MARKET FORCES

FUELING THE FIRE

HOW THE BIG BANKS ARE USING OUR MONEY TO SUPPORT THE DIRTY FOSSIL FUEL INDUSTRY

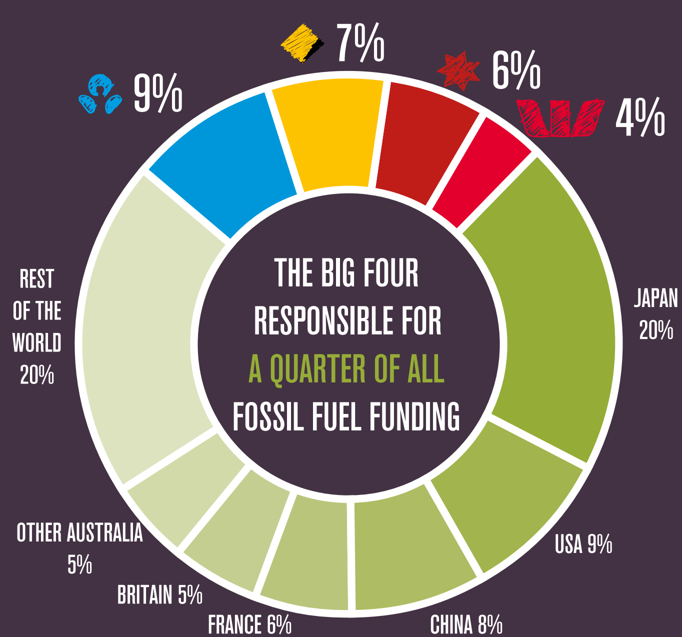
INTRODUCTION

Since the global financial crisis, tens of billions of dollars have been loaned to the Australian fossil fuel industry. Many of these projects have been responsible for horrific environmental damage, including the destruction of prime agricultural land and nature reserves, contamination of aquifers, declining air quality and the industrialisation of iconic sites including the Great Barrier Reef World Heritage Area.[1]

Fossil fuels are also the biggest source of greenhouse gas emissions in the world. Fossil fuels make up over 85% of global energy consumption,[2] producing more than 30 Gt CO2 (billion tonnes of carbon dioxide) each year.[3] The increasing concentration of carbon dioxide and other greenhouse gases in the earth's atmosphere is causing global warming, which is already delivering dangerous impacts that are set to become catastrophic without an urgent reduction in emissions.[4]

Funding decisions made by banks to support fossil fuel projects have massive impacts on our climate, environment, health, communities and economy. It is incumbent on these institutions to withdraw their support for the destructive and dangerous activities of the fossil fuel industry.

LENDING TO FOSSIL FUELS IN AUSTRALIA 2008 TO 2014



This report presents the findings of Market Forces' research into banks that have loaned to fossil fuel projects and companies in Australia between 2008 and 2014, and provides a resource for individuals and groups wanting to help put a stop to the financing of this dirty industry.

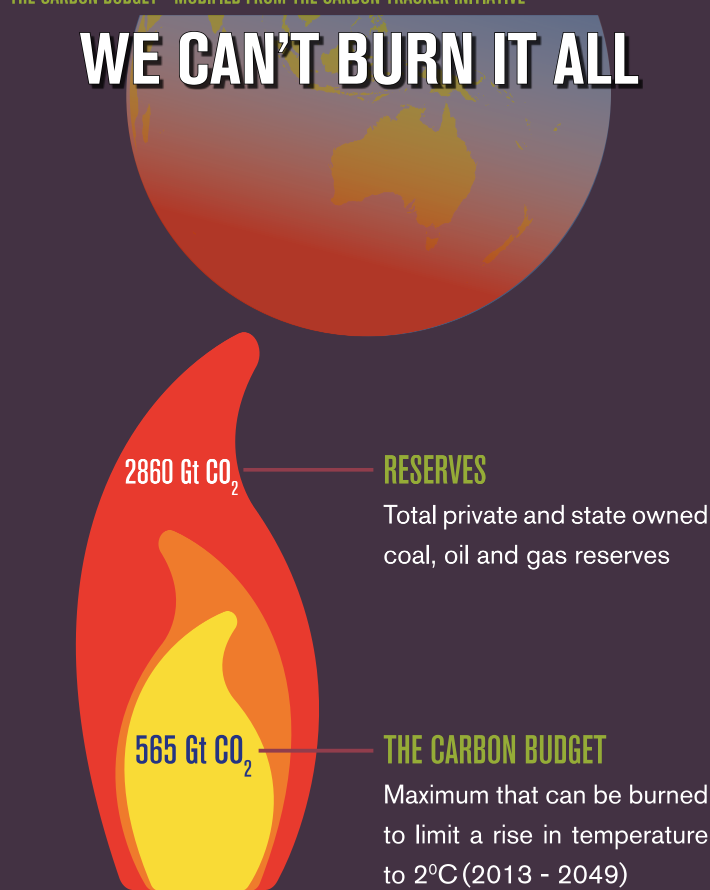
THE CARBON BUBBLE

At the 2009 UN Climate Change Convention in Copenhagen, nations agreed to limit global warming to a maximum of 2°C above pre-industrial levels in an attempt to avoid the worst impacts of climate change,[5] although current climate science demonstrates that warming should be limited even further.[6]

In October 2013 the Carbon Tracker Initiative calculated that, in order to have an 80% probability of not breaching the 2°C limit, around 70% of the world's known fossil fuel reserves must not be burned.[7] More recent research conducted by University College London found that "globally, a third of oil reserves, half of gas reserves and over 80% of current coal reserves should remain unused from 2010 to 2050 in order to meet the target of 2°C."[8]

As the world moves to limit global warming to less than 2°C, trillions of dollars of fossil fuel assets are at risk in the impending 'carbon bubble'. Despite this, the industry is continuing to expand its reserves of unburnable carbon.[9] With the support of banks, fossil fuel companies and projects continue to put the climate, environment and economy at unacceptable risk.

