

THE END OF COAL?

COAL FINANCE REPORT CARD 2015



BANKTRACK

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PHOTO: JOE ATHIALLY
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EXECUTIVE SUMMARY

The end of coal is on the horizon—but will it come quickly enough?

Five years after Rainforest Action Network, BankTrack, and the Sierra Club began issuing an annual coal finance report card, the long-term transition away from coal is seen as both inevitable and necessary by market observers and climate experts. This structural decline of coal is presaged by the shuttering of coal-fired power plants across the United States, and new policies aimed at transitioning other major economies away from coal. But with dwindling time left to limit global warming below the internationally-agreed-upon upper limit of two degrees Celsius, banks have not moved fast enough or acted boldly enough to transition away from coal before it's too late.

For 2015, we have expanded the report card to evaluate the largest global banks based on financing for coal mining and coal-fired power. This year's report card details a number of positive developments.

- » In 2014, a critical mass of banks said “no” to particularly destructive coal mining projects and practices, including

proposed development of the Galilee Basin in Australia, and mountaintop removal mining in the United States.

- » Bank of America adopted a policy to scale back its financing for coal mining companies operating in the U.S. and around the globe, becoming the first major private sector bank to commit to cut financing exposure to the coal mining industry.
- » Key financial industry voices have concluded that the shift away from fossil fuels has reached a turning point, with Goldman Sachs concluding that thermal coal has “reached its retirement age” and Bloomberg New Energy Finance marking the “beginning of the end” for fossil fuels.
- » Global leaders have called for an end to coal and fossil fuel investment, including the U.N. Secretary General and the Secretary of the U.N. Framework Convention on Climate Change.

However, despite these bright spots, if the financial sector does not act swiftly and decisively to end financing for all coal, the death of coal will come too late for the climate.

- » In spite of the financial distress faced by the coal industry overall, banks have approached financing decisions in a piecemeal fashion, with global financing for coal mining and top coal-fired power companies holding steady at \$141 billion, compared to \$145 billion in 2013.
- » Disappointingly, major banks have also continued to finance several worst-of-the-worst “extreme coal” producers with major human and environmental impacts. Continued exposure to these coal mining companies shows that several banks continue to fail to meet basic human rights and environmental responsibilities.

Going forward from 2015, it is incumbent on banks to heed the warning signs of coal's systemic decline, and to respond to those warning signs with immediate action. If banks wait for the market to force them to transition away from coal, it will be too late for the climate. Most privately held global banks evaluated in this report frequently tout their financing for renewable energy. But the real test of global leadership at this critical moment for humanity is whether banks will stop bankrolling the fuels that are destroying our last chance at a livable climate while there is still time to make a difference.

The other important test of leadership will be whether banks moving out of coal move their resources to truly renewable energy; shifting finance to other fossil fuels—including natural gas—will not keep warming to safe levels. Due to the urgency of a rapid transition away from carbon-based energy, future report cards will not only evaluate banks on coal finance, but on financing for other fossil fuels as well.

The banking industry faces an urgent choice on coal and climate change. It can continue to bank coal as an energy source, or it can finance a rapid transition to a low-carbon economy. Analysts have issued reports warning investors of a dire outlook for coal, with a Goldman Sachs report concluding that thermal coal has “reached its retirement age.”¹ But the commercial and investment banking arms of most banks over the past five years have continued to view backing coal mining and power as a “safer” choice, only to be blindsided by a sharp decline in the global coal industry. With the window for stabilizing the climate below the internationally-recognized two-degree limit closing in a matter of years, banks have little time to choose between coal and climate stabilization before business-as-usual financing for coal locks in a future of runaway climate change.

Five years ago, Rainforest Action Network, BankTrack, and the Sierra Club published the first annual Coal Finance Report Card, calling on the banking industry to end financing for coal mining and coal-fired power. At the time, conventional market wisdom viewed coal’s continued role as a top component of the global power mix as a foregone conclusion. But since the global coal market’s peak in 2010 that saw benchmark international coal prices rising above \$130 per metric ton, the global coal industry has been rocked by several shocks that were previously “unthinkable” to conventional wisdom, contributing to a collapse in coal prices to around \$60 per metric ton today.² These have included a wave of coal plant retirements in the United States (with over 188 retirements, totaling 77 gigawatts of capacity already announced), a peak in Chinese coal demand, and India planning a massive push into renewable power.³ In addition, a Bloomberg New Energy Finance report showed that in 2013, renewable energy

capacity increased worldwide more than coal, oil, and natural gas combined. “This is the beginning of the end” for fossil fuels, Bloomberg news concluded. “Fossil fuels just lost the race against renewables.”⁴

These shifts were not unforeseeable black swans. NGOs, activists, scientists, and impacted communities around the world have been warning that coal and coal-fired power are not only bad investments on financial grounds, but incompatible with a livable future for the planet. But banks have erred by treating the human and environmental costs of coal as “risks” to be managed and not stark evidence that a transition away from coal is both inevitable and urgently needed. This transition is already well underway, and banks must now choose whether to contribute to this transition or keep mines and power plants on financial life support in the hope that business-as-usual for coal can somehow continue for a few more desperate years.

As part of this ongoing transition away from coal, momentum for phasing out coal financing is building both outside and inside the financial sector. Last September, the People’s Climate March drew 400,000 to New York to demand action on climate, while thousands risked arrest the next day to “Flood Wall Street” and spotlight the financial sector’s role in financing climate destruction. The fossil fuel industry has become increasingly toxic on the public stage, with world leaders including the U.N. Secretary General and the Secretary of the U.N. Framework Convention on Climate Change calling for divestment and leading global universities such as Stanford divesting from coal. Furthermore, with the publication of the U.N. Guiding Principles on Business and Human Rights nearly four years ago, financing mining and power companies that violate human rights has

become a glaring reputational risk for banks.

In response, several banks have taken incremental steps away from coal financing. Some have publicly cut ties to egregious projects such as proposed coal export projects in the U.S. and Australia.⁵ And since 2013, several major U.S. and European banks have committed to cut financing for mountaintop removal coal mining. But as this report’s grades show, the stark climate and human reality of the impacts of the coal industry demand not incremental steps, but leadership and a willingness to do what is necessary to respect human rights and stabilize the climate. Unless financial institutions decisively reject coal across the board now, the death of coal will be a slow one, and runaway climate change will be unstoppable.

The banking industry faces an urgent choice on coal and climate change.

It can continue to bank coal as an energy source, or it can finance a rapid transition to a low-carbon economy.

THE WARNING SIGNS ARE CLEAR: Business-as-usual for coal is over. When will banks get the message?

KEY DATA

GLOBAL BANK FINANCING FOR COAL MINING, 2014: **\$66.37 BILLION** (UP FROM \$55.28 BILLION IN 2013)

GLOBAL BANK FINANCING FOR THE 30 LARGEST COAL-FIRED POWER PRODUCERS, 2014: **\$74.39 BILLION** (DOWN FROM \$89.62 BILLION IN 2013)

Bloomberg

Chapter: Fossil Fuel Divestment Gaining Steam >> Exhibit 1 of 9
Coal, High-Cost Oil Producers Lead Investor Exits on Carbon Risk
Analyst: Gregory Elders
Apr 30, 2015

Some institutional investors, particularly in Nordic countries, have pledged to dispose of coal and oil companies, especially those operating in oil sands and deep offshore, because of the financial risk that climate change poses to returns. Sharp declines in coal oil prices, along with a heightened awareness of climate change, led these investors to conclude carbon-exposed companies face reduced business profitability. Continued low commodity prices and tighter carbon rules may lead to follow.

Environmental, Social & Governance, Bloomberg Intelligence

Beginning of the end for coal? Citi sees structural decline

By Giles Parkinson

A new series of reports from global investment bank Citigroup has highlighted the dramatic changes that are sweeping the world's largest energy markets, and which will have a significant impact on the future of the coal industry in Australia.

The reports – titled “A new balance of power”, “A short gas bridge to renewables” and “Global Thermal Coal: When cyclical supply met structural demand” – come to several key conclusions.

The first is that emission standards and rising costs will force a mass closure of coal-fired generation (more than 60GW) in the next few years in the world's biggest market, the United States. And contrary to most expectations, it says gas will play only a minor role in this “energy transformation,” because it will be usurped by the falling costs of renewables.

The second conclusion is that increasingly strict environmental regulations will force a mass closure of coal-fired generation (more than 60GW) in the next few years in the world's biggest market, the United States. And contrary to most expectations, it says gas will play only a minor role in this “energy transformation,” because it will be usurped by the falling costs of renewables.

June 23, 2015

Heat Sensor

Thermal coal reaches retirement age

Goldman Sachs

Producers are unlikely to experience another bull market

Regulatory risks undermine long term coal-fired generation

Just as a worker celebrating their 60th birthday can settle into a more sedate lifestyle while they look back on past achievements, we argue that thermal coal has reached its retirement age. Thermal coal accounted for nearly half of the incremental energy consumed by the world since 2000 and it supported the three-fold increase in global energy demand over that period, but its role in meeting the world's energy poverty will become less prominent as the price forecast to US\$65/t FOB Newcastle in 2020, and the prospect of peak demand.

The long term outlook for coal-fired power is bleak. Greater competition in the fuel mix from clean gas and renewable energy. Progress in international climate change has been slow, but regulatory pressure is increasing. Meanwhile, demand growth in China after years of overinvestment in energy-intensive infrastructure. We believe demand for thermal coal will continue to grow, but the pace of growth will continue to slow and seaborne demand eventually peak – unless a major event occurs.

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Renewconomy
Fueling the next industrial revolution

<http://renewconomy.com.au/2015/06/coal-fuels-to-be-stranded-by-economics-innovation-and-climate-73622/>

Fossil fuels to be stranded by economics, innovation and climate

By Giles Parkinson

HSBC says fossil fuel companies, or some of their assets, will become “non-viable” or “unburnable”. That's not just because of climate action, but also because of changing economics and the impact of new technologies, such as solar and wind.

the guardian
June 16, 2015

US coal sector in 'structural decline', financial analysts say

Over 200 mines shut down and industry loses 76% of its value in five years, report finds



METHODOLOGY

For 2015, the coal finance report card has gone global.

This year, we analyze major Chinese, European, Japanese, and U.S. banks based on their financing of coal mining and electric power companies. Due to coal's impacts on both the environment and communities, the report card rates bank coal financing policies and practices according to both environmental and human rights criteria.

Banking industry scope: Ratings assess 26 of the largest global commercial and investment banks based in China, Europe, Japan, and the United States. Banks are included based on the size of their commercial and investment banking business and the extent of their financial relationships with coal mining and power companies over the past decade.⁶

Companies and transactions assessed (coal mining): For the coal mining industry, we assess each bank's total involvement in corporate lending and underwriting transactions (debt and equity issuance) in 2014 with global coal mining companies (using Bloomberg sector definitions). In addition, we evaluate each bank's involvement in transactions with companies that exemplify the worst of the coal mining industry, or "extreme coal mining" companies (described on pages 10-11) separately.⁷

Companies and transactions assessed (coal power): For the power sector, we assess banks based on their total 2014 involvement in corporate lending and underwriting transactions (debt and equity issuance) with the top 30 global electric power producers by coal generation capacity (top 10 by MW of coal-fired capacity in the U.S. and in the Europe-Middle East-Africa, and Asia-Pacific regions, see Appendix 4).

Human rights and environmental ratings: We rate banks based on their human rights and environmental policies and performance with respect to both coal mining and coal power finance. As we detail on pages 15 and 25:

- » "A" range grades reflect full alignment with human rights protection and climate stabilization.
- » "B" range grades are awarded to banks with some human rights and environmental performance improvements.
- » "C" range grades are issued for policies and disclosure alone. Banks without policies or with non-public policies are awarded failing grades.

This AAA-C scale is similar to those used by financial rating agencies to evaluate the creditworthiness of companies and financial instruments. As part of the rating process, banks have been issued draft grades and provided an opportunity to share feedback.



WHY RATE BANKS ON BOTH HUMAN RIGHTS AND THE ENVIRONMENT?

Coal mining and power operations do not only have grave consequences for the climate. As this report highlights, many also violate fundamental human rights. These violations can include forced resettlement, contaminating critical drinking water supplies, destroying the livelihoods that support communities, or responding to peaceful protests against environmental damage with violence. Moreover, the global climate crisis is evolving into a human rights crisis, with tens of millions of people around the world already facing impacts from drought, storms, and rising sea levels.

