The vast overground workings of Kaltim Prima Coal, belonging to its Sangatta and Bengalon concessions in East Kalimantan, each stretch for more than a kilometre across, plunging - from crest to bottom - almost the same distance. They are creating a moonscape that, if all the plans of KPC's

mines and men are fulfilled, will cut a 30 mile wide swath, advancing 100 km north of Sangatta town. According to one of Indonesia's leading environmental and human rights activists, Chalid Muhammad, the Kaltim Prima mines are sacrificing 12,000 hectares each year - and this amount is bound to increase unless Bumi Resources and Tata of India (the leading investors in KPC) are not halted in their current expansion.

One thing is certain: when it comes to rehabilitating a closed-down underground mine, much of the waste can be deposited into the empty shafts. But this cannot happen when the coal has been scooped from hills and valleys and already degraded surface rivers and streams. What is left behind is a series of horizontal plateaus (known as "benches"), vertically descending at slopes too steep to ensure long-term stability, while being bereft of sufficient nutrients for adequate plant regeneration.

Even were this not the case, the extraction process will already have robbed the soil of most of its essential biota, and precluded sustainable water regeneration, in some cases over many years.

Sangatta town - at the heart of KPC's mini-empire - has already seen its local economy distorted - possible terminally - by its over-dependence on the plunder of its non-renewable resources. At least one community's farmland has been rendered useless as a result of flooding, allegedly triggered by KPC's denudation of upstream forestry; And the company's main tailings (waste disposal) dam, to which coal washings are assigned, is reportedly in a parlous state. ¹⁰

Notes

- I. International Energy Agency, *Coal Information*, 2008.
- The US Energy Information Administration's International Energy Outlook, 2010
- 3. Commodities Now, 28/6/2010
- 4. World Coal magazine 5/2009
- 5. BP Statistical Review of World Energy 2010
- 6. BP 2010 ibid
- 7. BP 2010 ibid
- 8. BP 2010 ibid
- 9. Information from Jatam, Samarinda, 14/5/2010
- 10. Our team was unable to visit the main KPC tailings' deposition area. However, a company employee, recently responsible for overseeing the dam's operational standards, told us that a number of basic precautionary measures were not being taken.



India links

The world's second most-populated country was, until recently, believed to contain the world's fourth largest reserves of coal. The vast majority of its coal mines are owned and managed by a single state entity, Coal India Ltd (CIL), the biggest coal mining corporation by volume in the world (*PTI*, 24/2/1010).

However, TERI (The Energy and Resources Institute, Delhi) estimates that the country has "only 45 years" left of exploitable domestic coal - standing in stark contrast to an earlier estimate of 200 years (WC Asia Special 2010).

In 2009, India imported 45 mt of thermal coal, a significant proportion of which originated in Indonesia.

India generates 70% or more of its electricity by burning coal. (Hydro and "renewables" account for nearly 24% and nuclear power 4% (WC Asia Special 2010, op cit). There's no doubt that considerably more of the raw material will be required from overseas during the next 2-3 years.

However, there are varying projections of what this will mean in terms of coal demand. India's Ministry of Power predicts a 120 mtpa shortfall by the close of 2010, declaring that imports must be increased by 50 mt from next year (2011). Raising the stakes somewhat higher, a recent study by Citigroup estimates that India must purchase 140 mtpa, of both steam and coking coal, from foreign suppliers by 2014 - with 50 mt arriving before next year. The Indian Planning Commission sets a lower, but remarkably precise figure, of 81.03 mt being required from imports during 2011 itself.

At the same time, CIL - perhaps over-optimistically - says it will increase its total supplies (of both coking and non-coking coal) from 689 million tonnes in 2011/2012 to almost double (1,015 mtpa) by 2016, in order to satisfy demand (WC Asia Special ibid).

The Coal Ministry in early 2010 announced it was "encouraging" CIL to acquire or develop coal mining operations in Mozambique, Australia, Indonesia, South Africa and the US (WC 2/2010).

Tata Power (see also next section) has already got its dark tentacles deep into East Kalimantan and Mozambique.

Other major Indian companies hungry for Indonesian coal include GMR, Lanco, NTPC, PTC, Reliance and cement producer Binani (see next section).

Indian steel producers are also actively seeking acquisitions and investment opportunities in overseas metallurgical coal projects "to ensure supply security as well as guard against price volatility" (*WC ibid*), while Essar Steel already operates Indonesia's largest flat steel plant.

SAIL (The Steel Authority of India), the country's most significant producer of steel and iron ore for domestic use, has been in talks with firms in Australia, Aotearoa/New Zealand, Mozambique - and Indonesia - to this end (*WC ibid*).

References:

PTI: Press Trust of India

WC: World Coal magazine (monthly)

Foreign companies that have their hands (or eyes) on Indonesia's coal

Anglo Coal (subsidiary of UK-listed Anglo American plc and based in South Africa), is seeking to exploit thermal coal opportunities in Indonesia (*Reuters* 12/4/2010).

Banpu Public Company Ltd (Thailand), owns 5 mines, containing reserves of around 300 mt, in South and East Kalimantan - Jorong, Indominco Bontang, Kitadin-Emblamut and Trubaindo (*Coal Trans* 7/5/2010).

BHP Billiton (Australia and the UK) is planning to advance its Maruwai coal project in Central Kalimantan (seven concessions covering 350,000 hectares) along with PT Adaro Energy. Production is targeted to begin in 2014, rising to 5 mtpa of thermal and coking coal during the following five years (see separate item on UK-Indonesia connections).

Binani Cement (India) announced in 2009 it would be "looking" at acquiring coal blocks in Indonesia in order to meet its energy requirements for cement kilns. (*Mergers and Acquisitions in India*, 19/3/2009).

China Investment Corp (a Chinese state agency) has allocated USD1.9 billion to acquire Indonesian mines, in partnership with PT Bumi Resources (WC Asia Special 2010).

