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Over 100 Global Financial Institutions Are Exiting Coal, With More to Come

Every Two Weeks a Bank, Insurer or Lender Announces New Restrictions on Coal

Executive Summary

Today, over 100 globally significant financial institutions have divested from thermal coal, including 40% of the top 40 global banks and 20 globally significant insurers. Momentum is building.

Since January 2018, a bank or insurer announced their divestment from coal mining and/or coal-fired power plants every month, and a financial institution who had previously announced a divestment/exclusion policy tightened up their policy to remove loopholes, every two weeks.

Global capital is fleeing the coal sector. This is no passing fad.

In total, 34 coal divestment/restriction policy announcements have been made by globally significant financial institutions since the start of 2018.

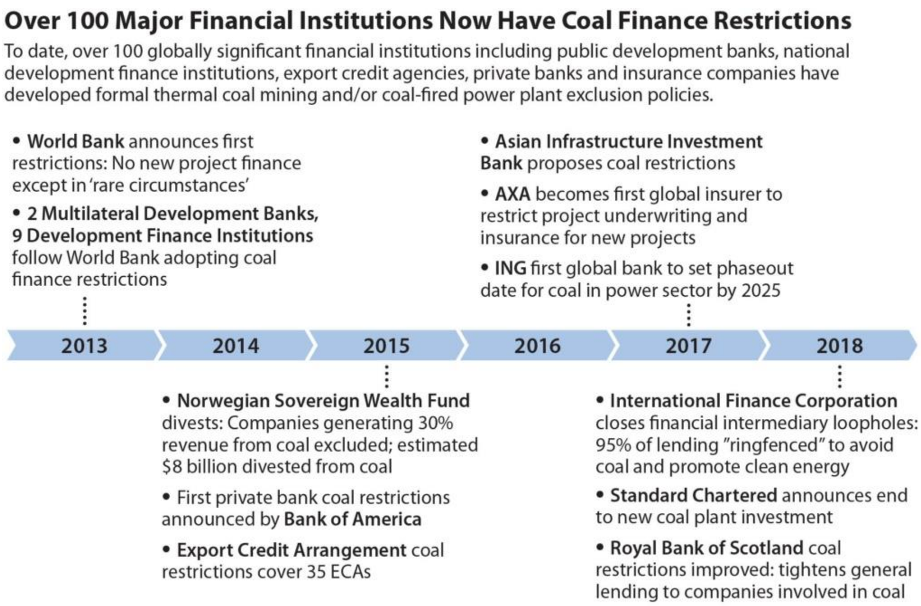
In the first nine weeks of 2019, there have been five new announcements of banks and insurers divesting from coal. Global capital is fleeing the thermal coal sector. This is no passing fad.

Since 2013 more than 100 global financial institutions have made increasingly tight divestment/exclusion policies around thermal coal.

When the World Bank Group moved to exit coal in 2013, the ball started rolling. Following, Axa and Allianz become the first global insurers to restrict coal insurance and investment respectively in 2015, and their policies have subsequently been materially enhanced. Next, some 35 export credit agencies (ECA) released a joint statement agreeing to new rules restricting coal power lending. In the same year, the China-led Asian Infrastructure Investment Bank trumpeted its global green credentials with the Chairman confirming the Bank was in practice ruling out finance for coal-fired power plants.

One of the strongest moves in 2015 came when the world’s second largest sovereign wealth fund based in Norway (US$1 trillion) stepped up its exclusion criteria and started divesting from coal. When such a significant investor acts, global momentum increases.

In May 2018 Dai-ichi Life of Japan issued a new policy announcing it would no longer insure coal. Sumitomo Mitsui Trust Bank ruled out coal-fired power plant lending soon after. In September 2018 Standard Chartered announced the end of lending for new coal plants, anywhere in the world.



To close the year, some 415 global investors managing a collective US$32 trillion called for a complete thermal coal phase out by 2030 across the OECD.

By the start of 2019 over 30 global banks had ceased project financing for thermal coal mines and/or coal-fired power plants worldwide, without geographic loopholes.

When such a significant investor acts, global momentum increases.