Published in 2011, the U.N. Guiding Principles on Business and Human Rights place clear responsibilities on global private banks to develop mechanisms to avoid contributing to human rights violations and to remedy abuses that occur. As a BankTrack report detailed last year, nearly five years after their publication, not a single global bank has fulfilled these responsibilities, and few have publicly disclosed an intention of integrating the Guiding Principles into their business practices.⁸ In light of the ongoing human rights abuses of some of their mining and power industry clients profiled in this report, banks must move swiftly to meet their basic human rights obligations.

PHOTOS: TERRY VIRTS / NASA; JOE ATHIALLY

COAL MINING



PHOTOS: SHUTTERSTOCK; PAUL CORBIT BROWN

BACKGROUND ON COAL MINING

In 2014, a critical moment for the world's major coal mining companies finally arrived as Chinese demand for thermal coal peaked and began to decline.⁹ In combination with the ongoing global oversupply of coal, this 'peak coal' development in China, which was recently the world's largest coal importer, has plunged the future of the global coal industry into doubt.

For decades, the coal mining industry has struggled to shake off the 'dirty' tag leveled at it by NGOs and thousands of embattled communities directly afflicted by mining's health and ecosystem impacts. But as of 2015, not only has coal failed to avoid the 'dirty' label, it has also been branded as 'ugly' by financial analysts in the same breath as they issue unambiguous advice to investors to avoid investing in the sector.¹⁰ In the U.S., as coal prices have hit a six year low, the Financial Times recently analyzed the tailspin that three of the largest coal producers have been in for the last five years: Peabody Energy's shares have lost 87% of their value, while Alpha Natural Resources's and Arch Coal's are down 98%, and 96%, respectively.¹¹ Globally, the Bloomberg Global Coal Index has shed half of its value in the last three years.¹²

The coal industry's chosen strategy of turning this crisis around by forging ahead with new mining projects invites the time-worn advice of what to do when one finds oneself at the bottom of a hole: stop digging.

Adding to these industry-wide financial woes, coal's 'dirtiness' is now compounding its financial 'ugliness.' Increasing awareness about coal mining's dangerous impacts, coupled with increasingly networked citizen and community activism, has hit the industry's bottom line. For example, community-

based campaigns have blocked industry plans to export over 100 million tons of coal via ports on the U.S. West Coast.¹³ Clean, price-competitive energy alternatives to coal are also now being installed faster than had been widely predicted. Meanwhile, global momentum on reducing carbon emissions is forcing the hands of investors who are concerned about stranded assets scarring their portfolios and are eyeing the growing reputational risks of being associated with the coal industry.

However, the option of digging deeper into new, massively expensive extreme mining investments will only exist as long as the financial industry is willing to provide capital for these projects. One of this section's case studies describes one of the most extreme being pitched to bankers the world over: Adani's massive coal mining and export project in Australia. In 2014, in the face of the project's dubious financial prospects and potential impacts on the climate and the Great Barrier Reef, a string of European and U.S. banks ruled out financing for the project. As Adani is discovering, coal mining is fast becoming an untouchable investment on both financial and reputational grounds.

*The coal industry's chosen
strategy of turning this crisis
around by forging ahead
with new mining projects
invites the time-worn advice
of what to do when one finds
oneself at the bottom of a
hole: stop digging.*

EXTREME COAL MINING

Past editions of this report have spotlighted banking industry financing for mountaintop removal coal mining in the United States, which has had devastating impacts on ecosystems, communities, and health. This year, we have broadened our assessment by adding additional “extreme coal mining” companies linked to human rights violations, impacts on critical ecosystems, or operations in globally-significant protected areas elsewhere in the world.

The extreme coal companies included below are not an exhaustive list of coal mines with egregious human rights or environmental impacts. Instead, they are examples of companies with abuses that have faced sustained criticism from local communities and global civil society organizations. Several global banks have publicly distanced themselves from some of these extreme coal operators, including mountaintop removal coal producers and mining companies with plans to export coal through the Great Barrier Reef. But several banks continue to finance one or more of the below companies, indicating that their existing environmental and human rights screening mechanisms are broken.



PHOTO: SHUTTERSTOCK

EXTREME COAL MINING COMPANIES

COMPANY	EXTREME COAL OPERATION(S)	COUNTRY OF OPERATION	HUMAN RIGHTS VIOLATIONS	HIGH CONSERVATION VALUE ECOSYSTEM IMPACTS	IMPACTS ON PROTECTED AREAS	MOUNTAINTOP REMOVAL MINING
ADANI	CARMICHAEL MINE	AUSTRALIA	X		X	
ADARO	INDOMET PROJECT	INDONESIA		X		
ALPHA NATURAL RESOURCES	APPALACHIAN MTR MINING	UNITED STATES				X
ANGLO AMERICAN	CERREJÓN MINE	COLOMBIA	X			
ARCELORMITTAL	APPALACHIAN MTR MINING	UNITED STATES				X
ARCH COAL	APPALACHIAN MTR MINING	UNITED STATES				X
ASIA RESOURCE MINERALS	BERAU COAL MINE	INDONESIA		X		
BHP BILLITON	INDOMET PROJECT, CERREJÓN MINE	COLOMBIA, INDONESIA	X	X		
BUMI RESOURCES	KALTIM PRIMA MINE (AND OTHERS)	INDONESIA		X		
COAL INDIA	SEVERAL MINES IN INDIA	INDIA	X	X		
DRUMMOND COMPANY	PRIBBENOW AND EL DESCANSO MINES	COLOMBIA	X			
ESSAR GROUP	APPALACHIAN MTR MINING	UNITED STATES				X
GCM RESOURCES	PHULBARI MINE	BANGLADESH	X			
GLENCORE	CERREJÓN MINE, PRODECO MINES	COLOMBIA	X			
GVK	ALPHA COAL MINE	AUSTRALIA			X	
JINDAL STEEL & POWER	MULTIPLE MINES	INDIA, MOZAMBIQUE	X			
KEYSTONE GLOBAL	APPALACHIAN MTR MINING	UNITED STATES				X
METINVEST	APPALACHIAN MTR MINING	UNITED STATES				X
PATRIOT COAL	APPALACHIAN MTR MINING	UNITED STATES				X
TECO ENERGY	APPALACHIAN MTR MINING	UNITED STATES				X

COAL MINING CASE STUDIES

CASE STUDY

COAL INDIA'S SHARE OFFERING FOLLOWS YEARS OF ENVIRONMENTAL AND HUMAN RIGHTS CONTROVERSY

Coal India, majority owned by the Indian government, is the world's second-largest coal mining company by market capitalization and produced 494 million tons of coal in its last fiscal year, accounting for over 80% of India's coal production.¹⁴ This massive company has faced strong criticism from local communities, workers, and environmental groups for a string of environmental and human rights abuses.¹⁵ Coal India's 90% reliance on open pit mines has involved significant clearance of forest areas, resulting in impacts on protected tribal groups and endangered species, including the tiger and the elephant.¹⁶ The company also has a very poor worker safety record (the company reported 52 fatalities in their mines in 2011), and faces allegations of use of child labor in its mines.¹⁷ Coal India's corporate governance record is also notably poor, with repeated legal violations that in 2012 alone resulted in several penalties and closure notices for over 50 mines.¹⁸

Following an initial public offering in 2010 that involved the sale of 10% of Coal India's equity, an underwriting consortium involving Bank of America, Credit Suisse, Deutsche Bank, and Goldman Sachs finally managed after two years of delay to sell an additional 10% of the company's shares in January 2015. While Coal India attempted to portray the sale as a success, foreign investor interest was minimal amidst concerns about rising costs of production and the difficulty in expanding production while keeping operating costs low. Another government firm quietly purchased nearly half the offering to save face.¹⁹ The company has also been accused of misleading investors and the public about the extent of its extractable reserves.²⁰



PHOTO: JOE ATHIALLY

CASE STUDY

AUSTRALIAN COAL MEGAPROJECTS PUT THE GREAT BARRIER REEF AND INDIGENOUS COMMUNITIES AT RISK

Indian mining companies GVK and Adani are currently embarking on plans to develop vast coal mining and export projects in Australia's Galilee Basin that would light the fuse to a 'climate bomb.' If fully developed, coal from the Galilee Basin mine proposals, including GVK's Alpha project and Adani's Carmichael mine, would be the world's seventh largest source of fossil fuel CO₂ emissions each year, ranking ahead of the United Kingdom.²¹ Furthermore, for this coal to be sold, the Abbot Point coal export terminal on the Queensland coast would have to be expanded, jeopardizing the health of the Great Barrier Reef. The UNESCO World Heritage Committee has expressed concern about the practice of dumping millions of tons of dredge spoil from mega-port expansions in the reef's waters, and in June 2015 the committee will decide whether to place the Great Barrier Reef on the list of World Heritage sites that are in danger. In addition, Adani's planned Carmichael mine, which would export coal through Abbot Point, has prompted opposition from the traditional owners of the mine site, the Wangan and Jagalingou, who rejected the company's proposed indigenous land use agreement in October 2014.²²

Individual aspects of the Galilee Basin mining proposals are extreme enough; cumulatively, they could be catastrophic. The 30 million metric ton per year Alpha coal mine and the 60 million metric ton per year Carmichael mine would be among the largest in the world and result in an additional 128 million metric tons of CO₂ added to the atmosphere each year.²³

Eight international banks (Barclays, Citigroup, Deutsche Bank, Goldman Sachs, HSBC, JPMorgan Chase, Morgan Stanley, and RBS) have declared their intention in the last year to steer clear of financing coal terminal expansion at Abbot Point.²⁴ And in April 2015, three French banks (BNP Paribas, Crédit Agricole, and Société Générale) went further, committing to refrain from financing either mining projects in the Galilee Basin or associated infrastructure.²⁵



PHOTO: SHUTTERSTOCK



TRADITIONAL OWNER ADRIAN BURRAGUBBA ANNOUNCES THE W&J RESISTANCE TO THE ADANI CARMICHAEL MINE. PHOTO COURTESY OF: WANGAN AND JAGALINGOU FAMILY COUNCIL

CASE STUDY

U.S. MOUNTAINTOP REMOVAL MINING PRODUCERS: UNPROFITABLE AND INCREASINGLY UNBANKABLE

2014 was an extremely difficult year for two of the largest producers of mountaintop removal coal, Alpha Natural Resources and Arch Coal. Even as the two companies sold and idled mines to cut costs, both suffered a third straight year of net losses and saw their stock prices drop by over 95% from 2011 highs.²⁶

In addition to financial pressure, Alpha and Arch also faced mounting evidence of the devastating environmental and health impacts of their mountaintop removal operations. Mountaintop removal, which involves blasting off mountaintops and burying waste rock in neighboring valleys, has already destroyed 500 mountains and buried 2,000 miles of stream in the Appalachian region of the U.S.²⁷ Since 2007, over 20 peer-reviewed studies have linked mountaintop removal to health impacts such as cancer, cardiovascular disease, and birth defects.²⁸ Last year, a study went a step further and identified a causal pathway between particulate emissions from blasting at mountaintop removal sites and cancer.²⁹ Alpha's environmental record was further tarnished by a record-setting \$227.5 million enforcement settlement with the U.S. Environmental Protection Agency over water contamination at 79 of its mines, including at mountaintop removal operations.³⁰

Banks in the U.S. and Europe have taken notice and announced plans to phase out financing for mountaintop removal producers. Following the lead of JPMorgan Chase and Wells Fargo, six other banks (Barclays, BNP Paribas, PNC Financial, RBS, Société Générale, and UBS) have since cut or announced plans to phase out financing to major mountaintop removal mining companies.



PHOTO: PAUL CORBIT BROWN

COAL MINING RATING CRITERIA

This year's report card evaluates global bank policies and performance related to coal mining finance on both environmental and human rights criteria. In addition to the summary below, full rating criteria can be found in Appendix 1.

In the top ratings tier, AAA, AA, and A environmental ratings indicate that a bank has phased out or is phasing out financing for coal mining production. "A" range human rights ratings are assigned to banks that are fully implementing their human rights obligations according to the U.N. Guiding Principles on Business and Human Rights with respect to financing the coal mining industry.

"B" range ratings (BBB, BB, and B) are assigned to companies that have demonstrated progress towards reducing financing exposure to coal producers or have begun implementing key elements of the U.N. Guiding Principles on Business and Human Rights.

"C" range ratings (CCC, CC, and C) are awarded to banks that have environmental or human rights policies of varying strength that cover financial transactions for coal mining.