Churchill Mining Plc (UK) signed an MOU this year with a subsidiary of PT Perusahaan Listrik Negara (PLN), Indonesia's state electricity utility (WC Asia Special 2010) to supply PLN-Batubara (PLN's coal subsidiary) with 4 mtpa from its East Kutai Coal Project (EKCP), in addition to 20 mtpa already intended for delivery elsewhere. Churchill is also partnered in a coal-bed methane trial project at Sendara in East Kalimantan, along with Indonesia's Ridlatama Group which owns nearly thirty concessions (KPs) in East Kutai, Pasir and West Kutai blocks - all in East Kalimantan (Ridlatama website, accessed 29/6/2010).

CIL (Coal India Ltd) (India) has short-listed 24 foreign firms as potential partners in sourcing overseas coal, including from Indonesia (WC 4/10).

Essar Steel (India, and UK-registered) owns a flat steel products plant in West Hava and holds 35% domestic market share in Indonesia (Essar corporate website, 22/7/2010). Essar this year announced that it had agreed to buy the Aries coal mines in Indonesia to secure supplies for its power plants (*Business Standard* 25/3/2010).

GMR Energy (part of India's GMR Group) acquired in 2009 a 100% stake in PT Indonesia's Barasentosa Lestari (PT BSL), which holds two coal blocks in South Sumatra (Business Standard 26/2/2009; see also GMR website). GMR holds 50% of InterGen NV, a global energy producer, which operates 12 power plants, in the UK, the Netherlands, Mexico, the Philippines and Australia.

Kangaroo Resources (Australia) has a number of "coal options" in East Kalimantan (*WC Asia Special* 2010).

Lanco (India) has been recently seeking opportunities to import coal from Indonesia and elsewhere to feed power projects in coastal regions.

Leighton Group (Australia) wholly-owns Thiess Indonesia, which operates PT Arutmin's mines in South Kalimantan (see below).

MEC (United Arab Emirates) announced plans in 2009 to start operating coal mines in East Kalimantan during 2010 (*Reuters* 8/12/200).

Noble Group - (Hong Kong), Asia's largest commodities trading firm; owns PT Sangha Coal Indonesia (Noble Group website, accessed 29/7/1010). Sangha's Morris2 mine in East Kalimantan exports coal to Eastern Europe, China and Japan.

North American Coal Corporation (USA, a subsidiary of NACCO Industries) is partnered with Reliance Power (qv) to provide technical services for the Indian corporation's "development" of the Aries mines in South Sumatra.

NTPC (India, state-owned utility) in July 2010, announced plans to import 5-10 million tonnes of coal from Indonesia between now and 2017. (Energy Business News, 15 July 2010).

Peabody Energy (USA) opened an office in Jakarta in 2009, "to expand business development and coal sourcing opportunities to serve the fast-growing Pacific Market" (*CoalTrans* 1/6/2010).

PTC India (India) has identified Indonesian and Australian sources of coal as "top" of its wish list (WC 4/10).

RAK (Dubai) In February 2008, the Dubai government's Ras Al Khaimah Investment Authority, together with RAK Minerals and Metals Investments (RIMMI) signed an MoU with the provincial government of South Sumatra that "covers the entire mining-to-export chain of the coal industry" (*Gulf News* 19/2/2008).

Ramky Infrastructure Ltd (India) announced in January 2010 that it was "looking at some coal mines in Indonesia" - without specifying which (Business Standard, 1/1/2010).

Reliance Power (India) signed in June 2010 an agreement with Indonesia's mining and industrial Sugico Group to acquire three coal mines (Bloomberg 10/7/2020). The three mines are in South Sumatra. Their output is earmarked for Reliance's proposed Krishnapatnam Power Project in Andhra Pradesh.

Rognar Holding B.V (Netherlands), together with Japan's Sojitz Corp. (qv) respectively hold equity in PT Berau Coal which operates the Binunan Lati and Sambarata coal mines in East Kalimantan, from which Rognar obtains both thermal and smaller amounts of metallurgical grade coal (Rognar website, 29/7/2010).

Sahin Jain (India) claims as partners the Indonesian companies, PT Kaltim Prima, PT Adaro and PT Bumi, as well as Rio Tinto, Glencore, Noble Energy and Austral Coal. The company supplies thermal coal to Tata and GMR; and metallurgical coal to steel plants.

Samtan Co (South Korea), part of industrial conglomerate, Samchully, imports thermal coal from Indonesia plus metallurgical coal for its steel production. With Jakarta-based Indika Energy, Samtan controls PT Kideco Jaya Agung. Kideco's workforce has suffered several mine fatalities so far this year: two in January, a further two in May, and one in June.

Shenhua Group (China) in July announced a start to construction of a 300 MW power plant in South Sumatra, to be fed by a 1.5 mtepa coal mine (*Bloomberg* 13/7/2010). This is the first time that a Chinese company has invested directly in Indonesia's own electrical energy production.

Sojitz Corp (Japan) owns 10% of PT Berau Coal (see also Rognar Holding BV)

Straits Asia Resources (Singapore). The Sebuku mine in South Kalimantan and the Jembayan mine in East Kalimantan is operated by its subsidiary, PT Bahari Cakrawala Sebuku.

Tata (Tata Sons) (India). In March 2007, Tata Power concluded a US\$1.1 billion agreement with PT Bumi Resources to acquire 30% stakes in PT Kaltim Prima Coal, in PT Arutmin and a Bumi-owned coal trading company. In March 2010, Tata announced a major step-up to its Indonesian coal mining capacity, from the current 60 mtpa to 75 mtpa by the middle of the coming fiscal year (*WC* 4/2010).

Thiess (of Australia, wholly-owned subsidiary of Leighton Holdings), in 2000 secured one of its largest-ever contracts, with PT Arutmin, to operate the Senakin and Satui Mines in South Kalimantan (http://www.leighton.com.au/about_us/projects/senakin_and_satui_coal_mines.html)

Vinacomin (Vietnam), in 2009 announced plans to begin importing coal from Indonesia (The US Energy Information Administration's *International Energy Outlook*, 2009)

The full report can be found on the Mines and Communities website http://www.minesandcommunities.org/article.php?a=10299

References

WC: World Coal magazine (monthly)

Corruption, Collusion and Nepotism

The case of Rio Tinto, BP, the Bakrie Brothers and Kaltim Prima Coal.