THE CARBON BUDGET - MODIFIED FROM THE CARBON TRACKER INITIATIVE



COVER PHOTO: HAZELWOOD OPEN MINE FIRE FEBRUARY 2014 - CFA COMMUNITIES & COMMUNICATION

KEY FINDINGS

- Since 2008, at least **$134.3 billion** in loans have been issued to the Australian fossil fuel industry.

- The “big four” Australian banks - **ANZ, Commonwealth Bank, NAB and Westpac** - play a critical role in lending to the fossil fuel industry; out of the 150 banks that appeared in our research, these four have loaned a combined **$36.7 billion** to the industry since 2008, 27.3% of all debt finance.

- Australia’s big four banks participated in **134 of the 182 loans (73.6%)** examined.

- **ANZ is the biggest lender** to the fossil fuel industry in Australia, having made $12.6 billion in loans to the sector since 2008. ANZ is followed by Commonwealth Bank ($9.9 billion), NAB ($8.3 billion) and Westpac ($5.9 billion).

- After Australia, the main sources of debt finance for the fossil fuel industry in Australia from 2008 to 2014 are **Japan, China, the United States, France and Britain**.

- Export credit agencies (ECAs) play a vital role in financing the most expensive projects. **A fossil fuel loan worth more than $1 billion has a 40% likelihood of involving an ECA**. The likelihood of a loan worth less than $1 billion involving an ECA is just 6.5%.

- The **most active ECAs** in Australia are: the Japan Bank for International Cooperation, the Export-Import Bank of the United States and the Export-Import Bank of China.

- For every dollar loaned to the **renewable energy sector** since 2008, the big four have loaned almost **$6 to fossil fuels**.

$36.7 BILLION IN FOSSIL FUEL FUNDING

BIGGEST COMMERCIAL LENDERS TO FOSSIL FUELS

The table below lists the top 20 commercial banks worldwide by total amount of debt provided to the Australian fossil fuel sector between 2008 and 2014.*†

Australian banks led the way both in terms of the amount of debt provided and the number of deals participated in, with ANZ taking out the dubious title of 'biggest lender to the Australian fossil fuel industry.'

The Japanese megabanks, led by the Bank of Tokyo-Mitsubishi, also played a critical role, while banks from China, France and Britain are prominent in the top 20 lenders.

Of the 182 loans to Australia's fossil fuel industry uncovered, Australia's big four banks have participated in 134, meaning that any project receiving debt finance during this period had a 73.6% chance of involving ANZ, Commonwealth Bank, NAB or Westpac.

* *In order to remain as current and comprehensive as possible, Market Forces included loans that took place up to March 2015 in this study.*

The big four local banks provided $36.7 billion of the total $134.3 billion (27.3%)

A total of 150 commercial banks from around the world loaned money to the Australian fossil fuel sector between 2008 and 2014. The big four local banks provided $36.7 billion of the total $134.3 billion (27.3%), while a further $6.1 billion came from other Australian institutions.

Japanese financiers' lending to the Australian fossil fuel industry from 2008 to 2014 totaled $27.4 billion, and despite only having one representative in the top 20 list, banks from the USA combined to provide $11.6 billion, the third largest proportion of debt by country of origin.

Other notable sources of lending to fossil fuels in Australia were China with $11.0 billion, France ($7.5 billion) and Britain ($6.5 billion). As the most prominent debt providers to the Australian fossil fuel industry, these institutions have the greatest power to influence the industry.

TOP 20 COMMERCIAL BANKS LENDING TO FOSSIL FUELS

BANK	DEBT ($AU MILLIONS)	NO. OF DEALS	COUNTRY OF ORIGIN
ANZ	$12,593.45	99	Australia
Commonwealth Bank	$9,904.66	73	Australia
NAB	$8,277.96	75	Australia
Westpac	$5,924.27	59	Australia
Bank of Tokyo-Mitsubishi	$5,860.51	54	Japan
Sumitomo Mitsui Banking Corporation	$4,603.91	47	Japan
Mizuho Financial Group	$4,216.49	38	Japan
Bank of China	$3,990.56	15	China
BNP Paribas	$2,533.04	35	France
Oversea-Chinese Banking Corporation	$2,127.61	24	Singapore
Société Générale	$2,053.80	29	France
JP Morgan Chase	$1,949.17	13	USA
State Bank of India	$1,862.78	6	India
HSBC	$1,809.15	16	Britain
WestLB	$1,508.75	15	Germany
Deutsche Bank	$1,287.17	13	Germany
DBS Bank	$1,272.09	14	Singapore
Standard Chartered	$1,245.63	8	Britain
Crédit Agricole	$1,119.46	24	France
Barclays	$1,098.65	10	Britain

THE INCREASING IMPORTANCE OF THE BIG FOUR

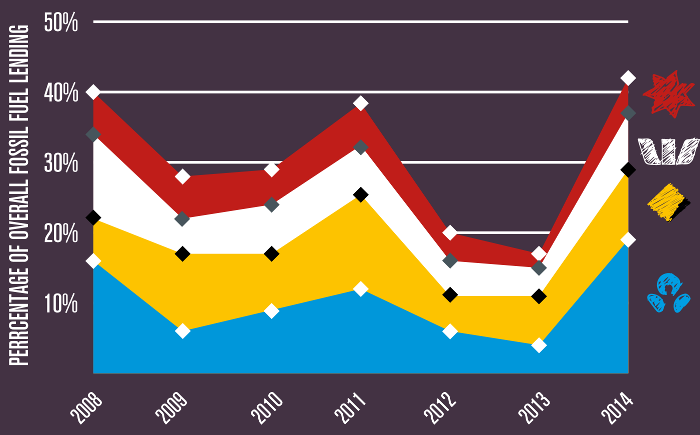
The big four banks' involvement in financing Australian fossil fuel projects is immense, and their commitment throughout the seven years that we examined has increased slightly over time. In absolute terms, the big four banks increased their debt financing for the fossil fuel industry from $5.4 billion loaned in 2008 to $6.8 billion in 2014.