Failing grades are assigned to banks that do not report any policies covering financing for coal mining that address environmental or human rights issues.

MINING SECTOR ENVIRONMENTAL ASSESSMENT CRITERIA

FAIL RATING

No publicly available policy

C, CC, AND CCC RATINGS

Has relevant environmental policies and processes

- » Has an environmental policy covering coal mining
- » Has a due diligence process
- » Reports on policy and due diligence implementation

B, BB, AND BBB RATINGS

Demonstrates progress towards reducing coal mining exposure

- » Reports on due diligence outcomes and controversies
- » Cutting financing for extreme coal mining practices
- » Reducing coal mining financing

A, AA, AND AAA RATINGS

Phasing out financing for coal mining

- » Progress towards full sector exclusion of coal mining
- » Full exclusion of extreme coal mining practices

MINING SECTOR HUMAN RIGHTS ASSESSMENT CRITERIA

FAIL RATING

No publicly available policy

C, CC, AND CCC RATINGS

Has relevant human rights policies and processes

- » Has a human rights policy
- » Has a due diligence process
- » Reports on policy and due diligence implementation

B, BB, AND BBB RATINGS

Demonstrates progress towards respecting human rights

- » Participates in a human rights grievance mechanism
- » Consults with at-risk communities
- » Is phasing out financing for mining companies with rights abuses

A, AA, AND AAA RATINGS

Full alignment with responsibility to respect human rights

- » Has a process for remediating human rights impacts
- » Requires client implementation of the U.N. Guiding Principles on Business and Human Rights

BANK RATINGS: COAL MINING FINANCE

COMPANY	COAL MINING: ENVIRONMENTAL RATING	COAL MINING: HUMAN RIGHTS RATING
AGRICULTURAL BANK OF CHINA	F	F
BANK OF AMERICA	BBB	C
BANK OF CHINA	F	F
BANK OF TOKYO MITSUBISHI UFJ	C	C
BARCLAYS	B	CC
BNP PARIBAS	B	CC
BPCE/NATIXIS	F	F
CHINA CONSTRUCTION BANK	F	F
CITIGROUP	CC	CC
CRÉDIT AGRICOLE	CC	CC
CREDIT SUISSE	CCC	CC
DEUTSCHE BANK	CC	CC
GOLDMAN SACHS	CC	CC

RATING KEY:

AAA, AA, A:
CCC, CC, C:

Demonstrates leadership on the environment/human rights
Has relevant environmental/human rights policies and processes

BBB, BB, B:
F:

Shows progress on environmental/human rights performance
No publicly available policies

COMPANY	COAL MINING: ENVIRONMENTAL RATING	COAL MINING: HUMAN RIGHTS RATING
HSBC	CC	CC
INDUSTRIAL & COMMERCIAL BANK OF CHINA	F	F
JPMORGAN CHASE	B	CC
MIZUHO	C	C
MORGAN STANLEY	CC	C
PNC FINANCIAL	B	C
RBS	B	CC
SANTANDER	C	C
SOCIÉTÉ GÉNÉRALE	B	CC
SUMITOMO MITSUI	C	C
UBS	B	CC
UNICREDIT	CC	CC
WELLS FARGO	B	CC

PHOTO: PAUL CORBIT BROWN

RANK	BANK	2014 FINANCING
1	INDUSTRIAL BANK (CHINA)	\$7.88 BILLION
2	BANK OF CHINA	\$7.71 BILLION
3	CHINA EVERBRIGHT BANK	\$4.57 BILLION
4	CHINA CONSTRUCTION BANK	\$3.20 BILLION
5	AGRICULTURAL BANK OF CHINA	\$3.19 BILLION
6	CHINA DEVELOPMENT BANK	\$2.82 BILLION
7	BANK OF COMMUNICATIONS	\$2.60 BILLION
8	CHINA CITIC BANK	\$2.49 BILLION
9	INDUSTRIAL & COMMERCIAL BANK OF CHINA	\$2.15 BILLION
10	CHINA MERCHANTS BANK	\$1.98 BILLION

RANK	BANK	2014 FINANCING
11	SHANGHAI PUDONG DEVELOPMENT BANK	\$1.89 BILLION
12	HUAXIA BANK	\$1.66 BILLION
13	DEUTSCHE BANK	\$1.50 BILLION
14	BOHAI BANK	\$1.42 BILLION
15	BANK OF AMERICA	\$1.33 BILLION
16	JPMORGAN CHASE	\$1.29 BILLION
17	WELLS FARGO	\$1.20 BILLION
18	CITIGROUP	\$1.10 BILLION
19	GOLDMAN SACHS	\$1.07 BILLION
20	CREDIT SUISSE	\$1.02 BILLION

PHOTO: TERRY VIRTS / NASA

COAL POWER



PHOTOS: SHUTTERSTOCK; PAUL CORBIT BROWN

BACKGROUND ON COAL POWER

In 2013, analysts at Goldman Sachs concluded that the window for investment in thermal coal was closing.³² During 2014 and the first part of 2015, that window may have slammed shut as understanding of the financial, public health, and environmental dangers of coal-fired power grew dramatically across the world. China's five year strategic energy plan included caps on coal while ramping up renewables.³³ Electricity produced by coal will continue to fall in the U.S. as the Obama administration proposed its Clean Power Plan in 2014, establishing the country's first national limits on carbon pollution from power plants. These two proposals allowed both nations to come together and reach a significant agreement to reduce pollution contributing to climate disruption.³⁴

The European Union has refused to be left behind on climate: Early this year the European Commission outlined their climate commitments for the upcoming U.N. climate conference in Paris that will decrease damaging pollution from coal-fired power.³⁵ Leaders of the three largest political parties in the United Kingdom joined a pledge to phase out coal power plants that failed to capture and store carbon dioxide.³⁶ Even India took steps to ensure access to clean energy and deal with air pollution choking communities, increasing the nation's 2022 solar power target to 100 GW and over \$100 billion in investment in renewables.³⁷

The writing is now on the wall: Coal's role in generating electricity around the globe will diminish, and communities everywhere will breathe easier. The end of harmful power from coal can't come soon enough for people like Marti Blake and Awadesh Kumar Dwivedi. In Springdale, Pennsylvania, Marti has lived near the Cheswick Generating Station for 21 years. She told EarthJustice about a day when, while cleaning her

house, the sky went black and she saw all that she had cleaned was yet again covered in black soot. A man walking by, who identified himself as an employee of the plant's owner, claimed the soot came from the plant. Serious allergies, she claims, are another effect of the plant. "If I go away and I'm not near a coal plant, guess what? I don't have any allergies. I feel great, with clean air."³⁸

Awadesh lives in the district of Singrauli, India, which contains both coal mining and coal-fired power plants. Although these plants produce twice the amount of electric energy than the peak demand in the area, Awadesh says "...villagers near the plant still have no electricity. Breathing difficulties, asthma, birth disorders, and early death are common place. Far from creating jobs and ushering in prosperity, these power plants have robbed farming livelihoods and increased poverty."³⁹ If all of the coal plants proposed in India right now were completed, associated asthma cases could grow to 42.7 million annually by 2030, and 186,500 to 229,500 people could die prematurely each year due to the resulting air pollution.⁴⁰

Questions about the future of coal power generation still remain. How quickly will global financial institutions recognize the devastation caused by coal's damaging pollution and disassociate themselves from the practice? How much money will banks lose if they continue to pour resources into new and existing coal-fired power plants? A report by the Institute of Energy Economics and Financial Analysis (IEFFA) estimated that electric costs would have skyrocketed, and investors could have lost up to \$273 billion if the hundreds of new coal plants proposed in the U.S. since 2000 had not been halted by citizen opposition, rising costs, and falling prices for cleaner energy.⁴¹

In 2014 researchers with Citigroup forecasted reductions in global demand for coal used to generate power.⁴² It's past time for their counterparts on the deal-making side at Citigroup and other banks to decide to change course. How many more companies will go bankrupt, and how many more people will suffer serious health impacts before financial leaders decide to just say no to coal whenever it comes across their desk?

The writing is now on the wall:

Coal's role in generating electricity around the globe will diminish, and communities everywhere will breathe easier.

COAL POWER CASE STUDIES

CASE STUDY

RAMPAL: PUTTING COMMUNITIES AND A WORLD HERITAGE SITE AT RISK FOR A NEW POWER PLANT

Bangladesh is extremely vulnerable to climate change. When powerful storm surges hit this low lying country, the world's largest mangrove forest, the Sundarbans, provides a natural barrier which protects hundreds of thousands of lives.⁴³ But this could change if a joint venture between India's National Thermal Power Company (NTPC) and the state-owned Bangladesh Power Development Board (BPDB) moves forward with Rampal, a proposed 1,320 megawatt coal power plant. Construction of the Rampal plant's associated infrastructure has already been built, jeopardizing the livelihoods of 500,000 inhabitants.⁴⁴ Displacement of local residents has taken place in highly irregular circumstances, leading to allegations of human rights violations, including forcible displacement of local communities. Displacement has also disproportionately impacted the Hindu minority community in the region.⁴⁵ Bangladeshis from all walks of life have banded together to oppose the project, culminating in 20,000 joining a five-day, 400 kilometer "Long March" from the capital city Dhaka to Rampal to protest the plant.⁴⁶ This action and the human rights violations already taking place are the subject of a 2014 documentary film, *Long Live Sundarban*.⁴⁷

The Sundarbans received UNESCO World Heritage site status in 1997. According to independent environmental assessments, the project would have a range of disastrous and irreversible impacts on the richly biodiverse Sundarbans. In June 2014, UNESCO published a State of Conservation report on Sundarbans, expressing concern about the Rampal project.⁴⁸ While there has been no formal acknowledgement to date of international investor interest in the project, it is estimated that the joint Bangladeshi-Indian venture may be seeking up to \$1.2 billion in additional financing for the project. However, the project has become so controversial that Norway's pension fund withdrew investments from NTPC in March 2015 after the country's Council of Ethics recommended excluding Rampal from the fund's portfolio.⁴⁹



PHOTO: NASA

CASE STUDY

ESKOM'S CONTINUED INVESTMENT IN COAL-FIRED MEGAPLANTS FOR SOUTH AFRICA

Eskom, South Africa's troubled state-owned power utility and the world's eleventh largest in terms of generating capacity, is proceeding with the simultaneous development of two mammoth coal fired power plants. The Medupi and Kusile plants are each planned to have gross generating capacity of 4,800 megawatts.⁵⁰ The projects have been controversial from the beginning, with Kusile set to be built in a region that already exceeded South African air pollution limits.⁵¹ In the face of major national and international pressure, in 2012 the World Bank controversially provided \$3.05 billion in financing for Medupi, which is reported to be running four years behind schedule and projected to be fully on line by 2019 at the earliest.⁵² With construction delays at both plants, Eskom has relied on rate increases to cover its mounting costs. The company is asking to raise prices again by 25% starting in April 2015, as it attempts to recover from Standard & Poor's lowering its credit rating to junk.⁵³

The South African power sector is already one of the most carbon intensive in the world, and the country is currently responsible for 40% of Africa's total carbon emissions. Critics question this further, vastly expensive coal sector consolidation. In the case of Medupi, the huge costs of the World Bank loan will be disproportionately borne by South Africa's poorest for a project that largely benefits major industries that consume electricity below cost.⁵⁴

Additional demand for coal is also likely to drive the opening or expansion of coal mines in South Africa. This will likely lead to severe local environmental impacts, including strains on already scarce water resources.⁵⁵ If all of Eskom's plans go ahead – at Medupi, Kusile and a range of life-extensions and expansions at other plants – the company's own consultants anticipate that 35 new mines will be required to support them. Set to be the world's fourth largest coal-fired plant, Medupi alone will add an estimated 25 million metric tons of CO₂ emissions per year.⁵⁶



PHOTOS: WIKIPEDIA COMMONS

CASE STUDY

FIRSTENERGY'S FAILED BET ON COAL POWER

One year ago, Tony Alexander, FirstEnergy's CEO stood up before the U.S. Chamber of Commerce to defend coal and deride energy efficiency, wind, solar, demand response, and virtually any other form of clean energy innovation taking place in the U.S. electric sector.⁵⁷ In 2011, Mr. Alexander had made a big bet on merchant coal plants, acquiring Allegheny Energy Supply and touting its benefits: "The merger more than doubles our highly efficient, supercritical coal capacity."⁵⁸ As dozens of FirstEnergy's coal units failed to compete against cleaner and cheaper options, the company refused to take advantage of opportunities to invest in energy efficiency, wind, and solar power. FirstEnergy's stock price dropped starting in 2012, with the company posting the worst total return performance relative to more than 31 comparable utilities.⁵⁹ Today Mr. Alexander is no longer the CEO.