By Andrew Hickman, DTE

It is a sad fact that more than 10 years after the fall of Suharto and the establishment of democratic rule in Indonesia corruption, collusions and nepotism, known in Indonesian as *KKN* - remain key problems and challenges faced by Indonesia today.

As we all know, the issue of corruption is not something that is exclusive to Indonesia. Its roots can be traced far and wide. One of Indonesia's foremost writers, Pramoedya, writes vividly about the historical roots of this problem in Indonesia's colonial past; its powerful and corrupt bureaucracies and shameful inequalities tied Indonesia with Europe. Similar powerful and unequal connections exist today between Europe and Indonesia in the form of multinational business interests. These include the giant UK and Australian registered multinational mining company Rio Tinto, which has large mining interests in Indonesia.

Recently, Rio Tinto has become associated with corruption, too. In the last year, four Rio Tinto employees have been accused (and found guilty) of accepting bribes in a case related to the steel industry in

At the company's AGM in London on the 15th April 2010, the issue of corruption was raised repeatedly by shareholders. Down to Earth, in collaboration with the Indonesian Mining Advocacy Network (JATAM), questioned Rio Tinto's board about corruption in relation to the Kaltim Prima Coal (KPC) mine in East Kalimantan and the transfer of ownership of the mine to Bumi Resources, part of the Bakrie and Brothers group, the holding company for the Bakrie family business interests.²

KPC and corruption

KPC is one of the world's largest coal mines, previously owned and run by Rio Tinto. Even though it is now about 7 years since Rio Tinto and its then partner BP sold their stake in KPC, the legacy of these companies' involvement in this mine continues to have big repercussions in today's Indonesia.

In 2002 - the year before Rio Tinto and BP finally sold their 50-50 stakes in KPC - this mine near Sangatta, in East Kutai district of East Kalimantan province, was producing around 15 million tonnes of high quality coal per year and held reserves estimated to last another 20 years. It already had a history of strikes, land disputes and environmental problems affecting local communities.³

With an initial investment of more than USD I billion and profits of nearly USD

300 million per year, stakes were high for all concerned. The Contract of Work, signed in 1982, required Rio Tinto and BP to divest 51% of the shares to Indonesian investors over 5 years, starting in 1996.4 In 2003, Rio Tinto and BP finally (and apparently reluctantly) divested all their shares in KPC, following stricter government requirements to return the mine to Indonesian ownership. Not only did this process take many years to conclude, but it was also an unhappy one for Rio Tinto and BP and others looking to gain control over KPC and its prize assets.⁵ It appears that the two companies were forced to sell their shares in the company for near to half of the going rate, for a total of USD 500 million. A consortium of business interests in East Kalimantan, connected to the local provincial government, previously offered near to double the price finally paid.6

After years of legal wrangling, there are still questions as to why BP and Rio Tinto sold out so suddenly and how that came about. There is more than a suspicion that the deal struck was more about political and power relations than about doing business in an honest and transparent manner. What has been, and is, the real price of doing business with Aburizal Bakrie? There are legal and political processes still running that challenge the 2003 sale of shares in KPC and that allege serious irregularities (including continuing investigations in the East Kalimantan parliament). Most recently, the current East Kalimantan governor, Awang Farouk Ishak, has been named by the Attorney General's Office in lakarta as a corruption suspect (from when he was head of East Kutai district) in the divestment of its KPC shares to Bumi Resources.7 (See also separate article 'Food. coal and Makroman Village'.)

The fact that the final outcome of all this should leave KPC under the control of Bumi Resources, part of Aburizal Bakrie's business empire, has more serious consequences for the public and communities that continue to be affected by the mining industry in East Kalimantan and elsewhere in Indonesia

Bakrie and Brothers

The transfer of KPC to the Bumi Resources in 2003 marked a turn around in fortune for the Bakrie family's business empire. Since the Asian Financial crisis in 1997-1998, when PT Bakrie and Brothers had accumulated more than USDI billion in debt, the Bakrie conglomerate has been repeatedly bailed out by investment banks and sovereign wealth funds. The most recent was in October 2009

when Bumi Resources signed a USD 1.9 billion 6 year loan deal with the China Investment Corporation. This recent deal has helped the Bakrie group buy up a controlling stake in PT Newmont Nusa Tenggara, which includes the controversial Batu Hijau gold and copper mine on Sumbawa Island, West Nusa Tenggara. This expansion in the Bakrie family's interests in the mining sector adds to an already dominant position in Indonesia's mining industry with Bumi Resources, itself owning both KPC and another of the biggest Indonesian coal companies, PT Arutmin Indonesia. 12

Aburizal Bakrie, the eldest of four siblings and one of Indonesia and East Asia's richest men, 13 controls this vast business empire that includes mining, energy, media and property interests. 14 In 2004, he was appointed Coordinating Minister for Economy and then in 2005 Coordinating Minister for People's Welfare, in the government of President Susilo Bambang Yudhoyono. In 2009, he was elected chairman of the Golkar party, the political power base of the former dictator Suharto. Despite a request from President Yudhoyono to divest personal business interests to avoid allegations of conflict of interest, Bakrie has continued in control of his business empire.

It is highly ironic that in 2006, during his tenure as Coordinating Minister for People's Welfare, one of the companies controlled by Bakrie, PT Lapindo Brantas was responsible for an oil drilling disaster in East Java. This caused a mud-volcano that has engulfed thousands of homes, displaced some 30,000 families, is blamed for the deaths of 14 people and that continues pouring out mud to this day. 15 In an attempt to avoid paying compensation to the thousands of victims of this ongoing disaster, Energi Mega Persada, the Bakrie-owned company controlling the majority of shares in PT Lapindo Brantas, twice attempted to sell this company for USD2 to an offshore company.¹⁶ To date, many of the victims of the mudflow disaster have received only 20% of the compensation due to them. 17 There are parallels with the recent BP oil disaster in the Gulf of Mexico. However, tragically for Indonesia and the communities affected, it appears unlikely that these companies will ever be forced to remedy and give compensation to the equivalent extent that BP is being forced to in the United States. 18

In the political arena, Aburizal Bakrie is not shy of being accused of conflicts of interest. Indeed his record here is equally,

(continued on page 22)

Coal and climate change

By Geoff Nettleton, Kailash Kutwaroo, edited by Richard Solly with input from Roger Moody and Mark Muller.