This generally made up well over a quarter of all debt funding to the fossil fuel sector, but their overall market position decreased from 40% of debt issued in 2008 to below 20% in 2012 and 2013.

This was due to a huge increase in foreign investment in several multi-billion dollar liquefied natural gas (LNG) projects that reached financial close during this period, diminishing the share of debt provided by Australian banks.

This trend sharply reversed in 2014, with the involvement of Asian financiers in fossil fuel projects falling from $17.5 billion in 2013 to $3.7 billion in 2014, a decrease of 78.8% in twelve months. Over the same period, Australian banks increased their provision of debt to fossil fuel projects in relative terms from 17% to 42%, their highest proportion throughout the period examined.

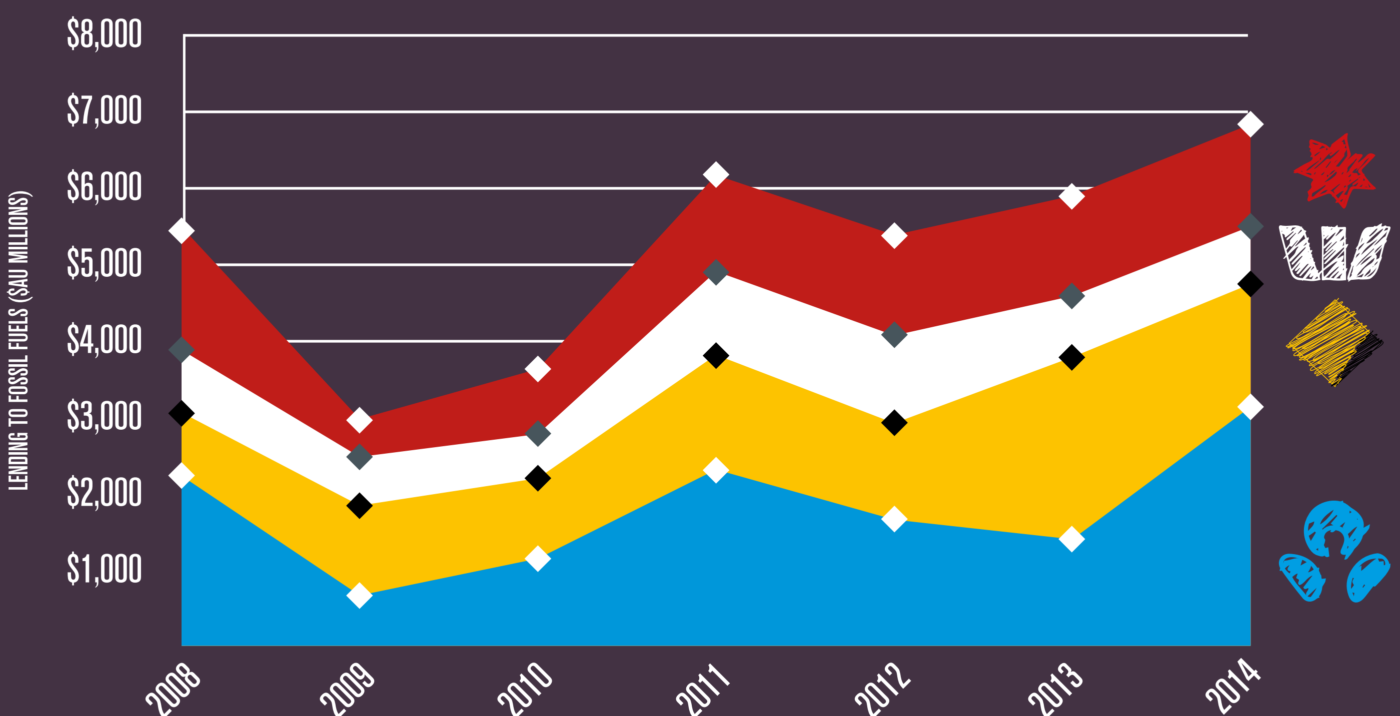
BIG FOUR PERCENTAGE OF LENDING TO FOSSIL FUEL PROJECTS 2008 TO 2014



The big four banks were not equal in their financial support for fossil fuel projects, with Westpac having provided significantly less than the other three, while all banks except ANZ decreased their provision of debt in absolute terms from 2013 to 2014.

In times when foreign bank support for fossil fuels is at its lowest, the role of the big four banks is of greatest importance.

BIG FOUR TOTAL LENDING TO FOSSIL FUEL PROJECTS 2008 TO 2014



EXPORT CREDIT AGENCIES

Export credit agencies (ECAs) are semi-governmental financial institutions that provide loans, insurance and guarantees for local companies to support their international operations, or to projects that offer some national incentive. They often lend much more than commercial banks and offer long-term, low-interest debt that makes a project far more bankable.

It is also common for smaller investors to follow an ECA into a project, and for their investments to be secured by that larger institution, making ECA support integral to many large projects that are undertaken.

ECAs such as the Japan Bank for International Cooperation, the Export-Import Bank of the United States and the Export-Import Bank of China are prominent in recent fossil fuel debt financing due to the multi-billion dollar loans that they provided for some of the world's largest LNG projects.