In January 2019 GMO founder Jeremy Grantham stated thermal coal is "dead meat". During the month Export Development Canada (EDC) and Barclays both announced their exit from coal project finance, with EDC's commitment comprising all thermal coal infrastructure including ports and rail links.

In late January 2019 Varma of Finland announced its cessation from investing in coal while Nedbank of South Africa withdrew financing for two major coal-fired power plant projects in South Africa, then February 2019 saw VIG of Austria cease coal insurance.

Over 100 and counting. The implications of this are electrifying.

The financial institutions leaving coal behind are no ethically minded minnows – they are some of the largest across the globe. As extreme weather increases in frequency and extremity the list will continue to grow, while the lending exclusions and divestments will increasingly be delivered upon.

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Introduction

Global Financial Corporations Are Progressively Implementing 'Paris Agreement' Compliant Policies

Over 100 globally significant financial institutions,[1] including public development banks, national development finance institutions, export credit agencies, private banks and insurance companies, have developed formal thermal coal mining and/or coal-fired power plant restriction policies since 2013.

Since the start of 2018, there have been 34 new or significantly improved announcements from global financial institutions, one every two weeks.[2]

Of 34 new coal exclusion policies announced since January 2018, 24 were new policies from financial institutions, and 10 were expanded policies building upon earlier coal-related climate and divestment commitments.

The math is simple. As the world acts on climate change, coal becomes the most obvious stranded asset.

Five new announcements in 2019 alone show the increasing geographical diversity of the globally significant institutions exiting coal, including Export Development Canada, Varma of Finland, Nedbank of South Africa, Barclays Bank UK and VIG of Austria.

While many of the policies initially contained exclusions and technology or country exemptions, these loopholes are increasingly being closed off in subsequent policy refinements.

Globally significant financial institutions (which we define as assets under management and/or equity market capitalisation of greater than US$10bn) are exiting coal at progressively faster rates because the math has become simple: coal causes climate change, and as the world acts on climate change, coal becomes the most obvious stranded asset.

IEEFA finds once an institution begins accepting the science of climate change and endorsing the Paris Agreement, they quickly understand their formal policies are usually not aligned with any rigorous climate scenario. Many of the policies which initially were far from complete or rigorous (sometimes little more than

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[1] IEEFA defines globally significant financial institutions to be a threshold of at least US$10 billion of assets under management (AuM) or loans outstanding.

[2] IEEFA notes insurance companies divest coal investments across their asset portfolio, and restrict the provision of insurance, while banks restrict lending to coal companies or projects.

'greenwash') have been subsequently upgraded to be more rigorous and comprehensive, with initial exceptions now removed.

IEEFA notes the International Energy Agency (IEA)'s central New Policy Scenario and even their more ambitious Sustainable Development Scenario are entirely inadequate in modelling a delivery on the Paris Agreement.

As the rate of technology development in the global electricity sector is exceeding all expectations, particularly in terms of renewables deflation, IEEFA notes the global financial institution's new climate policies are forcing a critical evaluation of what a Paris Agreement endorsement really looks like.

The IEA's Beyond 2 Degrees Scenario (B2DS) or Bloomberg NEF's New Energy Outlook modelling shows the true magnitude of change really required.

As this evaluation is being undertaken, **it is clear to IEEFA that global investor and debt capital is fleeing coal at an increasing rate, and it is foreseeable that thermal coal and power plants become uninsurable in the medium term. As a leading example, private finance in India for a new power plant is no longer available.**

The rate of change globally looks very much like dominos falling, raising the question of who will make the next move.

In recent months Japan has been party to what could amount to a pivotal change within government and the business community, with Marubeni Corp and ITOCHU being cases in point, while China and Russia lag well behind.

**Over 100 and counting.
The pace of change is electrifying.**

The geographical diversity of announcements shows global momentum is building, and not withstanding some government members' attempts to obstruct progress, the reality is that finance and corporates are increasingly taking the lead, not waiting for a political consensus to emerge before acting.

Already an emerging theme in 2019 is coal companies' inability to access capital markets for expansions, or mergers and acquisitions.

The CoalTrans USA conference held in January 2019 saw executives lament the fact that access to capital is very tight: banks are still considering lending to coking coal but most refuse lending for thermal coal projects.