Banks and investors should keep FirstEnergy in mind when evaluating other coal-heavy independent power producers such as NRG, Dynegy, and PPL/Riverstone's spinoff, Talen. NRG most recently acquired GenOn and Midwest Generation, both of which have large fleets of aging coal assets.⁶⁰ Dynegy closed a deal with Duke and Energy Capital Partners to pick up merchant coal generation and Talen will own several outdated plants, including Pennsylvania's Brunner Island.⁶¹ All three of these independent power producers have different explanations for why buying up coal plants that few other companies wanted was a smart bet, and why they can extract more value out of them than the last owner. But anyone considering the creditworthiness of these companies should ask tough questions about why the future will play out differently for them than it did for FirstEnergy and why, on the eve of the first nationwide U.S. limits on carbon pollution from power plants, they are doubling down on coal.



PHOTO: WIKIPEDIA COMMONS

COAL POWER RATING CRITERIA

As with coal mining finance, this year’s report card rates bank financing for the electric power sector and coal-fired power generation. Ratings assess bank policies and practices and address both environmental and human rights criteria. Ratings are assigned on a AAA–C scale and full rating criteria can be found in Appendix 2.

For the AAA, AA, and A tier, environmental ratings indicate that a bank is phasing out financing for coal plant construction and power producers with coal-fired generating operations. “A”-range human rights ratings are assigned to banks that are fully implementing their human rights obligations according to the U.N. Guiding Principles on Business and Human Rights.

For the “B” tier, BBB, BB, and B environmental ratings indicate that a bank reports on and limits the carbon footprint of its power sector financing or sets reduction goals for its financing exposure to coal-fired power production. “B” tier human rights ratings indicate that a bank has begun implementing key elements of the U.N. Guiding Principles on Business and Human Rights with respect to financing the electric power sector.

“C” tier ratings (CCC, CC, and C) denote banks that have environmental policies or human rights policies of varying strength that cover financial transactions for electric power producers.

Failing grades are assigned to banks that do not disclose any environmental or human rights policies covering financing for the electric power sector.

POWER SECTOR ENVIRONMENTAL ASSESSMENT CRITERIA

FAIL RATING

No publicly available policy

C, CC, AND CCC RATINGS

Has relevant environmental policies and processes

- » Has an environmental policy addressing coal power impacts
- » Has a due diligence process
- » Reports on policy and due diligence implementation

B, BB, AND BBB RATINGS

Demonstrates progress towards reducing coal-fired power exposure

- » Sets quantitative carbon emissions limits for power plants
- » Reports on financed emissions from power sector financing
- » Sets targets to reduce financed emissions or coal power financing

A, AA, AND AAA RATINGS

Full alignment with climate stabilization pathway

- » Timeline for phasing out financing for coal-fired power
- » Has made climate action a public policy advocacy priority

POWER SECTOR HUMAN RIGHTS ASSESSMENT CRITERIA

FAIL RATING

No publicly available policy

C, CC, AND CCC RATINGS

Has relevant human rights policies and processes

- » Has a human rights policy
- » Has a due diligence process
- » Reports on policy and due diligence implementation

B, BB, AND BBB RATINGS

Demonstrates progress towards respecting human rights

- » Participates in a human rights grievance mechanism
- » Consults with at-risk communities
- » Is phasing out financing for power companies with rights abuses

A, AA, AND AAA RATINGS

Full alignment with responsibility to respect human rights

- » Has a process for remediating human rights impacts
- » Requires client implementation of the U.N. Guiding Principles on Business and Human Rights

BANK RATINGS: COAL POWER FINANCE

COMPANY	COAL POWER: ENVIRONMENTAL RATING	COAL POWER: HUMAN RIGHTS RATING
AGRICULTURAL BANK OF CHINA	F	F
BANK OF AMERICA	CC	F
BANK OF CHINA	F	F
BANK OF TOKYO MITSUBISHI UFJ	C	C
BARCLAYS	CC	CC
BNP PARIBAS	B	CC
BPCE/NATIXIS	F	F
CHINA CONSTRUCTION BANK	F	F
CITIGROUP	CCC	CC
CRÉDIT AGRICOLE	B	CC
CREDIT SUISSE	CC	CC
DEUTSCHE BANK	CC	CC
GOLDMAN SACHS	CC	CC

RATING KEY:

AAA, AA, A:
CCC, CC, C:

Demonstrates leadership on the environment/human rights
Has relevant environmental/human rights policies and processes

BBB, BB, B:
F:

Shows progress on environmental/human rights performance
No publicly available policies

COMPANY	COAL POWER: ENVIRONMENTAL RATING	COAL POWER: HUMAN RIGHTS RATING
HSBC	B	C
INDUSTRIAL & COMMERCIAL BANK OF CHINA	F	F
JPMORGAN CHASE	CC	CC
MIZUHO	C	C
MORGAN STANLEY	CC	C
PNC FINANCIAL	CC	C
RBS	B	CC
SANTANDER	C	C
SOCIÉTÉ GÉNÉRALE	B	CC
SUMITOMO MITSUI	C	C
UBS	CCC	CC
UNICREDIT	CC	CC
WELLS FARGO	CC	CC

PHOTO: PAUL CORBIT BROWN

RANK	BANK	2014 FINANCING
1	CHINA CONSTRUCTION BANK	\$3.86 BILLION
2	AGRICULTURAL BANK OF CHINA	\$3.75 BILLION
3	INDUSTRIAL & COMMERCIAL BANK OF CHINA	\$3.42 BILLION
4	JPMORGAN CHASE	\$3.02 BILLION
5	CHINA CITIC BANK	\$2.99 BILLION
6	CHINA EVERBRIGHT BANK	\$2.68 BILLION
7	CITIGROUP	\$2.50 BILLION
8	BANK OF CHINA	\$2.32 BILLION
9	BARCLAYS	\$2.29 BILLION
10	BANK OF AMERICA	\$2.10 BILLION

RANK	BANK	2014 FINANCING
11	CHINA MERCHANTS BANK	\$1.87 BILLION
12	BBVA	\$1.73 BILLION
13	SOCIÉTÉ GÉNÉRALE	\$1.72 BILLION
14	CHINA DEVELOPMENT BANK	\$1.69 BILLION
15	MITSUBISHI UFJ FINANCIAL	\$1.67 BILLION
16	RBS	\$1.61 BILLION
17	SHANGHAI PUDONG DEVELOPMENT BANK	\$1.59 BILLION
18	GOLDMAN SACHS	\$1.56 BILLION
19	BANCO SANTANDER	\$1.55 BILLION
20	BNP PARIBAS	\$1.52 BILLION

PHOTO: TERRY VIRTS / NASA

APPENDIX 1:

FULL COAL MINING RATING CRITERIA AND BANK RATINGS

RATING TIER	GRADE	COAL MINING SECTOR ENVIRONMENTAL CRITERIA	COAL MINING SECTOR HUMAN RIGHTS CRITERIA
"A" Tier (bank policy and performance aligned with respect for human rights and phase-out of coal mining exposure)	AAA	Has a sector exclusion policy covering all forms of coal mining	Meets "AA" criteria and has made strengthening global business and human rights standards an advocacy priority
	AA	Has a public commitment to phase out financing for all coal mining with a clear timeline and regular reporting on implementation	Meets "A" criteria and requires coal mining clients to implement of the UN Guiding Principles on Business and Human Rights as part of transaction review process
	A	Meets both of the following criteria: <ul style="list-style-type: none"> •Prohibits financing for all forms of extreme coal mining* •Has a commitment to reduce overall coal mining financing (without timeline or reporting on implementation) 	Meets "BBB" criteria and the bank's human rights grievance mechanism includes both reporting on implementation and a process for remediating human rights impacts
"B" Tier (bank demonstrates human rights performance improvements and progress reducing coal mining exposure)	BBB	Meets one of the following criteria: <ul style="list-style-type: none"> •Prohibits financing for all forms of extreme coal mining* •Has a commitment to reduce overall coal mining financing (without timeline or reporting on implementation) 	Meets "BB" criteria and has established or participates in a human rights grievance mechanism
	BB	Meets "CCC" criteria and one of the following criteria: <ul style="list-style-type: none"> •Has no exposure to extreme coal mining* companies •Prohibits financing for one or more forms of extreme coal mining 	Meets "CCC" criteria in addition to both of the following: <ul style="list-style-type: none"> •Does not finance any electric power companies with significant human rights controversies •Has a commitment to consult with independent civil society groups and potentially impacted communities as part of human rights due diligence processes
	B	Meets one of the following criteria: <ul style="list-style-type: none"> •Meets all "CCC" criteria and reports on outcomes and effectiveness of environmental policies and practices, including responses to all significant environmental controversies or impacts associated with financed companies or projects. •Has a commitment to cut financing for one or more forms of extreme coal mining**** 	Meets "CCC" criteria and reports on outcomes and effectiveness of human rights policies and practices, including responses to all significant human rights controversies or impacts associated with financed coal mining companies or projects

RATING TIER	GRADE	COAL MINING SECTOR ENVIRONMENTAL CRITERIA	COAL MINING SECTOR HUMAN RIGHTS CRITERIA
"C" Tier (bank has elements of a human rights and environmental policy framework)	CCC	Meets all of the following criteria: •Has an environmental policy covering coal mining financing that includes required elements* •Has an environmental due diligence process covering all corporate and investment banking activities involving coal mining •Publicly reports on due diligence process implementation	Meets both of the following criteria: •Has a human rights policy covering coal mining financing that includes all required elements** •Has a human rights due diligence process covering all corporate and investment banking activities involving the coal mining sector, with clear designation of internal responsibility for human rights issues
	CC	Meets one of the following criteria: •Has an environmental policy covering coal mining financing that includes required elements* •Has an environmental due diligence process covering all corporate and investment banking activities involving the coal mining	Meets one of the following criteria: •Has a human rights policy covering coal mining financing that includes all required elements** •Has a human rights due diligence process covering all corporate and investment banking activities involving the coal mining sector
	C	Has an environmental policy covering coal mining financing that does not include required environmental elements**	Has a human rights policy covering coal mining financing that does not include required elements**
Failing (bank finances coal producers and lacks a policy framework)	FAIL	No environmental policy covering coal mining financing and/or policy not disclosed	No human rights policy covering coal mining financing and/or policy not disclosed

*: "Extreme coal mining" refers to any of the following:

1. Mountaintop removal coal mining (also referred to as "mountaintop" mining)
2. Mining that impacts internationally-recognized protected areas or high-conservation-value ecosystems
3. Mining operations that have been linked to documented human rights violations

** : Required elements for an environmental policy covering coal mining financing:

1. Assessment of climate impacts
2. Assessment of impacts on air and water quality, biodiversity, and public health
3. Prohibition on financing projects that would impact internationally-recognized protected areas (e.g. UNESCO World Heritage Sites or Ramsar-listed wetlands)
4. Prohibition of financing companies that violate local and national environmental regulations
5. Applicability to all relevant financial transaction types (project finance, corporate lending, corporate equity and debt underwriting)

***: Required elements for a human rights policy covering coal mining financing:

1. A commitment to respect the International Bill of Human Rights (the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, and the International Covenant on Economic and Social Rights) and ILO Declaration of Fundamental Principles of Rights at Work
2. A commitment to follow the UN Guiding Principles on Business and Human Rights
3. A commitment to respect the right of indigenous communities to free, prior, and informed consent
4. A prohibition on financing any project or company that engages in forced resettlement of individuals or communities
5. A requirement that all financed projects and companies implement the Voluntary Principles on Security and Human Rights
6. Applicability to all relevant financial transaction types (project finance, corporate lending, corporate equity and debt underwriting)

****: For 2015, banks that have implemented a policy to cut financing for MTR producers with more than two million short tons of annual MTR-linked production meet this criterion

BANK RATINGS: MINING

Agricultural Bank of China

Total global coal mining financing, 2014: \$3.2 billion
Extreme coal mining companies financed, 2014: None
Coal mining environmental rating: Fail

Rationale: No publicly available policy.

Coal mining human rights rating: Fail

Rationale: No publicly available policy.