THE RISE OF EXPORT CREDIT AGENCIES

The role of ECAs in project finance has radically changed over the past ten years, with their debt provision increasing threefold worldwide since 2008.[10]

In our study, ECAs were most prominent in financing Australian LNG projects, which were unprecedented as such large-scale deals had historically only been undertaken by government. The biggest of these deals was the $19 billion Ichthys LNG loan, $11 billion of which was provided by ECAs.

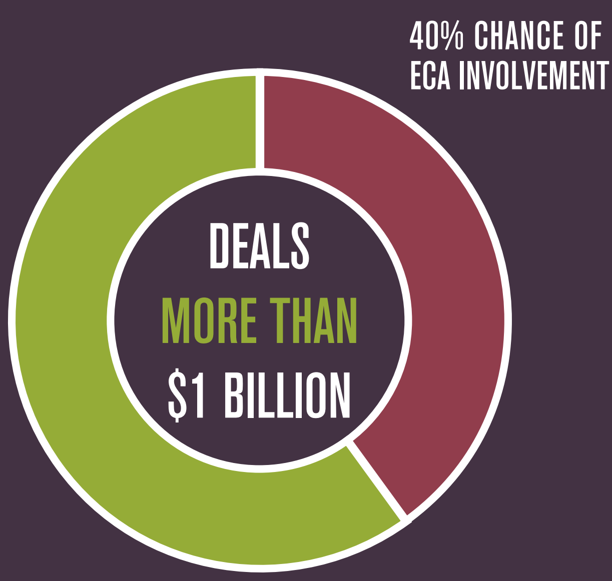
ECAs were most prominent in financing Australian LNG projects

In 2012 and 2013 Ichthys LNG, Gladstone LNG, Australia Pacific LNG and Queensland Curtis LNG all reached financial close, each project requiring billions of dollars in capital. The spike in ECA debt financing is attributable to these projects.

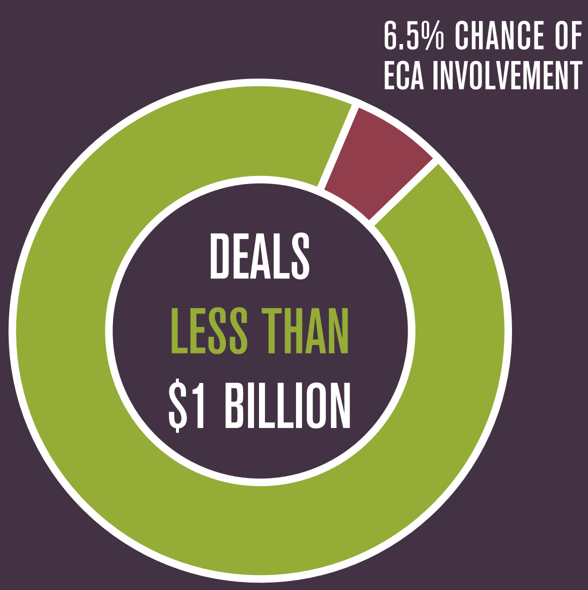
TOP EXPORT CREDIT AGENCIES LENDING TO FOSSIL FUEL PROJECTS

EXPORT CREDIT AGENCY	DEBT ($AU MILLIONS)	NUMBER OF DEALS	COUNTRY OF ORIGIN
Japan Bank for International Cooperation	$8,703.40	7	Japan
Export-Import Bank of the United States	$4,744.68	4	USA
Export-Import Bank of China	$3,397.80	2	China
Export Development Canada	$1,433.90	6	Canada
Export Finance & Insurance Corp	$1,026.25	1	Australia
Korea Exim Bank	$1,026.25	1	Korea

FREQUENCY OF ECA INVOLVEMENT IN DEALS WORTH MORE THAN $1 BILLION



FREQUENCY OF ECA INVOLVEMENT IN DEALS WORTH LESS THAN $1 BILLION



2008 TO 2014 TOP LENDERS TO: COAL MINING

MILLIONS ($AU): $1,000 – $3,500

RANK	BANK	MILLIONS ($AU)
1	Bank of China	
2	ANZ	$944m
3	CommBank	$728m
4	NAB	$681m
5	BNP Paribas	

2008 TO 2014 TOP LENDERS TO: LNG

MILLIONS ($AU): $4,000 – $10,000

RANK	BANK	MILLIONS ($AU)
1	Japan Bank for International Cooperation	
2	EX-IM Bank of the US	
3	EX-IM Bank of China	
4	Mizuho Financial Group	
5	Bank of Tokyo Mitsubishi	

2008 TO 2014 TOP LENDERS TO: COAL PORTS

MILLIONS ($AU): $1,000 – $3,000

RANK	BANK	MILLIONS ($AU)
1	CommBank	$2,514m
2	ANZ	$2,385m
3	State Bank of India	
4	Westpac	$1,344m
5	Standard Chartered	

2008 TO 2014 TOP LENDERS TO: GAS POWER

MILLIONS ($AU): $1,000 – $2,000

RANK	BANK	MILLIONS ($AU)
1	NAB	$1,552m
2	ANZ	$1,471m
3	CommBank	$964m
4	Suncorp Metway	
5	UniCredit	

2008 TO 2014 TOP LENDERS TO: COAL POWER

MILLIONS ($AU): $1,000 – $2,500

RANK	BANK	MILLIONS ($AU)
1	ANZ	$2,491m
2	NAB	$2,123m
3	CommBank	$964m
4	Société Générale	
5	Westpac	$851m