Given the industry's propensity to promulgate bullish demand growth forecasts that do not materialise, the behaviour by the banks is exerting some industry discipline, preventing higher prices resulting in a material increase in supply even as demand continues to decline.

European coal demand is down 40% since 2012, and the U.S. market has seen a similar rate of decline. The industry makes a possibly fair point that a lack of access to capital is constraining consolidation which might allow cost savings on integration and downsizing. However, the industry's capacity to destroy investor, lender and worker pension capital suggests this caution is entirely warranted.

IEEFA notes that IEA forecasts suggest unabated thermal coal use must cease globally by 2050 if the world is to successfully restrict temperature rises to 1.5-2.0°C above pre-industrial levels. Global investors are likewise calling for coal use to cease by 2050.

In this report, we address the progress being made by global financial institutions as they rapidly divest from thermal coal, taking a lens to:

- global asset managers;
- multilateral development banks;
- export credit agencies;
- national development finance agencies;
- global insurers and reinsurance firms; and
- leading global banks.

We finish the report with a review of nine global financial institutions who have collectively pledged to invest US$1.4 trillion in clean energy lending over the coming decade.

Where there are threats to incumbent industries, there are also new investing opportunities.

Preceding the Global Financial Crisis (GFC), Chuck Prince as head of Citigroup said: "But as long as the music is playing, you've got to get up and dance", remaining blind to the smart money heading for the door. Prince was late to the party and was duly sacked as Citi shares dropped 99% or US$250bn in the following two years in one of the largest single private shareholder wealth destruction events ever. Citi has belatedly moved from being the top U.S. financer of coal in 2017 to having a coal-fired power plant exclusion policy (with loopholes) in place by December 2018.

In the financial industry global climate risks are clear and known, just as to most, the GFC risks were known. Renewable energy is just one area of this comprehensive technology led disruption, and it is clear that in countries as diverse as India, Mexico, Australia and America that renewables are the low cost source of new generation capacity. The electric vehicle disruption of transport will compound this technology disruption, given the convergence of the transport and energy sectors.

This report suggests that an increasing number of global financial institutions have already looked ahead and are leaving coal at an ever-increasing pace, both in response to global warming and to ensure history, in the form of financial collapse, does not repeat itself. Financiers are increasingly unwilling to wait for governments to awake to the clear need for policy clarity and modernisation, although in this report we detail California as a clear global leader of the benefits of showing policy foresight.

1. Forecasting Coal's Collapse in Climate Change Scenarios

IEA's 'Sustainable Development Scenario' Charts 57% Decline in Coal by 2040

Since 2013, there has been a rapidly increasing number of global financial institutions announcing lending polices addressing the financial risks of climate change.

The 100 and counting global financial institutions already restricting and/or divesting from coal is a clear response to the growing discrepancy between the world's current carbon emissions trajectory and the technological investment and commitment required for the world to deliver on the Paris Agreement, a global treaty committing nations of the world to limit global temperature rises to 1.5-2.0°C above pre-industrial levels.

The International Energy Agency (IEA) models the current trajectory of countries acting to reduce emissions under its New Policy Scenario (NPS), putting the world on track for an unacceptable 2.7°C, or more if feedback loops create more non-linear change.

In contrast, the IEA's Sustainable Development Scenario (SDS) forecasts a 50% chance of holding global temperature rises to 2.0°C. (The world would need far more aggressive policy changes to give any legitimacy to a 1.5°C ambition). The SDS models a 61% decline in global thermal coal demand by 2040. (Table 1.1.)

Table 1.1: IEA World Coal Estimates 2014-2017 (actual) vs. 2040 (estimate): NPS vs. SDS

	2014	2015	2016	2017	NPS 2040	NPS Chg vs 2017	SDS 2040	SDS Chg vs 2017
Total Coal (Mtce)	5,680	5,531	5,225	5,360	5,441	1.5%	2,282	-57.4%
Coking Coal (Mtce)	1,016	994	956	960	806	-16.0%	579	-39.7%
Thermal Coal (Mtce)	4,374	4,254	3,979	4,134	4,412	6.7%	1,609	-61.1%
Coking Coal % of total Vol.	17.9%	18.0%	18.3%					

Source: IEA WEO2017 page 644-645, WEO2018 pages 520-521, IEEFA Calculations.