Climate change

The rise in average atmospheric temperature and increased frequency of extreme weather events are widely understood to be a major threat to the future of all current human societies and ecological zones.

Despite increasing scepticism in some parts of the world, there is widespread agreement among climate scientists² that certain gases present in the Earth's atmosphere, particularly carbon dioxide, nitrous oxides and methane, trap heat and function as 'greenhouse gases'. It is feared that increase in the concentration of these gases as a result of human activity will cause a rise in temperature of at least two, and possibly six, degrees centigrade during this century. The exact effects of such rapid temperature rises have been difficult to predict but it is believed that they will include even higher temperature rises at higher latitudes, especially polar regions; significant rising of sea level, resulting in inundation of low lying areas; some melting of icecaps, permafrost and glaciers; and changes in weather patterns, including more droughts, heat waves and more powerful, and possibly unseasonal, storms.3

Some low-lying island states in the Pacific and Indian Oceans are fearful for their continued existence even if there are only moderate rises in sea level. Many other low-lying regions may also be seriously affected.⁴

Minimising the damage - or not

The view of the great majority of climate scientists is that climate change is already under way and that already-released greenhouse gases will continue to contribute further to global warming throughout at least the next decade. They urge strong mitigating measures to cut the generation of greenhouse gases and thereby limit the serious negative effects which are predicted. Most governments are also committed in words and international agreements to measures attempting to minimise the degree and mitigate the effects of climate change. Some are committing themselves, in theory, to radical measures to reduce the output of greenhouse gases. The United Kingdom, for example, recently adopted targets for an 80% cut in UK carbon dioxide emissions (compared to 1990 levels) by 2050.5 Such large cuts are seen as essential to address the scale of the crisis.



(JATAM)

These cuts cannot be achieved without significant changes to the nature of the current economy. This does not have to mean reductions in employment - indeed, climate campaign groups specifically advocate investment in new, 'green' jobs in industrialised economies. 6 Neither does it necessarily involve huge reductions in energy use - but it does require changes in the sources of energy used. Some scientists argue that 95% of the world's energy needs could be provided by renewable sources by 2050.7

But there is a massive contradiction between government and business statements and their current investment plans. Governments across the world are encouraging industry to spend hundreds of billions of dollars to build hundreds of new coal-fired power stations in the coming years - notably in the USA, India and China.

Much of this expansion would be impossible without government support. The International Energy Agency (IEA) states in a June 2010 report, Global fossil fuel subsidies and the impacts of their removal,8 that global subsidised consumption of fossil fuels amounted to US\$557 billion in 2008, including \$40 billion for coal consumption. In June 2010 the European Union was considering twelve more years of state aid for coal, a draft European Commission document showed, even as the Group of 20 prepared to discuss phasing out fossil fuel subsidies. The IEA suggests that, compared to a baseline in which subsidy rates remain unchanged, global subsidy phase-out would cut global energy demand by 5.8%, and energy-related carbon

dioxide emissions by 6.9%, by 2020.9 The Organisation for Economic Co-operation and Development (OECD) has urged governments to end fossil fuel subsidies, arguing that this could reduce greenhouse gas emissions by 10%.¹⁰

Another way in which the governments of industrialised countries encourage coal use is through the carbon trading system in use in the European Union and encouraged by the Kyoto Protocol. Participating governments have already given large quantities of free carbon permits to companies which use coal to generate electricity. Some of the least acceptable of the permits have been given to steel and aluminium producers, too - the latter using more electricity per unit of output than any other industrial operation, apart from uranium hexafluoride production. These permits can either be used to continue producing high levels of carbon dioxide or traded for cash. In this way, heavily polluting companies can both carry on polluting and profit from enabling others to pollute. 11

There is vigorous and mounting opposition to the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD Programme)¹², other REDD schemes linked to carbon trading and the Clean Development Mechanism¹³ because of the opportunities which they provide for companies to avoid making meaningful emissions reductions.¹⁴

Greenpeace estimates that if all the planned coal-fired power stations are built, carbon dioxide emissions from coal would rise 60 percent by 2030.¹⁵ This would have severe negative impacts on any international agreements to tackle climate change. But the global coal industry continues to be able to mobilise finance on behalf of its projects across the world. The World Bank, for instance, according to the Bank Information Centre, saw a 200% increase in funding for coal-based initiatives between 2007 and 2009.¹⁶

Coal's contribution to carbon emissions

As fossil fuels are burned to produce energy, the carbon in the fuel reacts with oxygen to form carbon dioxide gas, CO₂. Most of this is released into the atmosphere. Burning coal (which consists of 'free' carbon) produces more carbon dioxide per unit of energy

generated than any other fossil fuel. Compared to gas (which consists mostly of the carbon-compound methane, CH_4), coal releases 66% more CO_2 per unit of energy generated.

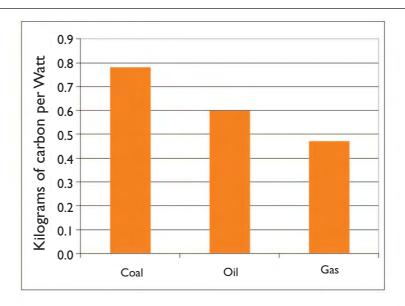
Coal mining releases methane into the atmosphere. Methane is twenty times more powerful than carbon dioxide as a greenhouse gas. In the USA in 2006, 26% of energy-related methane release was a direct result of the mining of buried coal strata. Around the world, about 7% of annual methane emissions originate from coal mining. This methane could be used to produce energy more efficiently than the coal itself. Methane can theoretically be captured from underground strata before opencast mining takes place, but this is rarely, if ever, done. It is easier to capture it in underground mines.