2008 TO 2014 TOP LENDERS TO: GAS SUPPLY

MILLIONS ($AU): $1,000 – $3,500

RANK	BANK	MILLIONS ($AU)
1	ANZ	$3,250m
2	CommBank	$2,394m
3	Westpac	$2,073m
4	Bank of Tokyo Mitsubishi	
5	NAB	$1,441m

TO SEE THE FULL TABLES BE SURE TO VISIT: WWW.MARKETFORCES.ORG.AU/MAP

AUSTRALIA'S DIRTY FOSSIL FUEL PROJECTS

Since late 2013 a number of new deals have been finalised to support some of Australia's dirtiest and most controversial fossil fuel projects. Here we list details of some of these recent deals. For more information on these projects and to see who has financed them since 2008 go to:

WWW.MARKETFORCES.ORG.AU/MAP

MUJA A & B

The A and B units of Muja power station in Collie, Western Australia, were retired due to age and inefficiency in 2007. However, a gas shortage in 2008 led to the units being recommissioned and they have remained on since. In 2016 it will be 50 years since Muja A and B first began operating.

DETAILS OF LOAN TO MUJA A & B SIGNED IN DECEMBER, 2013

BANK	DEBT ($AU MILLIONS)
ANZ	$46m
NAB	$46m

HAZELWOOD

Hazelwood is the most carbon intensive coal-fired power station in Australia. In February 2014 the mine feeding Hazelwood caught fire and was ablaze for 45 days, often engulfing nearby Morwell in toxic smoke. The loans listed here were made just a few months after the mine fire, enabling the Hazelwood power station and mine to continue operating.

DETAILS OF LOANS TO HAZELWOOD SIGNED IN JUNE 2014

BANK	DEBT ($AU MILLIONS)
ANZ	$300m
Bank of Tokyo - Mitsubishi	$157m
Sumitomo Mitsui Banking Corp	$157m
Commonwealth Bank	$72m

ABBOT POINT

In 2011 Adani bought the existing Abbot Point coal port with the help of a $1.2 billion loan. In late 2013, this debt was refinanced in a deal that saw several of the initial lenders leave the deal. This left three banks to share a heavy level of exposure, in particular Commonwealth Bank. The Abbot Point expansion is a major concern with several massive new terminals proposed at the site, which sits within the Great Barrier Reef World Heritage Area.

DETAILS OF LOAN TO ABBOT POINT SIGNED IN NOVEMBER 2013

BANK	DEBT ($AU MILLIONS)
Commonwealth Bank	$707m
Westpac	$250m
Deutsche Bank	$167m

MAULES CREEK

The Maules Creek coal mine is one of Australia's most controversial new fossil fuel projects. The project has continued despite significant community opposition, impacts upon the local environment and climate. Whitehaven Coal is turning state forest containing Koala habitats and endangered species into an open-pit coal mine. This deal refinanced the $1.2 billion loan that Whitehaven Coal secured in late 2012.

DETAILS OF LOAN TO MAULES CREEK SIGNED MARCH 2015

BANK	DEBT ($AU MILLIONS)
ANZ	$100m
Commonwealth Bank	$100m
NAB	$100m
Westpac	$100m
FOR A FULL LIST OF LENDERS GO TO: WWW.MARKETFORCES.ORG.AU/MAP	

BAYSWATER AND LIDDELL

In September 2014 AGL acquired the Bayswater and Liddell coal-fired power stations from Macquarie Generation. The purchase meant AGL became Australia's most carbon polluting company, adding more than 20 million tonnes of CO_2 annually to its carbon footprint. The figures listed below are part of a broader refinancing deal that applied to AGL's coal power portfolio.

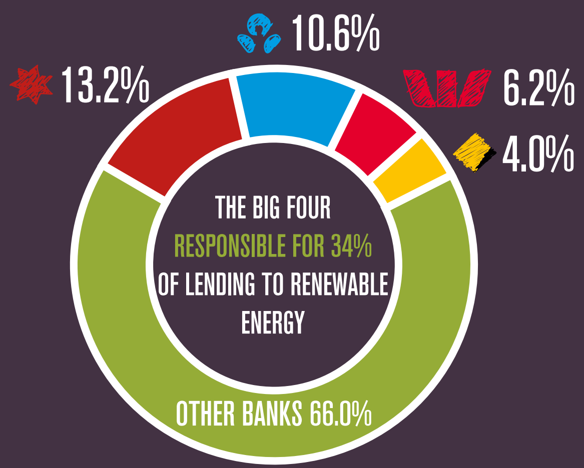
DETAILS OF LOAN TO BAYSWATER AND LIDDELL SIGNED IN NOVEMBER 2014

BANK	DEBT ($AU MILLIONS)
ANZ	$175m
NAB	$175m

PUTTING RENEWABLES LENDING IN PERSPECTIVE

When banks are challenged over their enormous support for the fossil fuel sector, a common response is that they also invest in renewable energy.

LENDING TO RENEWABLE PROJECTS 2008 TO 2014*



* *Includes Australian deals, and international deals that involved Australian lenders.*

Investing in renewables is important, but it does not offset or excuse banks' support for fossil fuels. Renewable energy needs to be replacing fossil fuels. While lending to coal, oil and gas projects continues, we will see ever more carbon emissions and environmental damage from fossil fuels.