Bank of America

Total global coal mining financing, 2014: \$1.3 billion
Extreme coal mining companies financed, 2014: Alpha Natural Resources, BHP Billiton, Coal India (2015), Glencore

Coal mining environmental rating: BBB

Rationale: Updated in 2015, Bank of America's coal policy states that the bank has a responsibility "to accelerate the transition from a high-carbon to a low-carbon society, and from high-carbon to low-carbon sources of energy." The policy commits the bank to "continue to reduce our credit exposure to coal extraction companies" including producers of mountaintop removal coal. Although this commitment did not have specific targets and deadlines, Bank of America is the first global bank to have committed to reduce sector-wide exposure to the coal mining industry.

Coal mining human rights rating: C

Rationale: Bank of America's 2015 update to its coal policy states that the bank expects coal mining clients to support "fundamental principles of human rights" The policy includes some required human rights policy elements, although the bank does not disclose any associated due diligence processes.

Bank of China

Total global coal mining financing, 2014: \$7.7 billion
Extreme coal mining companies financed, 2014: Anglo American, BHP Billiton

Coal mining environmental rating: Fail

Rationale: No publicly available policy.

Coal mining human rights rating: Fail

Rationale: No publicly available policy.

Bank of Tokyo-Mitsubishi UFJ

Total global coal mining financing, 2014: \$276 million
Extreme coal mining companies financed, 2014: Adaro, Anglo American, BHP Billiton, Glencore, TECO Energy

Coal mining environmental rating: C

Rationale: BTMU has a set of environmental policy and due diligence guidelines for implementing the Equator Principles, which apply to transactions involving the mining sector. However, the guidelines do not include all required environmental policy elements and apply only to project finance transactions.

Coal mining human rights rating: C

Rationale: BTMU's implementation policies and due diligence guidelines for the Equator Principles address human rights and other social risks. However, they do not include all required human rights policy elements and apply only to project finance transactions.

Barclays

Total global coal mining financing, 2014: \$445 million
Extreme coal mining companies financed, 2014: Alpha Natural Resources, ArcelorMittal, Anglo American, BHP Billiton, Glencore

Coal mining environmental rating: B

Rationale: In March 2015, Barclays adopted a new policy statement on mountaintop removal coal mining, committing not to engage in any transactions with MTR producers, with exceptions made only for companies with written commitments to phase out MTR production. The bank also has an environmental and social due diligence process covering other coal mining transactions.

Coal mining human rights rating: CC

Rationale: Barclays published an updated Statement on Human Rights in March 2015 which refers to the U.N. Guiding Principles on Business and Human Rights and requires the bank to assess human rights as part of the bank's transaction due diligence process.

BNP Paribas

Total global coal mining financing, 2014: \$391 million
Extreme coal mining companies financed, 2014: Anglo American, ArcelorMittal, BHP Billiton, Glencore

Coal mining environmental rating: B

Rationale: BNP Paribas has a sector policy for the mining sector and reports on the implementation of its associated due diligence practices. The bank's policy includes some required environmental policy elements. On mountaintop removal, the policy states: "BNP Paribas will not provide any financial products or services to Mining Companies that are significant producers of coal extracted from Appalachian MTR operations."

Coal mining human rights rating: CC

Rationale: BNP Paribas has a Statement on Human Rights. The bank also has a sector-specific mining policy covering the coal mining sector, which includes human rights criteria as part of the bank's due diligence process and includes some required human rights policy elements.

BPCE/Natixis

Total global coal mining financing, 2014: None in a lead arranger role
Extreme coal mining companies financed, 2014: None

Coal mining environmental rating: Fail

Rationale: Natixis has an environmental & social risk policy covering the mining sector, including coal mining, but this document is internal and not publicly accessible.

Coal mining human rights rating: Fail

Rationale: Natixis has an environmental & social risk policy covering the mining sector, including coal mining, but this document is internal and not publicly accessible.

China Construction Bank

Total global coal mining financing, 2014: \$3.2 billion
Extreme coal mining companies financed, 2014: None
Coal mining environmental rating: Fail

Rationale: No publicly available policy.

Coal mining human rights rating: Fail

Rationale: No publicly available policy.

Citigroup

Total global coal mining financing, 2014: \$1.1 billion

Extreme coal mining companies financed, 2014: Adaro, Alpha Natural Resources, Anglo American, BHP Billiton, Glencore, TECO Energy

Coal mining environmental rating: CC

Rationale: Citigroup has an environmental and social risk management process that includes some required environmental policy elements. The bank reports on the transactions reviewed through this process, as well as on its MTR-specific due diligence process, although the bank remains significantly involved with MTR financing.

Coal mining human rights rating: CC

Rationale: Citigroup's Statement on Human Rights refers to the U.N. Guiding Principles on Business and Human Rights and includes some required human rights policy elements. The bank reports on the number of transactions reviewed through this process on the categories of human rights issues evaluated in each instance.

Crédit Agricole

Total global coal mining financing, 2014: \$625 million

Extreme coal mining companies financed, 2014: Alpha Natural Resources, Anglo American, ArcelorMittal, BHP Billiton, Glencore

Coal mining environmental rating: CC

Rationale: Crédit Agricole has a sector policy for the mining sector describing its environmental due diligence processes. The policy includes some of the required environmental policy elements. On the issue of mountaintop removal, the bank states that it "will not develop relationships with clients predominantly involved in MTR," However, the bank financed a significant MTR producer in 2014.

Coal mining human rights rating: CC

Rationale: Crédit Agricole has a Corporate Human Rights Charter, which includes a commitment to "carrying out due diligence vis-à-vis customers, suppliers and service providers to ensure that the group does not unwittingly participate in human rights violations, whether directly or indirectly."

Credit Suisse

Total global coal mining financing, 2014: \$1.0 billion

Extreme coal mining companies financed, 2014: Anglo American, BHP Billiton, Coal India (2015), Glencore

Coal mining environmental rating: CCC

Rationale: Credit Suisse has a Sustainability Statement which states that the bank "carries out a detailed internal reputational risk review process." The bank also has a sector-specific policy for the mining sector, which includes all required environmental policy elements in addition to public reporting. The policy addresses mountaintop removal mining, but does not prohibit corporate financing for MTR producers.

Coal mining human rights rating: CC

Rationale: Credit Suisse has a Statement on Human Rights which states that the bank "examines aspects of client relationships or transactions that are sensitive from a human rights perspective using a clearly defined, comprehensive risk review process." The bank's mining sector policy includes some required human rights policy elements.

Deutsche Bank

Total global coal mining financing, 2014: \$1.5 billion

Extreme coal mining companies financed, 2014: Alpha Natural Resources, BHP Billiton, Coal India (2015), Glencore, Metinvest

Coal mining environmental rating: CC

Rationale: Deutsche Bank has an Environmental and Social Risk Framework and sector-specific assessment and due diligence guidelines, including one for the mining sector, although it does not include all required environmental policy criteria. The bank has a statement on mountaintop removal, although it remains significantly involved with MTR financing.

Coal mining human rights rating: CC

Rationale: Deutsche Bank has a human rights position statement that mentions that the bank has "integrated human rights considerations in the due diligence processes," as part of its environmental and social risk framework.

Goldman Sachs

Total global coal mining financing, 2014: \$1.1 billion

Extreme coal mining companies financed, 2014: Alpha Natural Resources, Anglo American, BHP Billiton, Coal India (2015)

Coal mining environmental rating: CC

Rationale: Goldman Sachs's Environmental Policy Framework covers its financing for the coal mining sector and reports on the implementation of its associated due diligence process. The bank also conducts MTR-specific due diligence, although it financed a significant producer of MTR coal in 2014.

Coal mining human rights rating: CC

Rationale: Goldman Sachs's Statement on Human Rights includes some required human rights policy elements. The bank integrates human rights assessments into its transaction due diligence processes.

HSBC

Total global coal mining financing, 2014: \$118 million

Extreme coal mining companies financed, 2014: Adaro, Anglo American, BHP Billiton, Glencore

Coal mining environmental rating: CC

Rationale: HSBC has a mining sector policy which includes some required environmental policy elements. The bank also has an associated due diligence process for mining transactions.

Coal mining human rights rating: CC

Rationale: HSBC does not have a specific human rights policy but its mining sector policy mentions the Equator Principles. The bank's description of its transaction due diligence process contains some required human rights elements.

Industrial & Commercial Bank of China

Total global coal mining financing, 2014: \$2.2 billion

Extreme coal mining companies financed, 2014: None

Coal mining environmental rating: Fail

Rationale: No publicly available policy.

Coal mining human rights rating: Fail

Rationale: No publicly available policy.

JPMorgan Chase

Total global coal mining financing, 2014: \$1.29 billion

Extreme coal mining companies financed, 2014: Anglo American, BHP Billiton, Glencore, TECO Energy

Coal mining environmental rating: B

Rationale: JPMorgan Chase's Environmental and Social Policy Framework covers transactions involving the coal mining sector. The bank reports on the implementation of associated environmental due diligence processes. On mountaintop removal, the bank states that it has "reduced our exposure to companies engaged in mountaintop mining" and that it "expected this decline to continue."

Coal mining human rights rating: CC

Rationale: The bank's Environmental and Social Policy Framework and associated due diligence process address human rights and include some required human rights policy elements.

Mizuho

Total global coal mining financing, 2014: \$121 million

Extreme coal mining companies financed, 2014: Adaro, Anglo American, BHP Billiton, Glencore

Coal mining environmental rating: C

Rationale: Mizuho has an environmental and social policy and assessment process for project finance covering the mining sector with criteria that are based on the International Finance Corporation's performance standards. However this policy framework covers only project finance and not non-project finance corporate finance or investment banking transactions.

Coal mining human rights rating: C

Rationale: Mizuho's has a human rights policy statement and assesses potential human rights impacts of its project finance transactions. However, the company does not disclose a human rights policy or due diligence process that applies to all corporate and investment banking transactions.

Morgan Stanley

Total global coal mining financing, 2014: \$477 million

Extreme coal mining companies financed, 2014: Alpha Natural Resources, Anglo American, Glencore, TECO Energy

Coal mining environmental rating: CC

Rationale: Morgan Stanley has an environmental policy which includes some required environmental policy criteria. The bank reports on the number of transactions reviewed through its associated due diligence process. It has a separate diligence process for mountaintop removal, but financed a significant MTR producer in 2014.

Coal mining human rights rating: C

Rationale: Morgan Stanley has a human rights statement and its environmental policy refers to some human rights due diligence practices for project finance transactions. However, the bank does not report on human rights policies or due diligence processes applicable to non-project finance transactions.

PNC Financial

Total global coal mining financing, 2014: \$892 million

Extreme coal mining companies financed, 2014: Alpha Natural Resources

Coal mining environmental rating: B

Rationale: PNC has an environmental due diligence process covering transactions with the coal mining industry. In addition, the bank updated its policy on mountaintop removal coal mining in 2014. The updated policy states that the bank's MTR financing "has declined significantly and will continue to do so moving forward."

Coal mining human rights rating: C

Rationale: PNC stated that as of 2015, it was reviewing its practices and policies related to human rights.

RBS

Total global coal mining financing, 2014: \$190 million

Extreme coal mining companies financed, 2014: Anglo American, BHP Billiton, Glencore

Coal mining environmental rating: B

Rationale: RBS has an environmental, social, and ethical risk management framework which includes a specific policy on the mining sector and reporting on the implementation of its associated due diligence practices. On mountaintop removal, this policy prohibits financing for "[s]ignificant producers of coal using MTR mining."

Coal mining human rights rating: CC

Rationale: RBS has a Group Position on Human Rights which states: "We conduct due diligence on clients relating to human rights standards, and expect our clients to share our commitment to respecting human rights associated with their operations." The bank's mining sector policy includes some required human rights policy elements.

Santander

Total global coal mining financing, 2014: None in a lead arranger role

Extreme coal mining companies financed, 2014: None

Coal mining environmental rating: C

Rationale: Santander has a social and environmental policy which includes a due diligence process. However, this process only applies to project finance and not to general corporate finance or underwriting.

Coal mining human rights rating: C

Rationale: Santander has a human rights policy covering the coal mining sector. This policy only applies to project finance and not to general corporate finance or underwriting.

Société Générale

Total global coal mining financing, 2014: \$218 million

Extreme coal mining companies financed, 2014: ArcelorMittal, BHP Billiton, Glencore

Coal mining environmental rating: B

Rationale: Société Générale has a set of environmental and social guidelines and reports on the implementation of its associated due diligence practices. It also has a sector-specific mining policy which contains some required environmental policy elements. On the issue of mountaintop removal, this policy prohibits financing "clients who are involved in Mountaintop removal coal mining in the Appalachians in a significant way."