Coal mining and the burning of coal for energy generation, cement manufacture and steel production have been among the major engines of global warming. According to the BP Statistical Review of World Energy²¹, published on 9 June 2010, 2009 was the first year since 2002 that coal was not the fastest growing fuel in the world. This was largely because of the slackening of demand from industrial consumers in the more heavily-industrialised OECD countries. Demand in the Asia Pacific region and the Middle East grew by 7.4%. China was responsible for 95% of that increase and was, overall, the largest producer and consumer of coal in the world, accounting for 46.9% of global coal consumption and producing 45.6% of global supplies during 2009, according to the BP report. Other producing countries differ widely in the proportion of their coal that they export.

BP noted that coal remains the most abundant fossil fuel by global reserves, and accounted for 29% of total energy consumption in 2009 - the highest proportion since 1970. The IEA forecast in its World Energy Outlook for 2009²² that until 2030 global demand for coal would grow much more than demand for both natural gas and oil. The World Coal Institute²³ forecasts that use of coal will rise by 60% over the next 20 years. It is estimated that 45% of carbon dioxide emissions will in 2030 be linked to coal.²⁴

Challenges to the coal industry over climate change

In many countries, including coal producing countries, there has been an increase in activism against the use of coal in recent years, mainly because of concern about the climate. The Pacific Island state of Micronesia is using existing environmental laws and the United Nations treaty on impact assessments to try to prevent the expansion of a coal fired plant by a Czech company, CEZ. Its plant at Prunerov in the north of the Czech Republic



Comparison of the amount of carbon (as carbon dioxide) released per unit of energy (Watt) generated by coal, oil and natural gas¹⁷(figure after Archer, D., 2007. Global Warming: Understanding the Forecast. Blackwell Publishing, p. 194.)

was, according to Micronesia, the 18th biggest source of greenhouse gases in the European Union, emitting about 40 times more carbon dioxide than the entire Pacific island federation.²⁵

Clean coal?

Some pro-coal bodies, particularly in the USA, have sought to inhibit the imposition of measures to slow global warming.²⁶ The coal, cement and steel industries lobbied hard to weaken international efforts to impose strict limits on carbon emissions at the Copenhagen Summit in 2009, and succeeded in persuading governments to opt for actions aimed at limiting average temperature rises to 2 degrees Celsius by 2100 - insufficiently strict, in the view of most climate scientists, to avoid some of the worst impacts of climate change. In attempting to present a clean image of coal²⁷ its proponents in both industry and government argue that one specific technical fix will reduce the mineral's "carbon footprint".

This fix is so-called "Carbon Capture and Storage (CCS)"28 which is claimed to catch and safely store the carbon within the carbon dioxide emissions. But, according to Michael Economides (Professor of Chemical and Biomolecular Engineering at the University of Houston, Texas), "[G]eologic sequestration of CO2 [is] a profoundly nonfeasible option for the management of CO₂ emissions." He suggests that there are insufficient geological formations suitable to store the enormous quantities of carbon dioxide which would be emitted under current energy-use projections.²⁹ There is also no guarantee that formations would not rupture, causing stored carbon dioxide to bubble back up to the surface and into the atmosphere. In fact, several experts doubt

that CCS technology will ever be feasible.³⁰
Yet governments, including the UK

Government, have paved the way for a whole new round of coal-fired power stations based on the promise that someday it will be. European Union member states will, between now and 2015, allocate about one billion euros to between six and twelve CCS 'proofof-concept' projects.31 The Geological Survey departments in a number of countries including the UK, Ireland, the Netherlands and the USA are aggressively assessing the CCS potential of their on-shore and off-shore subsurface geological formations.³² There are a rapidly growing number of active small-scale sequestration projects being constructed or planned, either as part of enhanced oil recovery efforts or straight proof-of-concept CCS efforts, in Algeria, Australia, Canada, the Netherlands, Norway, the UK and the USA.33

Another means of extending the life of the carbon economy is the processing of coal into a liquid fuel. This is an extremely difficult and dirty process resulting in a product that will, in production and use, deepen the environmental crisis of global warming rather than reduce it.³⁴

No clean coal

In July 2008, a report by the UK Parliamentary Environmental Audit Committee attacked the belief that 'dirty coal' will be eradicated in our own lifetimes. Pointing out that 'clean coal' can be used as a 'fig leaf' to cover technological and economic uncertainties over coal's future, the Committee concluded that, "unless there is a dramatic technological development, coal should be seen as the last resort, even with the promise of carbon capture and storage." 35

The prominent US political commentator, Joshua Frank, citing the work of Michael Economides (see above) in *Truthout*³⁶, February 2010, concludes: "We ought to bag the idea that coal can be clean altogether. The public investment in clean-coal technology is a fraud and will only serve as a life-support system for an industry that must be phased out completely over the course of the next two decades. Putting billions of dollars behind a dead-end theory will not bring about the energy changes our country and climate so drastically need."

An extensive collection of material on coal and climate change can be found on the Mines and Communities website at http://www.minesandcommunities.org/list.php?f=23.

Notes

- 'Facing the greatest environmental threat of the century',
 - $http://knowledge.allianz.com/en/globalissues/climate_change/global_warming_basics/climate_threat.html \\$
 - Also see documentation produced by the Intergovernmental Panel on Climate Change at http://www.ipcc.ch/index.htm.
- 2. See http://news.bbc.co.uk/1/hi/science_and_environment/10370955.stm.
- 'What are the effects of climate change' http://www.wri.org/publication/hot-climatecool-commerce/what-are-effects-of-climatechange

At the same time competing schools of thought have emerged on the science of climate change challenging that growing consensus. For a good comparison of the sceptics arguments against IPCC views see 'Climate scepticism: The top 10' http://news.bbc.co.uk/1/hi/in_depth/629/629/70 74601.stm.