What's more, the amount loaned to renewable energy by Australia's big banks is still vastly overshadowed by their support for dirty fossil fuels

Commonwealth Bank is a major outlier having loaned almost 13 times as much to fossil fuels since 2008 as they have to renewable energy

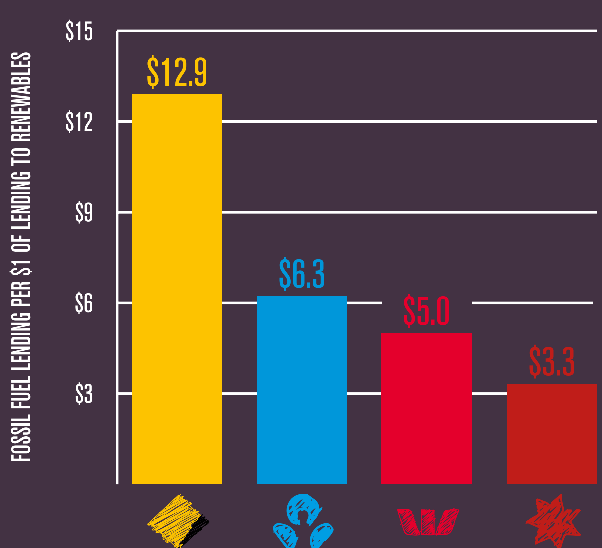
Market Forces has uncovered $6.4 billion in loans by the big four banks to renewable energy projects and companies around the world. Of this, NAB had the greatest proportion of investment from the big four (38.9%), followed closely by ANZ (31.2%), then Westpac (18.1%) and Commonwealth Bank (11.9%).

Contrasted against the big banks' fossil fuel financing, it becomes clear that lending to clean, renewable energy is vastly outweighed by its dirty alternatives. Each of the big four has loaned more to fossil fuels than they have to renewable energy since 2008, with some striking differences between the banks.

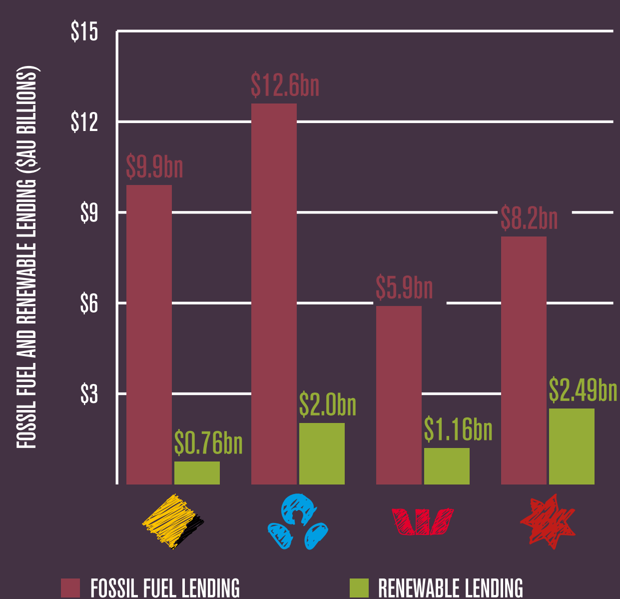
NAB has the best ratio of fossil fuel to renewable energy lending of the big four, but has still loaned 3.3 times as much to fossil fuels as they have to renewable energy since 2008.

ANZ's fossil fuel to renewable energy lending ratio is almost twice as bad, at over six to one, and Commonwealth Bank is a major outlier, having loaned almost 13 times as much to fossil fuels since 2008 as they have to renewable energy.

LENDING TO FOSSIL FUELS BASED ON EACH $1 LOANED TO RENEWABLES



COMPARING LENDING TO FOSSIL FUELS AND RENEWABLE ENERGY



RHETORIC VS. REALITY

Each of Australia's big four banks likes to talk the talk when it comes to sustainability, and they have all signed up to the Equator Principles as well as a range of other voluntary investment standards. However, as shown by their recent support of the fossil fuel sector, the reality of each bank's position on climate change and the environment is a long way removed from its rhetoric.

"ANZ will not knowingly support customer activities that significantly impact on culturally or environmentally sensitive areas"

LENDING TO COAL AND GAS IN THE REEF: $2.7 BILLION

"We recognise our role in helping organisations to transition to a low carbon economy"

RATIO OF FOSSIL FUEL TO RENEWABLE LENDING: 12.9 TO 1

"We have a key role to play in providing finance to assist the transition to a clean energy future"

2ND BIGGEST LENDER TO COAL FIRED POWER

"Reducing the emissions intensity of the Australian economy is vital if we are to sustainably position Australia for the challenges of the future"

$6 BILLION LOANED TO FOSSIL FUELS SINCE 2008

VOLUNTARY STANDARDS SIGNED BY THE BIG FOUR BANKS[11]

INITIATIVE	ANZ	COMMBANK	WESTPAC	NAB
Banking Environment Initiative	✗	✗	✓	✗
Carbon Disclosure Project	✓	✓	✓	✓
Equator Principles	✓	✓	✓	✓
Global Reporting Initiative	✓	✓	✓	✓
UNEP Finance Initiative	✓	✓	✓	✓
United Nations Global Compact	✓	✓	✓	✓

WHAT THE BANKS NEED TO DO

The vast majority of fossil fuel projects in Australia rely on our big four banks to get off the ground and keep operating. If further irreparable environmental, social and climate damage is to be avoided, then it is imperative that these banks and all other financial institutions:

- Not provide financial support* to any project that expands the fossil fuel industry,
- Not provide financial support† to any project that would negatively impact a World Heritage Area, involves the destruction of any environmentally significant landscape or habitat, or infringes upon human rights,
- Measure and disclose financed emissions‡ and commit to reducing financed emissions year-on-year in line with scientifically agreed targets for reducing greenhouse gas emissions,
- Publicly advocate in favour of increased renewable energy policy to maximise the opportunities for financing renewable energy projects and companies in Australia, and
- Disclose all financial support§ for the fossil fuel sector.