Realistically the SDS is far from sufficient to deliver on the Paris Agreement. The decline trajectory for thermal coal globally needs to be terminal by 2050, absent carbon capture and storage (CCS). This is clearly modelled in the IEA's Beyond 2°C Scenario (B2DS) and Bloomberg's New Energy Finance (BNEF) New Energy Outlook

2018 scenario which models a 50% chance of limiting average future temperature increases to 1.75°C utilising a rapid decarbonisation pathway.

Another factor driving the global acceleration of coal divestment coupled with institutionalisation of rigorous climate policy statements stems from the Task Force on Climate-related Financial Disclosures (TCFD).

Under the visionary guidance of Bank of England's Governor Mark Carney,[3] the Financial Stability Board (FSB) – an international body monitoring and making recommendations about the global financial system – has strongly endorsed the industry-led TCFD and its (for now) voluntary agreement to develop aligned and uniform disclosures acknowledging and assessing climate risks as they relate to financial institutions.

The TCFD covers all companies. This is important given financial institutions both own, insure and lend to virtually every company in the world, and any evaluation of climate risk requires clarity, transparency and reporting on systemic risks in their underlying asset and liability exposures.

While companies are currently not required to comply with the TCFD, financial regulators[4] and courts are increasingly recognising that directors have a fiduciary duty to assess, manage and report to shareholders on all key risks. For example, although a company's Board might deem the IEA's SDS path unlikely, their Fiduciary Duty will be to show they have clearly evaluated the financial risks in the event they are wrong.

A third factor driving global divestment away from coal is capacity versus utilisation. While global coal-fired power plant capacity has continued to grow over the last decade, the concurrent collapse in average global coal-fired power plant utilisation rates has seen record lows reached each year. (See Figure 1.2)

Renewables and energy efficiency have massively undermined coal power's viability. The ongoing deflation in renewable energy contrasts with the long-term inflationary nature of coal-fired power plants.

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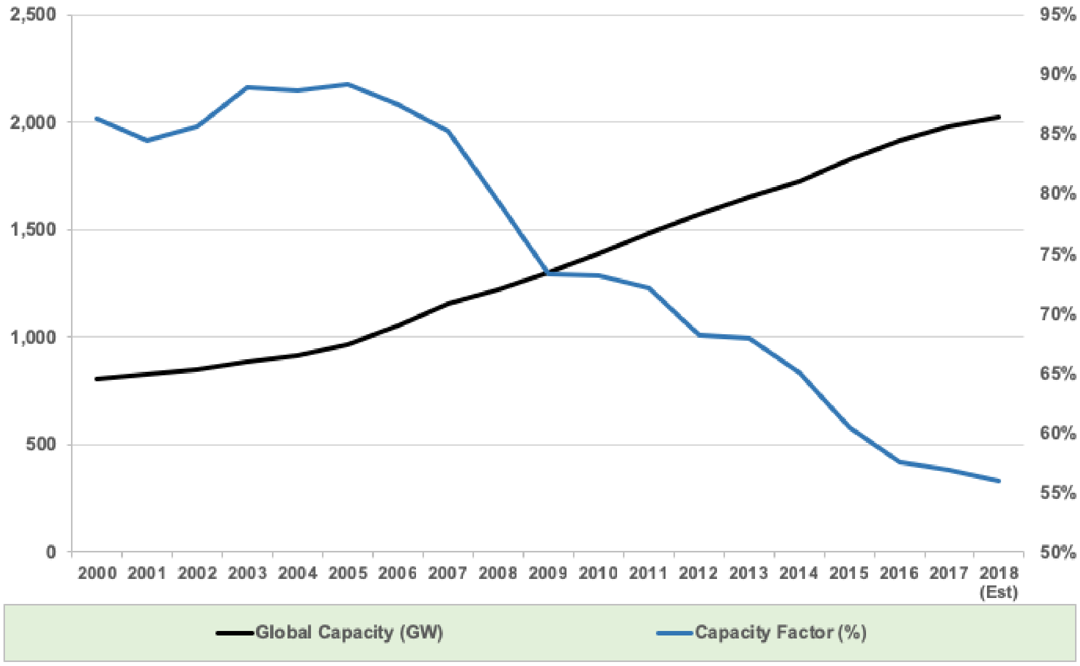
[3] In September 2015 Mark Carney gave the landmark speech "Breaking the tragedy of the horizon". This has been built upon in subsequent keynote speeches, including in April 2018: "A transition in thinking and Action."