Coal mining human rights rating: CC

Rationale: Société Générale has a set of environmental and social general guidelines describing its due diligence processes. The bank's sector-specific policy covering mining includes some required human rights policy elements.

Sumitomo Mitsui

Total global coal mining financing, 2014: \$356 million

Extreme coal mining companies financed, 2014: Adaro, Anglo American, BHP Billiton, Glencore

Coal mining environmental rating: C

Rationale: Sumitomo Mitsui has an environmental and social due diligence process for evaluating project finance transactions with evaluation criteria based on the Equator Principles. It also has a Credit Policy covering all credit transactions, although details of this policy are not publicly available.

Coal mining human rights rating: C

Rationale: Sumitomo Mitsui's environmental and social due diligence process for screening project finance transactions is based on the Equator Principles, which include human rights criteria. The bank has a credit policy covering all credit transactions, but it is not publicly disclosed.

UBS

Total global coal mining financing, 2014: \$434 million

Extreme coal mining companies financed, 2014: Anglo American, BHP Billiton, Glencore

Coal mining environmental rating: B

Rationale: UBS has an Environmental and Social Risk Management Framework that includes a due diligence process and sector-specific guidelines for high risk sectors, including the mining sector. UBS's mining sector guidelines address MTR and state: "UBS needs to be satisfied that the client is committed to reduce over time its exposure to this form of mining."

Coal mining human rights rating: CC

Rationale: UBS has an Environmental and Social Risk Management Framework that mentions its due diligence process and specific industry human rights issues sector guidelines for high risk sectors, including the mining sector.

UniCredit

Total global coal mining financing, 2014: \$157 million

Extreme coal mining companies financed, 2014: BHP Billiton, Glencore

Coal mining environmental rating: CC

Rationale: UniCredit "has developed special risk policies to address our involvement in sensitive industries". The mining sector is one of those sensitive industries and UniCredit has a position statement concerning the mining industry which includes environmental due diligence assessment areas.

Coal mining human rights rating: CC

Rationale: UniCredit has a Human Rights Commitment which states: "On applying the Reputational Risk Special Policies, we have developed specific reputational risk assessment systems/tools – some that assess aspects of human rights – in order to evaluate and track clients' risks and performances." UniCredit's mining policy also includes some human rights elements.

Wells Fargo

Total global coal mining financing, 2014: \$1.2 billion

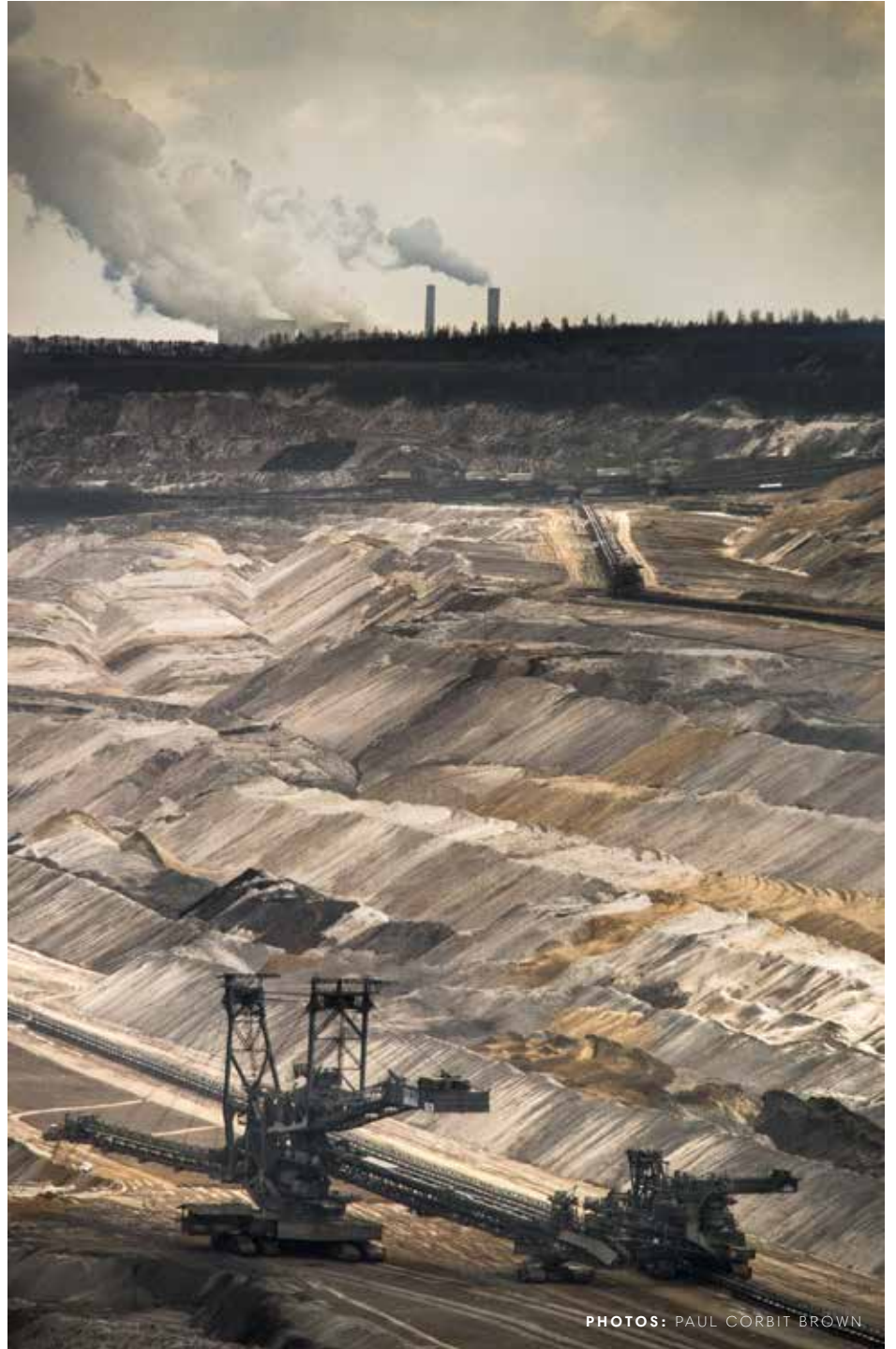
Extreme coal mining companies financed, 2014: TECO Energy

Coal mining environmental rating: B

Rationale: Wells Fargo has an environmental and social risk due diligence process which includes some required environmental policy elements. On mountaintop removal, the bank states: "our involvement with the practice of MTR is limited and declining."

Coal mining human rights rating: CC

Rationale: Wells Fargo has a human rights statement and its Environmental and Social Risk Management Framework states that the bank has "a comprehensive due diligence questionnaire specific to human rights" for its financing transactions.



PHOTOS: PAUL CORBIT BROWN

APPENDIX 2:

FULL COAL POWER RATING CRITERIA AND BANK RATINGS

RATING TIER	GRADE	COAL MINING SECTOR ENVIRONMENTAL CRITERIA	COAL MINING SECTOR HUMAN RIGHTS CRITERIA
"A" Tier (Bank policy and performance aligned with respect for human rights and climate stabilization)	AAA	Has a coal power exclusion policy and has made climate action a public policy advocacy priority (e.g. through advocacy for a price on carbon)	Meets "AA" criteria and has made strengthening global business and human rights standards an advocacy priority
	AA	Has a coal power exclusion policy that prohibits financing for all coal power generation projects and all companies that operate coal power plants	Meets "A" criteria and requires power sector clients to implement of the UN Guiding Principles on Business and Human Rights as part of transaction review process
	A	Has committed to phase out financing for coal-fired power with a clear timeline and regular reporting on implementation OR has set climate stabilization-aligned greenhouse gas emissions reduction targets for financing transactions involving the power sector	Meets "BBB" criteria and the bank's human rights grievance mechanism includes both reporting on implementation and a process for remediating human rights impacts
"B" Tier (Bank shows progress towards respecting human rights and reducing coal-fired power financing)	BBB	Has committed to reduce overall financing for coal-fired power (but without a clear timeline or reporting on implementation)	Meets "BB" criteria and has established or participates in a human rights grievance mechanism
	BB	Meets one of the following criteria: <ul style="list-style-type: none"> •Meets "CCC" criteria and sets and discloses progress towards quantitative greenhouse gas emissions reduction targets for transactions involving the power sector •Prohibits financing for new power plants that exceed a 450 g. CO₂/kWh emissions performance threshold 	Meets "CCC" criteria in addition to both of the following: <ul style="list-style-type: none"> •Does not finance any electric power companies with significant human rights controversies •Has a commitment to consult with independent civil society groups and potentially impacted communities as part of human rights due diligence processes
	B	Meets one of the following criteria: <ul style="list-style-type: none"> •Meets "CCC" criteria and publicly reports greenhouse gas emissions data for transactions involving the power sector •Sets a quantitative carbon emissions performance standard for new power plant construction 	Meets "CCC" criteria and reports on outcomes and effectiveness of human rights policies and practices, including responses to all significant human rights controversies or impacts associated with financed companies or projects.

RATING TIER	GRADE	COAL MINING SECTOR ENVIRONMENTAL CRITERIA	COAL MINING SECTOR HUMAN RIGHTS CRITERIA
"C" Tier (Bank has relevant policies and procedures)	CCC	Meets all of the following criteria: <ul style="list-style-type: none"> •Has an environmental policy covering power sector financing which includes required elements* •Has an environmental due diligence process covering all corporate and investment banking activities involving the power sector •Publicly reports on due diligence process implementation 	Meets both of the following criteria: <ul style="list-style-type: none"> •Has a human rights policy covering power sector financing that includes all required elements** •Has a human rights due diligence process covering all corporate and investment banking activities involving the power sector, with clear designation of internal responsibility for human rights issue
	CC	Meets one of the following criteria: <ul style="list-style-type: none"> •Has an environmental policy covering power sector financing that includes required elements* •Has an environmental due diligence process covering all corporate and investment banking activities involving the power sector 	Meets one of the following criteria: <ul style="list-style-type: none"> •Has a human rights policy covering power sector financing that includes all required elements** •Has a human rights due diligence process covering all corporate and investment banking activities involving the power sector
	C	Has an environmental policy covering power sector financing that does not include required elements*	Has a human rights policy covering power sector financing that does not include required elements**
Failing (bank finances coal producers and lacks a policy framework)	FAIL	No environmental policy covering power sector financing and/or policy not disclosed	No human rights policy covering power sector financing and/or policy not disclosed

*: Required elements for environmental policy covering power sector financing:

1. Assessment of greenhouse gas emissions
2. Assessment of impacts on air quality, water quality, and public health
3. Assessment of water use
4. Applicability to all relevant financial transactions (project finance, corporate lending, corporate equity and debt underwriting)

** : Required elements for human rights policy covering power sector financing:

1. A commitment to respect the International Bill of Human Rights (the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, and the International Covenant on Economic and Social Rights) and the ILO Declaration of Fundamental Principles of Rights at Work
2. A commitment to follow the UN Guiding Principles on Business and Human Rights
3. A commitment to respect the right of indigenous communities to free, prior, and informed consent
4. A prohibition on financing any project or company that engages in forced resettlement of individuals or communities
5. A requirement that all financed projects and companies follow the Voluntary Principles on Security and Human Rights
6. Applicability to all relevant financial transactions (project finance, corporate lending, corporate equity and debt underwriting)

BANK RATINGS: POWER

Agricultural Bank of China

Total financing for top 30 coal power producers, 2014: \$3.8 billion
Top 30 coal power producers financed, 2014: China Datang, China Guodian, China Huadian

Electric power environmental rating: Fail

Rationale: No publicly available policy.

Electric power human rights rating: Fail

Rationale: No publicly available policy.

Bank of America

Total financing for top 30 coal power producers, 2014: \$2.1 billion
Top 30 coal power producers financed, 2014: China Huaneng, FirstEnergy, GDF Suez, NRG Energy, RWE, Xcel Energy

Electric power environmental rating: CC

Rationale: Bank of America has an environmental due diligence process for evaluating transactions with corporate clients, including those in the electric power sector. The bank has a due diligence process covering transactions with power sector clients.

Electric power human rights rating: Fail

Rationale: Bank of America's Human Rights Statement and Developing Country Lending Policy both include references to human rights, but do not commit the bank to evaluate the human rights impacts of its corporate clients in the electric power sector.

Bank of China

Total financing for top 30 coal power producers, 2014: \$2.3 billion
Top 30 coal power producers financed, 2014: China Datang, China Guodian, China Huadian, China Huaneng

Electric power environmental rating: Fail

Rationale: No publicly available criteria.