* *Including lending, equity, underwriting and performing advisory and arranging roles. Includes corporate finance to fossil fuel companies pursuing*
† *ibid.*
‡ *Carbon dioxide equivalent emissions resultant from activities financed by that bank, discounted on a case by case basis to reflect the proportional exposure of the bank to the overall loan facility.*
§ *ibid.*

STILL FINANCING REEF DESTRUCTION

In 2013, Market Forces released the report *Financing Reef Destruction* identifying the leading lenders to coal and gas ports in the Great Barrier Reef (GBR) World Heritage Area. We can now update these figures to capture the two years since *Financing Reef Destruction* was released.

Lending to coal and gas projects in the GBR has continued, and a major refinancing of Abbot Point (see centre pages) was key to Commonwealth Bank taking over as the leading lender.

A multitude of proposed coal and gas projects has had the Reef teetering on the World Heritage "in Danger" list for several years. While many projects have been cancelled, the World Heritage Committee maintains that coal ports pose major risks to the Reef, underscoring the need to halt the Abbot Point expansion.

TOP COMMERCIAL LENDERS TO GBR WORLD HERITAGE AREA PROJECTS

BANK	DEBT ($AU MILLIONS)
Commonwealth Bank	$2,937.93
ANZ	$2,661.67
Westpac	$2,128.91
NAB	$1,798.71
State Bank of India	$1,711.23
Bank of Tokyo-Mitsubishi	$1,304.46
Mizuho Financial Group	$1,229.83
HSBC	$1,015.05
Standard Chartered	$964.54

ECA LENDERS TO GBR WORLD HERITAGE AREA PROJECTS

BANK	DEBT ($AU MILLIONS)
Export Import Bank of the US	$4,637.92
Export-Import Bank of China	$3,397.8
Export Development Canada	$956.01

THE GOOD NEWS

When *Financing Reef Destruction* was released, a host of new coal export projects were proposed in the World Heritage Area. A combination of deteriorating economic conditions and sustained community opposition have caused many of these projects to be cancelled, avoiding hundreds of millions of tonnes more coal being mined and exported each year. Among them are Glencore's Balaclava Island project, The Fitzroy Delta Terminal and Dudgeon Point, while mining giants Rio Tinto, BHP Billiton and Anglo American all withdrew from Abbot Point.

DEFENDING THE REEF

While politicians attempted to shift blame to one another over how the Reef was managed, Australians stood up to defend it from the threat of new coal and gas projects.

Hundreds of thousands have taken action in recent years, calling on political and business leaders to withdraw support for proposed new fossil fuel projects that further damage the Reef. Individual citizens have also gone to great lengths to protect their part of the Reef's beautiful coastline.

WHITSUNDAY RESIDENTS AGAINST DUMPING - HAVE A HEART CAMPAIGN

PHOTO: BEYOND COAL AND GAS/CORRIN STICKLAND

THE REMAINING THREAT

The battle to save the Reef from ongoing industrialisation and damage due to fossil fuels is far from over, as several major new coal export terminals at Abbot Point remain on the table. The threats posed by these projects include significantly increasing shipping activity through the reef each year, dredging, and further industrialising costal habitats of numerous endangered and threatened species.

Rising CO_2 emissions are also increasing ocean temperatures and acidity. Already, human influences on the Reef have caused a 50% decrease in hard coral cover since 1985, and unless global coal consumption rapidly declines, the Reef will be destroyed.[12]

The Abbot Point expansion is set to export coal from the Galilee Basin, one of the world's largest untapped coal reserves. Plans to open up the Galilee spell disaster for the climate, with proposals to mine enough coal to add 705 million tonnes of CO_2 to the atmosphere each year.

The immediate environmental implications are also immense, as the mines threaten the local water table and would increase air pollution around the mine site and transport corridor.

The largest and most advanced of the Galilee coal projects is Adani's Carmichael mega mine and its new T0 coal export terminal at Abbot Point. The project would cost a total of $16.5 billion, much of which is upfront capital to build the mine, port and a rail corridor stretching hundreds of kilometers.

Whitsunday resident Tony Brown took the case against the new coal export terminals at Abbot Point to Deutsche Bank and HSBC. Both of those banks agreed to not finance the coal port's expansion.

WHO IS AND ISN'T FUNDING GALILEE COAL EXPORTS

Since May 2014, eleven major international banks have committed to not finance part or all of the Galilee coal export supply chain. However, Adani is still actively looking to banks to provide the billions of dollars required to enable their project.

Standard Chartered, assisted by Commonwealth Bank, are acting as advisors,[13] helping Adani put proposals to possible lenders for the Carmichael mine. Adani has drawn down $680 million of finance from Standard Chartered for the mine.[14] At their 2015 AGM, Standard Chartered announced that it would go "no further" with the project until the environmental impacts are more thoroughly examined.

Adani has talked up its prospects of finance from Korea, China, Japan and the US, while the big four Australian banks remain among the leading contenders to provide debt. Preventing this finance will be critical to ensuring the Galilee Basin is not opened up for coal mining.

WHO IS FUNDING GALILEE COAL EXPORTS

WHO IS IN

Standard Chartered, Commonwealth Bank

ANZ? NAB? US EX-IM? Westpac? UBS? Bank of Tokyo-Mitsubishi? Korea EX-IM? Bank of China? Agricultural Bank of China? China Construction Bank? Industrial Commercial Bank of China? Credit Suisse? Bank of America? Export Finance and Insurance Corporation?

WHO HAS RULED OUT FUNDING

JP Morgan Chase, Citi Bank, Royal Bank of Scotland, BNP Paribas, Deutsche Bank, Morgan Stanley, Goldman Sachs, HSBC, Crédit Agricole, Barclays Société Générale

STRANDED ASSETS

Stranded assets are investments that are not able to deliver a viable economic return and which are likely to see their economic life curtailed due to a combination of technology, regulatory and/or market changes.