For further contrasts, see http://climatedebatedaily.com/

- 4. United Nations Environment Programme, 'Global Environment Outlook: environment for development (GEO-4) assessment' (Chapter 7) 'Vulnerability of People and the Environment: Challenges and Opportunities' (Natural hazards impacts on people including sea rise levels for small island states), (pp35-36) and the exposure of coastal areas to environmental change (pp42-43), 2007. The writers discuss the general impacts of climate change including how it will force small islands states to cope with natural hazards and how the economic losses from climate change have increased tenfold between 1950s and 1990s with between 1992 and 2001 almost 100,000 people having died from floods and affecting 1.2 billion people, areas such as south east Asia are vulnerable to storm surges. See http://www.unep.org/geo/geo4/report/07_Vulne rability_of_People.pdf See also http://www.greenpeace.org/intern
- ational/campaigns/climate-change/impacts
 5. 'MPs support tough bill on CO2 reporting'
 http://www.ft.com/cms/s/0/b511d18a-a53f11dd-b4f5-000077b07658.html?nclick_check=1

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if not more disturbing. He is currently linked with various cases of bribery and tax evasion, most notably in relation to an ongoing investigation into the activities of KPC and Bumi Resources. Over the past year, various attempts have been made by government officials to investigate the tax dealings of both KPC and Bumi Resources. This process has been resisted in the courts by company lawyers. More recently, an official from the tax office has claimed that he was bribed by Bakrie-owned companies to help them with their tax affairs. However, more worryingly from a wider perspective, is the resignation in May 2010 of the Finance Minister Sri Mulyani

after a long political vendetta by Bakrie. ²⁰ Sri Mulyani was noted for her anti-corruption campaigning. As an indication of these shifting political sands, two days after Mulyani's departure, Bakrie was appointed 'managing chairman' of a joint government secretariat to determine government policy. ²¹ It appears that Aburizal Bakrie's political fortunes are directly linked to his business fortunes and vice versa. ²²

KPC: a shared history and responsibility

It is clear that wherever the exploitation of natural resources in Indonesia, and particularly in the mining, oil and gas sector, money, power and corruption follow close behind. It is clear also that local communities and the Indonesian public are most likely to be victims of this apparent bonanza, whether directly from environmental consequences or indirectly through political and financial corruption. The Sangatta coal mine and Kaltim Prima Coal, whose history goes back more than 30 years, is central to this web of intrigue and environmental degradation. For more than a decade - from when the mine started exporting coal in 1992 to the Bumi Resources takeover in 2003 - Rio Tinto and BP benefited from the huge profits generated by KPC. In leaving East Kalimantan, Rio Tinto and BP have left behind a poisonous legacy.

When confronted with that legacy at the recent company AGM in London, Rio Tinto's reply to DTE's question was perfunctory: both the Chairman, Jan du Plessis and the Chief Executive Officer, Tom Albanese simply denied that there was anything amiss. It was shocking to see how little this problem was appreciated by the directors of the company, how far removed they appeared to feel from this issue and how casually they denied association and responsibility for their part in promoting the problem of corruption in Indonesia.²³

Now, seven years on from the sale of KPC, one overriding fact stands out in this depressing picture of corruption, collusion and nepotism. It is that Rio Tinto and its then partner BP, sold their stake in KPC to the business empire of Aburizal Bakrie, so strengthening the financial and political power of a man repeatedly accused of corruption and malpractice and who is at the centre of a society still at the mercy of KKN. In continuing to operate in Indonesia, both Rio Tinto and BP no doubt benefit, and hope to continue benefiting, from business and political connections inherited from their operations in East Kalimantan.

East Kalimantan's coal being loaded on a barge (DTE)

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- 6. See, for instance, http://www.campaigncc.org/greenjobs
- See http://www.businessgreen.com/businessgreen/news/2264307/report-renewablesrevolution.
- 8. http://www.iea.org/files/energy_subsidies _slides.pdf
- 9. Ibid.
- See http://www.reuters.com/article/idUS TRE6581DI20100609
- 11. See http://www.minesandcommunities.org/ /article.php?a=9953&highlight=carbon,trading, http://www.minesandcommunities.org//article.php?a=9712 and http://www.minesandcommunities.org//article.php?a=9707
- 12. http://www.undp.org/mdtf/unredd/ overview.shtml
- 13. http://cdm.unfccc.int/about/index.html
- 14. See http://en.wikipedia.org/wiki/Reducing_ emissions_from_deforestation_and_forest_ degradation, http://www.redd-monitor.org/ and http://en.wikipedia.org/wiki/Clean_Developmen t_Mechanism
- 15. http://www.greenpeace.org/international/ campaigns/climate-change/coal
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 Coalbed methane in the Ruhr Basin, Germany: a renewable energy resource? *Organic Geochemistry*, 35, 1537-1549.
- 20. See How coal may produce energy without being mined at http://www.minesandcommunit ies.org//article.php?a=9218&highlight=coal ,bed,methane
- 21.http://www.bp.com/productlanding.do?categoryld=6929&contentId=7044622
- 22.http://www.worldenergyoutlook.org/docs/weo2 009/WEO2009_es_english.pdf
- 23. http://www.worldcoal.org/
- 24.'Internet Link-http://www.foreignpolicy. com/articles/2009/12/09/banking_on_coal 'Banking on Coal-9 December 2009 Phil Radford- www.Foreignpolicy.com
- Pacific Islanders Bid To Stop Czech Coal Plant' Michael Kahn, Reuters - http://www.nytimes. com/reuters/2010/01/12/world/inter national-uk-czech-coal-micronesia.html
- 12 January 2010
- 26. Renewable industry cheers Obama budget while coal and nuclear jeer' Christina Marshall, John Fiala and Lea Radick, Climate Wire http://www.nytimes.com/cwire/2009/05/08/08cl imatewire-renewable-industry-cheers-obama-budget-while-12208.html
- Cashing in on Coal', Platform London, 2008, http://www.oyalbankofscotland.com/cioc/pdf/cashinginoncoal.pdf
- 28. See http://en.wikipedia.org/wiki/Carbon_capt ure_and_storage
- 29. 'The dirty truth behind clean coal', http://www.minesandcommunities.org/article.php?a=9961
- 'Carbon capture and storage, Trouble in store'
 March 2009 http://www.economist.com/ displaystory.cfm?STORY_ID=13226661
- 31. http://www.euractiv.com/en/climate-environ ment/eu-agrees-billions-fund-renewables-ccs
- 32. Email from Dr Mark Muller to London Mining Network, 18 June 2010