Electric power human rights rating: Fail

Rationale: No publicly available policy.

Bank of Tokyo-Mitsubishi UFJ

Total financing for top 30 coal power producers, 2014: \$1.7 billion
Top 30 coal power producers financed, 2014: American Electric Power, China Resources Power Holdings, GDF Suez, NRG Energy, Berkshire Hathaway (PacifiCorp), RWE

Electric power environmental rating: C

Rationale: BTMU has environmental policy and due diligence guidelines for implementing the Equator Principles, which apply to transactions involving the electric power sector. The bank reports on the number of transactions it reviews under these guidelines each year. However, the guidelines apply only to project finance transactions and not to all corporate and investment banking transactions.

Electric power human rights rating: C

Rationale: BTMU's implementation policies and due diligence guidelines for the Equator Principles address human rights and other social risks. However, they apply only to project finance transactions.

Barclays

Total financing for top 30 coal power producers, 2014: \$2.3 billion
Top 30 coal power producers financed, 2014: American Electric Power, Duke Energy, Enel, GDF Suez, NRG Energy, NTPC, RWE, Southern Company, Vattenfall, Xcel Energy

Electric power environmental rating: CC

Rationale: In March 2015, Barclays updated its Environmental and Social Risk Assessment in Lending policy, which states: "Environmental issues are required considerations in risk assessment for credit facilities and capital market transactions, and an environmental and social risk standard is included in the Wholesale Credit Risk Control Framework." In March 2015, Barclays also made public its specific risk assessment guidance for the power sector, which includes some required environmental criteria.

Electric power human rights rating: CC

Rationale: Barclays published an updated Statement on Human Rights in March 2015 which refers to the U.N. Guiding Principles on Business and Human Rights and requires that "when assessing customers' financial propositions generally, and providing financial advice, relationship management should consider any material human rights aspects as part of their due diligence."

BNP Paribas

Total financing for top 30 coal power producers, 2014: \$1.5 billion
Top 30 coal power producers financed, 2014: Enel, FirstEnergy, GDF Suez, Berkshire Hathaway (PacifiCorp), RWE, Vattenfall

Electric power environmental rating: B

Rationale: BNP Paribas has a sector policy covering the power generation sector and reports on the implementation of its associated due diligence practices. The policy includes all required environmental policy elements for the power sector. This policy also sets minimum net energy efficiency thresholds for new coal power plant project finance of 43% in high income countries and 38% in other countries.

Electric power human rights rating: CC

Rationale: BNP Paribas has adopted a Statement on Human Rights, which refers to its sector policies for sensitive sectors, including the power sector. The bank's power sector policy includes some required human rights policy elements and involves a due diligence process.

BPCE/Natixis

Total financing for top 30 coal power producers, 2014: \$784 million
Top 30 coal power producers financed, 2014: Enel, GDF Suez, NRG Energy

Electric power environmental rating: Fail

Rationale: Natixis has an environmental and social risk policy covering the coal-fired power plant sector but this document is internal and not publicly accessible.

Electric power human rights rating: Fail

Rationale: Natixis has an environmental and social risk policy covering the coal-fired power plant sector but this document is internal and not publicly accessible.

China Construction Bank

Total financing for top 30 coal power producers, 2014: \$3.9 billion
Top 30 coal power producers financed, 2014: China Datang, China Guodian, China Huadian, China Huaneng, China Resources Power Holdings

Electric power environmental rating: Fail

Rationale: No publicly available policy.

Electric power human rights rating: Fail

Rationale: No publicly available policy.

Citigroup

Total financing for top 30 coal power producers, 2014: \$2.5 billion

Top 30 coal power producers financed, 2014: American Electric Power, CEZ, GDF Suez, Korea Electric Power, NRG Energy, NTPC, RWE, Southern Company, Vattenfall

Electric power environmental rating: CCC

Rationale: Citigroup has an environmental and social risk management policy and reports on the implementation of its associated due diligence practices. The bank's Thermal Power Sector Brief includes all required environmental policy elements, including climate impacts, water use, and air emissions. The bank also reports on emissions from power plants for which the bank has provided project finance.

Electric power human rights rating: CC

Rationale: Citigroup's Statement on Human Rights refers to the U.N. Guiding Principles on Business and Human Rights and includes some required human rights policy elements. The bank reports on the number of transactions reviewed through this process on the categories of human rights issues evaluated in each instance.

Crédit Agricole

Total financing for top 30 coal power producers, 2014: \$1.1 billion

Top 30 coal power producers financed, 2014: Enel, FirstEnergy, GDF Suez, NRG Energy

Electric power environmental rating: B

Rationale: Crédit Agricole has a sector policy covering the power sector which includes some required environmental policy elements. The bank also has an associated due diligence process. The bank's sector policy also prohibits project financing for new construction of subcritical coal plants.

Electric power human rights rating: CC

Rationale: Crédit Agricole has adopted a Corporate Human Rights Charter which includes a commitment to conduct human rights due diligence of corporate clients. The bank's power sector policy also includes some required human rights policy elements and has an associated due diligence process.

Credit Suisse

Total financing for top 30 coal power producers, 2014: \$1.5 billion

Top 30 coal power producers financed, 2014: American Electric Power, Enel, GDF Suez, NRG Energy, RWE

Electric power environmental rating: CC

Rationale: Credit Suisse has a Sustainability Statement which mentions that it "carries out a detailed internal reputational risk review process. The assessment explores the nature of the transaction, the identity of the potential client and the regulatory, political and social background, as well as environmental and social impacts of a potential client's activities."

Electric power human rights rating: CC

Rationale: Credit Suisse issued a Statement on Human Rights where it mentions that it "examines aspects of client relationships or transactions that are sensitive from a human rights perspective using a clearly defined, comprehensive risk review process."

Deutsche Bank

Total financing for top 30 coal power producers, 2014: \$1.5 billion

Top 30 coal power producers financed, 2014: Berkshire Hathaway (MidAmerican Energy), GDF Suez, NRG Energy, NTPC, PGE, RWE, Vattenfall
Electric power environmental rating: CC

Rationale: Deutsche Bank has an Environmental and Social Risk Framework in addition to Environmental and Social Impact Assessment Guidelines and due diligence processes for critical sectors, including the utilities sector. The bank also has a position statement on coal fired power which includes some required environmental policy elements.

Electric power human rights rating: CC

Rationale: Deutsche Bank has a human rights position which states that the bank has "integrated human rights considerations in the due diligence processes required by our ES Risk Framework."

Goldman Sachs

Total financing for top 30 coal power producers, 2014: \$1.5 billion

Top 30 coal power producers financed, 2014: Enel, GDF Suez, NRG Energy, PGE, RWE

Electric power environmental rating: CC

Rationale: Goldman Sachs has an Environmental Policy Framework which covers its financing for the power sector and includes some required policy elements. The bank reports on the number of power generation transactions reviewed for environmental risk on an annual basis.

Electric power human rights rating: CC

Rationale: Goldman Sachs has a Statement on Human Rights, which notes: "We place a high priority on the identification of potential human rights issues in the due diligence that precedes our business transactions." The bank's Environmental Policy Framework also states that the bank incorporates some human rights issues into the bank's transaction review process.

HSBC

Total financing for top 30 coal power producers, 2014: \$821 million

Top 30 coal power producers financed, 2014: Enel, GDF Suez, RWE

Electric power environmental rating: B

Rationale: HSBC has an Energy Sector Policy which covers transactions with the power sector. This policy contains some criteria for coal-fired power plant (CFPP) financing. The policy states: "We will not provide financial services which directly support new CFPPs with individual units of 500MW or more and a carbon intensity exceeding 850 g. CO₂/kWh in developing countries, and 550 g. CO₂/kWh in developed countries."

Electric power human rights rating: C

Rationale: HSBC does not have a policy specific to human rights. The bank's Energy Sector Policy mentions the Equator Principles, which include some human rights elements for project finance.

Industrial & Commercial Bank of China

Total financing for top 30 coal power producers, 2014: \$3.4 billion

Top 30 coal power producers financed, 2014: China Datang, China Guodian, China Huadian, China Huaneng, China Resources Power Holdings, GDF Suez

Electric power environmental rating: Fail

Rationale: No publicly available policy.

Electric power human rights rating: Fail

Rationale: No publicly available policy.

JPMorgan Chase

Total financing for top 30 coal power producers, 2014: \$3.0 billion

Top 30 coal power producers financed, 2014: American Electric Power, Enel, FirstEnergy, GDF Suez, Korea Electric Power, Berkshire Hathaway (MidAmerican Energy), NRG Energy, RWE, Southern Company, Vattenfall, Xcel Energy

Electric power environmental rating: CC

Rationale: JPMorgan Chase has an Environmental and Social Policy Framework, which addresses transactions with the power sector and includes some required environmental policy elements. The bank reports on the implementation of its associated due diligence processes.

Electric power human rights rating: CC

Rationale: JPMorgan Chase incorporates human rights as part of its environmental and social transaction review process. The bank states that it assesses "management commitment to respect human rights through a policy or recognition of international standards and a client's capacity to effectively implement such a policy with appropriate management systems or governance approaches."

Mizuho

Total financing for top 30 coal power producers, 2014: \$1.5 billion

Top 30 coal power producers financed, 2014: China Resources Power Holdings, Chubu Electric Power, GDF Suez, Kansai Electric Power, NTPC, RWE

Electric power environmental rating: C

Rationale: Mizuho has an environmental and social policy and assessment process covering the power sector with criteria that are based on the International Finance Corporation's performance standards. However this policy framework applies only to project finance and the bank does not disclose which environmental policies and due diligence criteria, if any, it applies to other transactions.

Electric power human rights rating: C

Rationale: Mizuho's has a human rights policy statement and assesses potential human rights impacts of its project finance transactions. However, the company does not disclose a human rights policy or due diligence process that applies to all lending and underwriting transactions.

Morgan Stanley

Total financing for top 30 coal power producers, 2014: \$1.2 billion

Top 30 coal power producers financed, 2014: Chubu Electric Power, Enel, Kansai Electric Power, Korea Electric Power, NRG Energy, RWE

Electric power environmental rating: C

Rationale: Morgan Stanley's environmental policy includes some required environmental policy elements. The bank has an environmental due diligence process and reports on the number of transactions reviewed each year.

Electric power human rights rating: C

Rationale: Morgan Stanley has a Human Rights Statement and its environmental policy includes some required human rights policy elements in the context of project finance. However the bank does not disclose any human rights policies or due diligence practices covering its non-project finance corporate and investment banking operations.

PNC Financial

Total financing for top 30 coal power producers, 2014: \$142 million

Top 30 coal power producers financed, 2014: FirstEnergy

Electric power environmental rating: CC

Rationale: PNC has a due diligence process covering transactions with electric and gas utilities. In 2015, the company committed to "adopt a formal policy that prohibits construction financing of single coal-fired power plants, which lack the most advanced environmental control processes, such as carbon sequestration."

Electric power human rights rating: C

Rationale: PNC stated that as of 2015, it was reviewing its practices and policies related to human rights.

RBS

Total financing for top 30 coal power producers, 2014: \$1.6 billion

Top 30 coal power producers financed, 2014: American Electric Power, Enel, FirstEnergy, GDF Suez, NRG Energy, RWE, Vattenfall

Electric power environmental rating: B

Rationale: RBS has an Environmental, Social and Ethical risk management framework which includes a specific policy on the power sector. The bank reports on the implementation of associated due diligence practices. The policy prohibits "project finance for the construction of new Coal Fired Power Plants with an efficiency level below 28% for Non-OECD or Non-High Income OECD Countries and below 35% for High-Income OECD Countries."

Electric power human rights rating: CC

Rationale: RBS has a Group Position on Human Rights stating: "We conduct due diligence on clients relating to human rights standards, and expect our clients to share our commitment to respecting human rights associated with their operations." RBS's power sector policy also contains some required human rights policy elements.

Santander

Total financing for top 30 coal power producers, 2014: \$1.6 billion

Top 30 coal power producers financed, 2014: Enel, GDF Suez, RWE

Electric power environmental rating: C

Rationale: Santander has a social and environmental policy describing its due diligence process. However, this process only applies to project finance and not to general corporate finance or underwriting. The policy also mentions that the bank "pays particular attention to social and environmental risks of the Energy sector," although it does not provide further detail.

Electric power human rights rating: C

Rationale: Santander has a Human Rights Policy covering the coal power sector. This policy only applies to specific project finance and not to general corporate finance or underwriting.