> ***"If the current agreed climate change targets are to be met with any reasonable certainty, over half the proven fossil fuel reserves would have to stay where they are - underground"[15]***
> **Deutsche Bank Equity Research**

As the world moves towards a low carbon economy, it will quickly become clear that fossil fuel companies have been massively overvalued. Already we have seen a 70% decline in average market value of the world's largest coal mining companies over the last five years. The financial risk alone is causing some individuals and institutions to join the growing divestment movement on pragmatic risk mitigation grounds.

> ***"Smart investors can see that investing in companies that rely solely or heavily on constantly replenishing reserves of fossil fuels is becoming a very risky decision"[16]***
> **Professor Lord Stern, London School of Economics**

Companies that continue to pour money into fossil fuel projects are posing huge risks not only to the environment, but also to their balance sheets and investors.

STRANDED ASSETS IN AUSTRALIA

Along with the Galilee Basin coal mine proposals, which have already incurred billions of dollars in sunk costs and are looking less and less economically viable, the following are some of the greatest examples of stranded assets here in Australia.

AUSTRALIA PACIFIC LNG:

The Australia Pacific LNG project incorporates the mining of coal seam gas (CSG) in Queensland's Surat and Bowen basins, which is transported to a liquefaction facility before being exported. With the Australian CSG industry facing widespread public opposition over its appalling local environmental impacts, and increasing political wariness, there is a real chance that this multi-billion dollar project may end up undersupplied and hence underutilised. Coupled with the 20% to 30% capital cost blow-outs already incurred, this project vand several similar LNG ventures are becoming increasingly unlikely to meet their expected economic value.

LANCO INFRATECH'S GRIFFIN COAL:

In 2011 Lanco Infratech of India acquired the Griffin coal mine in Collie, Western Australia for $740 million. With plans to more than quadruple existing thermal coal production and build a $1 billion coal export facility at Bunbury, the project was intended to be a major global expansion for Lanco. However, with Lanco's parent company entering a corporate debt restructuring in 2014, and continued cash flow, production and cost issues at Griffin Coal, this acquisition is a stranded asset unable to generate an acceptable return on Lanco's investment. The application for the port development was withdrawn by the West Australian Government in 2014.

WIGGINS ISLAND COAL EXPORT TERMINAL:

Due to limited demand for Australian coal exports and financial difficulties for many of the coal mine proponents of this project, Wiggins Island will continue to run well below capacity for the foreseeable future, and may soon become obsolete if exports continue to decline. Saddled with nearly $3 billion of debt funding, both the equity and debt financiers potentially face a collective billion dollars of write downs on this peak of cycle 'investment'. In July 2015 Lloyds bank sought to offload its more than $100 million of distressed debt exposure to Wiggins Island. Aurizon's associated $800 million dedicated rail link to this port is likewise looking increasingly like a stranded asset.

METHODOLOGY

Market Forces obtained primary data from a range of finance industry databases including Thomson Reuters Project Finance International, Bloomberg, and IJ Global. Further primary data was sourced from company filings and reports, market disclosures and finance journal articles. Figures were cross-referenced for consistency and verified against secondary material. This report presents a synthesis of this material, after each loan has been checked and verified.

The loans we have captured and included in this report include refinancings, as we consider each refinancing of a loan as a conscious decision by a lender to continue supporting a project. Where corporate lending has taken place, we have sought direction on the purposes of the loan and if this is not available, discounted the value of that loan to reflect the proportion of the company's business that is involved in the fossil fuel supply chain.

We have done our best to capture as much information as possible in this study but know that this will only ever be a partial picture of the lending that has taken place to the fossil fuel sector in Australia. All values are expressed in Australian dollars and no adjustments have been made to reflect net present value of facilities arranged in years prior to 2014.

Throughout this report we refer to the time frame studied as 2008 to 2014. Note that we have included some deals that took place in the first few months of 2015. They will be included in the overall accounting of fossil fuel lending but will not influence the year-to-year presentation of results.

REFERENCES

[1] UNESCO (2014), 'Director-General meets with experts responsible for health of Great Barrier Reef'

[2] BP (2014), 'BP Statistical Review of World Energy, June 2014'

[3] International Energy Agency (2014), 'Key World Energy Statistics'

[4] World Wildlife Fund For Nature (website), 'Impacts of global warming and climate change'

[5] United Nations, 'Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009'

[6] United Nations (2015), 'Report on the structured expert dialogue on the 2013-2015 review'

[7] Carbon Tracker Initiative (2013), 'Unburnable Carbon: Are the World's Financial Markets Carrying a Carbon Bubble?'

[8] Nature (2015), 'The geographical distribution of fossil fuels unused when limiting global warming to 2 ^{0}C'

[9] Fossil Free Indexes (2015), 'The Carbon Underground'

[10] Baker & McKenzie (2014), 'Power Shift: The Rise of Export Credit and Development Finance in Major Projects'

[12] The Great Barrier Reef Marine Park Authority (2014), 'Great Barrier Reef Outlook Report 2014'

[13] Australian Financial Review, 18 Nov 2014, 'Adani's week of positives in an anti-coal atmosphere'

[14] The Guardian, 5 May 2015, 'Standard Chartered faces pressure to cut links to Australian 'carbon bomb' project'

[15] Deutsche Bank Research Haus (2015), 'Konzept: Peak Carbon Before Peak Oil'

[16] Carbon Tracker Initiative (2013), 'Unburnable Carbon 2013: Wasted capital and standard assets'

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Market Forces is an affiliate project of Friends of the Earth Australia and a member of the BankTrack network of organisations working towards responsible investment in the banking sector.

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