- 33. Ibid.
- 34. See http://www.minesandcommunities.org/ article.php?a=8976. A summary of the problems associated with liquid coal can be found at http://www.sierraclub.org/coal/liquidcoal/
- BBC News website, 22 July 2008, 'Clean deadline call on coal power', http://news.bbc.co.uk/1/hi/sci/tech/7518311.stm
- 36. See http://www.minesandcommunities.org/article.php?a=9961

(continued from bottom of page 22)

Notes

- For additional information on this case and Rio Tinto's attempt to distance itself see: http://www.abc.net.au/news/stories/2010/04/16 /2874320.htm
- 2. To view video footage of this question and the rest of the 2010 Rio Tinto London AGM see: http://www.riotinto.com/shareholders/12361_a gm2010.asp, or http://www.youtube.com/watch?v=04t-ZpsDpaY
- 3. See articles in *DTE* 47 & 52: http://dte.gn.apc.org/47Rio.htm and http://dte.gn.apc.org/52kpc.htm
- Business Week, May 20th 2002. See: http://www.minesandcommunities.org//article. php?a=7468&highlight=Kaltim,Prima,Coal
- For an account of part of this process, see DTE 52, February 2002. http://dte.gn.apc.org/52kpc.htm
- 6. A complete account of this divestment process is written up in 'Indonesia's bitter

- mining endgame' by Bill Guerin: http://www.atimes.com/atimes/Southeast_Asia/ EG24Ae01.html
- The case centres around claims of embezzlement of state funds in the transfer of shares between 3 companies; Kutai Timur Energi (KTE), Bumi Resources and Kutai Timur Sejahtera (KTS). See http://www.thejakartapost.com/news/2010/04/ 13/solid-evidence-graft-kpc-divestmentago.html, http://www.thejakartapost.com/news/ 2010/07/09/east-kalimantan-governornamed-graft-suspect.html; http://www.antara news.com/en/news/1280319320/president -to-process-permit-for-governors-questioning.
- 8. For an account of the financial backing behind the Bakrie family's business empire see:

 'Politics and business mix in Indonesia' by Bill Guerin: http://www.atimes.com/atimes/South east_Asia/HG22Ae01.html
- See: http://thejakartaglobe.com/business/bumito-seek-buys-armed-with-cic-warchest/334622
- See: http://www.thejakartaglobe.com/ business/the-bakrie-group-coal-hard-cash-andchinese-whispers/345131
- 11.See: http://dte.gn.apc.org/47New.htm and http://dte.gn.apc.org/67min.htm
- 12.It was alleged that Bumi Resources used funds from a state-run workers' insurance firm to pay for this deal. See: 'Indonesia's bitter mining endgame' as in note 6.
- 13.See: http://www.thejakartaglobe.com/home/

(notes continue on page 12)



Direct action against Coal in Scotland

DTE asked climate justice activist Mark Lloyd about coal and coal activism in Scotland...and his thoughts on reading JATAM's Deadly Coal report.

Q: Can you tell us a bit about the coal operation targeted by activists in Lanarkshire: what are the main issues that local people are concerned with there?

Scottish Coal plans to develop the 340 acre Mainshill Wood into an open cast coal mine. This will involve extracting around 1.7 million tonnes of coal and 160,000 tonnes of fireclay over a five year period.

Proposals to mine the area were made public in 2008, and met intense local opposition. Out of around 1000 people in the nearby village of Douglas, 650 wrote letters of objection to the planning application.

However, coal is a profitable business. ScottishPower and Scottish Coal recently signed the largest coal contract in Scottish history. Under the five-year deal, likely to be worth up to £700 million, Scottish Coal will supply fuel to ScottishPower's Longannet power station in Fife.

Scottish Coal operates nine other open-cast mines across the central belt of Scotland and currently mines about four million tonnes a year. It supplies other power companies, including British Energy, Drax Power and Eon.

Given these kinds of figures it's no surprise that Scottish Coal had the spare cash to pay the local Labour MP Jim Hood a 'retainer' of £625 per month for working zero hours. And given this kind of cosy relationship between the corporations and the politicians, it is no surprise that local opposition went ignored.

The communities surrounding the planned mine have already been living with open-cast mines for many years, and as a consequence suffering increased rates of cancer and diseases of the heart, lungs and kidneys. The surrounding roads are made very dangerous by heavy goods vehicles thundering along at high speed day and night. The area has one of the highest rates of cancer in Europe.

A protest camp was set up in Mainshill Wood in solidarity with local campaigners, but was also motivated by concerns about climate change; 1.7 million tonnes of coal extracted means 3.1 million tonnes of CO₂ released into the atmosphere.

Q: How do the Lanarkshire operations fit into the UK picture as a whole?

In the past 18 months 14 companies have applied to dig nearly 60 million tonnes of coal



Rail depot blockade, Scotland

(Mark Lloyd)

from 58 new or enlarged open-cast mines in the UK. Scotland will bear the brunt of the expansion, according to Coal Action Scotland. Currently 11 mines produce about 5m tonnes of coal a year. A further 27 mines could extract a total of 22m tonnes of coal over just a few years. Thirteen of the 27 have already been approved and the rest are awaiting planning decisions.

Q: What about jobs? Is the local community involved in the workforce? Are there any positive aspects of this operation as far as local people are concerned?

Scottish Coal claim that 93 jobs will be created by the new mine at Mainshill. However these aren't new jobs - it will simply involve people being transferred from existing mines. There are no other benefits to the community from another open-cast mine in the area.