Société Générale

Total financing for top 30 coal power producers, 2014: \$1.7 billion

Top 30 coal power producers financed, 2014: Enel, GDF Suez, PGE, RWE, Vattenfall

Electric power environmental rating: B

Rationale: Société Générale discloses its Environmental and Social General Guidelines and reports on the implementation of its associated due diligence practices. It also has a specific Coal-Fired Power Sector Policy which contains all required environmental policy elements. The policy also sets a minimum efficiency threshold for new power plant financing of 43% thermal efficiency for projects in high-income countries.

Electric power human rights rating: CC

Rationale: Société Générale has a set of environmental and social guidelines describing its transaction due diligence practices. The bank's sector-specific policy covering coal-fired power plants contains some required human rights policy elements.

Sumitomo Mitsui

Total financing for top 30 coal power producers, 2014: \$1.3 billion

Top 30 coal power producers financed, 2014: China Resources Power Holdings, Chubu Electric Power, GDF Suez, Kansai Electric Power, NRG Energy, NTPC, RWE

Electric power environmental rating: C

Rationale: Sumitomo Mitsui has an environmental and social due diligence process for evaluating project finance transactions with evaluation criteria based on the Equator Principles. It also has a Credit Policy covering all credit transactions, although details of this policy are not publicly available.

Electric power human rights rating: C

Rationale: Sumitomo Mitsui's environmental and social due diligence process for screening project finance transactions is based on the Equator Principles, which include human rights criteria. The bank has a credit policy covering all credit transactions, but it is not publicly disclosed.

UBS

Total financing for top 30 coal power producers, 2014: \$1.2 billion

Top 30 coal power producers financed, 2014: Duke Energy, Enel, RWE, Southern Company

Electric power environmental rating: CCC

Rationale: UBS has an Environmental and Social Risk Management Framework which includes all required environmental policy elements. This framework includes specific environmental sector guidelines for certain high risk sectors, including the utilities sector. The framework includes an associated due diligence process.

Electric power human rights rating: CC

Rationale: UBS has an Environmental and Social Risk Management Framework that includes some, but not all required human rights policy elements. The framework has specific sector guidelines for the utilities sector and involves an associated due diligence process.

UniCredit

Total financing for top 30 coal power producers, 2014: \$1.0 billion

Top 30 coal power producers financed, 2014: Enel, GDF Suez, PGE, RWE

Electric power environmental rating: CC

Rationale: UniCredit reports that it has "special risk policies to address our involvement in sensitive industries," including the power sector. UniCredit has also published a position statement on coal fired power generation.

Electric power human rights rating: CC

Rationale: UniCredit has a Human Rights Commitment and states that it has reputational risk assessment systems that address human rights risks. The bank's coal power policy also includes some required human rights policy elements.

Wells Fargo

Total financing for top 30 coal power producers, 2014: \$857 million

Top 30 coal power producers financed, 2014: American Electric Power, Berkshire Hathaway (MidAmerican Energy), Xcel Energy

Electric power environmental rating: CC

Rationale: Wells Fargo' Environmental and Social Risk Management Framework states that the bank has a due diligence process for its power and utilities transactions. The bank's framework includes some required environmental policy elements and specifically addresses carbon risk.

Electric power human rights rating: CC

Rationale: Wells Fargo has a human rights statement, and its Environmental and Social Risk Management Framework states that the bank has "a comprehensive due diligence questionnaire specific to human rights" for its financing transactions.

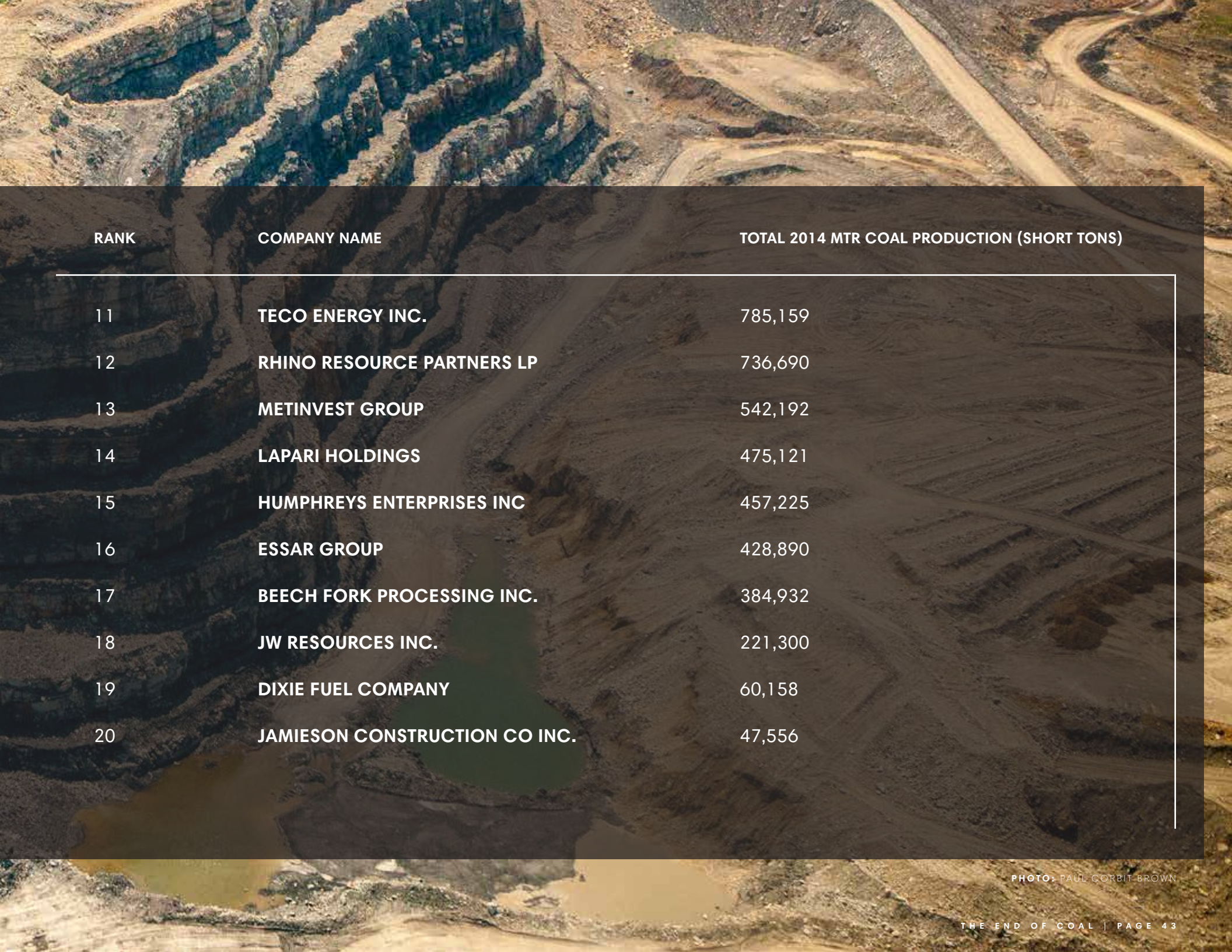


PHOTOS: JOHN DUFFY / SHUTTERSTOCK

APPENDIX 3:

MOUNTAINTOP REMOVAL COAL PRODUCTION DATA FOR 20 LARGEST PRODUCERS, 2014 ⁶³

RANK	COMPANY NAME	TOTAL 2014 MTR COAL PRODUCTION (SHORT TONS)
1	ALPHA NATURAL RESOURCES	7,507,466
2	PATRIOT COAL CORP	5,538,356
3	ARCH COAL INC.	4,793,971
4	JMP COAL HOLDINGS LLC	3,567,744
5	REVELATION ENERGY (KEYSTONE GLOBAL)	1,647,775
6	U S COAL CORPORATION	1,646,780
7	ARCELORMITTAL	1,274,211
8	CAMBRIAN COAL CORP	1,041,654
9	COAL RIVER MINING LLC	996,724
10	JAMES C JUSTICE CO INC	789,244



RANK	COMPANY NAME	TOTAL 2014 MTR COAL PRODUCTION (SHORT TONS)
11	TECO ENERGY INC.	785,159
12	RHINO RESOURCE PARTNERS LP	736,690
13	METINVEST GROUP	542,192
14	LAPARI HOLDINGS	475,121
15	HUMPHREYS ENTERPRISES INC	457,225
16	ESSAR GROUP	428,890
17	BEECH FORK PROCESSING INC.	384,932
18	JW RESOURCES INC.	221,300
19	DIXIE FUEL COMPANY	60,158
20	JAMIESON CONSTRUCTION CO INC.	47,556

PHOTO: PAUL CORBIT-BROWN

APPENDIX 4:**LARGEST COAL POWER PRODUCERS BY MW COAL CAPACITY (2013)⁶⁴**

ASIA-PACIFIC		EUROPE, MIDDLE EAST, AFRICA	
COMPANY	MEGAWATTS OF COAL GENERATING CAPACITY, 2013	COMPANY	MEGAWATTS OF COAL GENERATING CAPACITY, 2013
CHINA GUODIAN	92,270	RWE	21,201
CHINA HUANENG	50,253	ESKOM	37,745
TEPCO	42,950	ENEL	17,501
NTPC	33,015	E.ON	14,640
CHINA HUADIAN	26,889	VATTENFALL	11,790
CHUBU ELECTRIC POWER	25,159	GDF SUEZ	11,480
KOREA ELECTRIC POWER	24,247	PGE	10,190
CHINA RESOURCES POWER HOLDINGS	23,692	DTEK	18,000
CHINA DATANG	21,247	CEZ	8,171
KANSAI ELECTRIC POWER	17,981	ENDESA	6,676

UNITED STATES

COMPANY	MEGAWATTS OF COAL GENERATING CAPACITY, 2013
AMERICAN ELECTRIC POWER	26,000
SOUTHERN COMPANY	22,750
DUKE ENERGY	19,509
TENNESSEE VALLEY AUTHORITY	16,607
NRG ENERGY	14,160
PPL	11,671
BERKSHIRE HATHAWAY	11,477
FIRSTENERGY	11,000
ENERGY FUTURE HOLDINGS	8,594
XCEL ENERGY	8,128



PHOTO: PAUL K. ANDERSON

ENDNOTES

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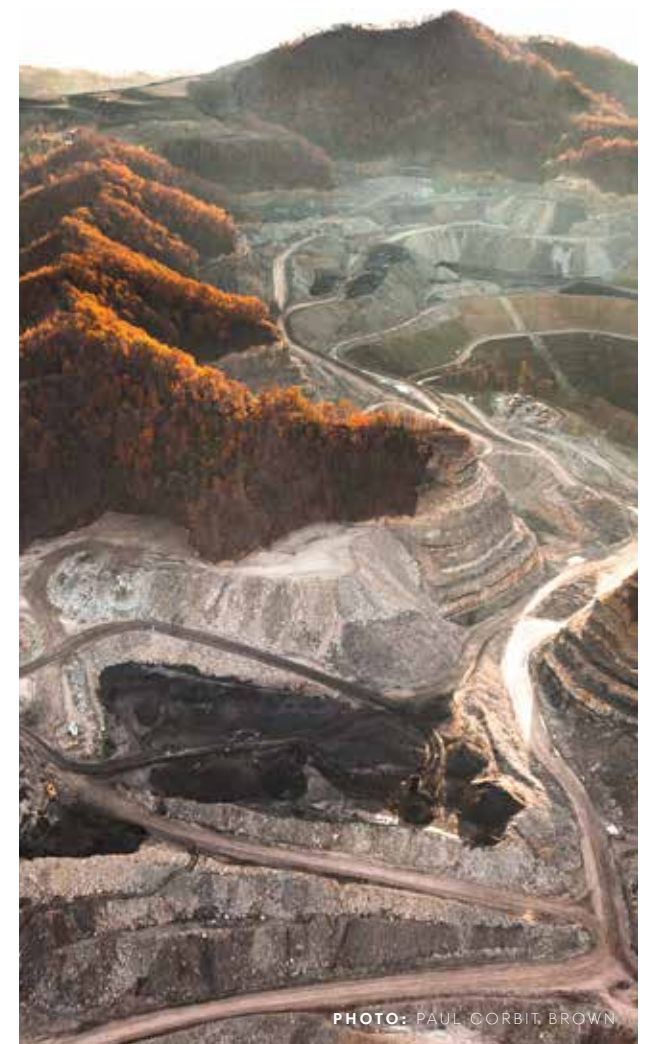


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