Q: As far as you know, what was the land taken over for the mine used for before? How did the company acquire the land for the mining?

Lord Home owns the land and has brokered a deal whereby Scottish Coal dig his patch for a hefty sum, as yet undisclosed. Lord Home is Chairman of Coutts & Co., which is the private banking arm of RBS, which banks for Scottish Coal. He's the son of the former Conservative Prime Minister Sir Alec

Douglas-Home, he went to school at Eton and is now a Conservative peer. He is also the current President of the British Association for Shooting and Conservation.

Previously the land was used for commercial forestry, although it had a few mature, ancient trees and there are reports of bats, otters, badgers and water voles. The proposed site is also within the designated Douglas Water Area of Great Landscape Value (AGLV).

Q:What would people like to happen in future?

From general conversations I had with local people, they would like the area to be left as it is. There is a large windfarm nearby and one person I spoke to felt that this was a much more positive use of the local countryside.

There are many other uses for the spectacular countryside around Lanarkshire such as tourism or sustainable forestry.

Q:. What specific action were you involved in?

I was involved in a blockade of the rail depot at Ravenstruther, where coal from the nearby open-cast mines is loaded onto trains in order to be transported to coal-fired power stations. We shut down the depot for one day. The depot provides coal from 5 local open cast-sites to many of the coal-fired power stations throughout the UK.

The demonstration was in support of the Lanarkshire communities who are opposing new open-cast mines. We were there to send a clear message that we don't want parts of Scotland such as South Lanarkshire to become the most heavily mined areas in Europe, as they will be if permission is granted for all the new open-cast coal mines currently being proposed. Direct action is not just the only avenue left open, it is also an effective one.

Q:What actually happened at the protest?

Ten of us peacefully blockaded the depot; two people climbed up onto the conveyor belt that loaded the coal onto the trains, and hung a banner saying 'No new coal'. Two others locked themselves to the front gates which were used to provide access to lorries arriving to load up the trains. When the workers arrived at the site, it was my job to talk to them - explaining that this was a

peaceful protest against coal expansion in the area. I also talked to media and liaised with the police.

Unfortunately the foreman of the site became aggressive and tried to force the gates open. As this would have broken the necks of the people 'locked onto the gates' I put my arm out to stop him. When the police arrived later, I was arrested for assault - which I deny. Everyone else was arrested for 'breach of the peace'.

Q: How has the company reacted to your protest? Did you get any other responses (positive or negative)?

The company estimated that 6,380 tonnes of coal were stopped from being loaded, equivalent to 11,675,400 kg $\rm CO_2$ released into the atmosphere. The action stopped three coal trains from being loaded and cost Scottish Coal some £200,000.

There has been no other response from the company.

Protesters at the camp were very warmly welcomed by the local people, who have been fighting this development and other mines in the area for many years. Local people provided food and 'beeped' their horns in support. Many local people came to the camp and talked with the protesters and took part in many of the activities and workshops.

Q: From reading JATAM's Deadly Coal report, can you see any similarities between the situation in

Scotland and Kalimantan and how local communities and activists are responding?

There are many similarities between coal extraction in Scotland and Kalimantan - although I would say that the scale means that the impact in Scotland is only a fraction of the effects felt in Kalimantan. The land in Scotland is already owned by an elite - so there is no need to impose land policies, but the corruption of the planning process looks similar to the widescale corruption by officials in Kalimantan.

The economic benefits of the coal extraction do not stay in the community, there is degradation of the local biodiversity

and impacts on local people's health (see coal health study, below) - but again, not on the scale that is apparent in Kalimantan.

Scotland has agreed to cut its emissions by 80% by 2050 - but is still pushing ahead with expansion of coal extraction and projects such as Mainshill.

Both Kalimantan and Scotland demonstrate a system that is blindly destroying our world for energy and profit without the consent people or communities that are directly affected.

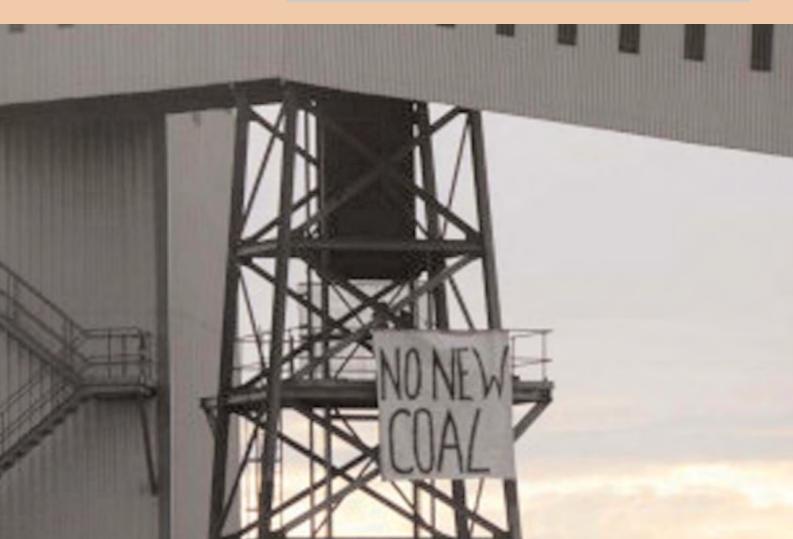
Contacts and resources for further information:

Local

Coal Health Study http://coalhealthstudy.org/
Douglas Community Council http://www.communitycouncil.org.uk/douglas/index.asp
Mainshill Solidarity Camp http://coalactionscotland.noflag.org.uk/?page_id=415

National:

Coal Action Scotland http://coalactionscotland.noflag.org.uk/?page_id=204 No New Coal http://www.nonewcoal.org.uk/
Earth First! Action Reports https://earthfirst.org.uk/actionreports/
Coal Action Network http://coalaction.org.uk/



Which companies are investing in Indonesia's coal?

What are the impacts on local communities?

What are the UK - Indonesia coal connections?

What public money is involved?

What are the links to climate change?

Indonesia's coal: local impacts, global links





London Mining Network

Nostromo Research