[4] To take Australia as an example, the Australian Prudential Regulation Authority (APRA)'s Geoff Summerhayes and the Australian Securities and Investment Commission (ASIC)'s John Price have made very clear policy positions for Financial Institutions overall and for Company Directors on Fiduciary Duties, implementing and building upon the guidance of the FSB and the TCFD.

Figure 1: Global Coal-fired Power Plants: Capacity Growth but Utilisation Falling



Source: Global Coal Plant Tracker, BP World Statistics, IEEFA Calculations.

Modelling Global Energy Demand With Climate Change Scenarios

The International Energy Agency (IEA) is an independent intergovernmental organisation established in 1974 under the framework of the Organisation for Economic Cooperation and Development (OECD). Each year, the IEA releases a World Energy Outlook report which, among other things, attempts to model global energy demand using various scenarios.

IEEFA sees the IEA's Sustainable Development Scenario is the most likely reflection of the world's likely energy future, but the Beyond 2°C Scenario is what financial institutions are committing to when they set Paris Agreement compliant targets.

The **Sustainable Development Scenario** (SDS) presents the most desirable scenario in terms of human and global safety whereby nations work together to successfully limit climate change by transforming the energy market. Under the SDS, the planet's 'carbon budget' will be exhausted as early as 2023 under a 1.5°C target and by 2040 under a 2°C objective. The SDS falls short of tracking a path towards meeting the Paris Agreement's target of restricting global warming to well below 2°C with any certainty. The SDS projects a significant decline in thermal coal demand, with global trade plummeting 59% by 2040.

The **New Policies Scenario** (NPS) is the IEA's central scenario. Under this scenario, emissions continue to slowly rise to 2040 and global temperatures will likely increase by at least 2.7°C by mid-century. The NPS assumes people and countries in the world will not take significant action to act on carbon emissions in line with the commitments included in the Paris Agreement. Under the NPS, global coal trade declines 5% by 2040.

The **Current Policies Scenario** (CPS) assumes no effective concerted action on climate such that the globe's carbon dioxide levels continue to increase and the global warming target of 1.5°C is exceeded by as early as 2022. By definition, the CPS is consistently out-of-date as any policies and measures that have taken place since mid-2018 are not included.

In the **66% 2°C scenario**, global policies are set to give the world a 66% chance that the <2°C Paris target is met through an 'an unparalleled ramp up of all low-carbon technologies in all countries' and the 'rapid phase out of fossil fuel subsidies', including massive increases to carbon pricing and 'extensive energy market reforms' and mandates. 66% 2°C projects the fastest structural decline for the thermal coal industry and offers a more definite chance of meeting the Paris target of restricting global warming to well below 2°C.

The **beyond 2°C scenario** (B2DS) sets out a rapid decarbonisation pathway aligned with international policy goals. To achieve net-zero emissions by 2060, technological innovation is heavily invested in and deployed to the limits across the energy system, resulting in cumulative emissions from the energy sector consistent with a 50% chance of limiting average future temperature increases to 1.75°C. The B2DS falls within the Paris Agreement range of ambition without defining a specific temperature target.

2. 100 and Counting: The Global Financial Institutions Restricting or Divesting Coal

To date, over 100 globally significant financial institutions[5] including global asset managers, public development banks, export credit agencies, national development finance institutions and private banks have developed formal thermal coal mining and/or coal-fired power plant restriction policies.

Table 2.1: Global Financial Institutions Restricting Coal as at Feb 2019

Global Financial Institutions >US$10bn AUM	Total
Multilateral Development Banks (MDB)	7
Export Credit Agencies (ECA)	35
Development Finance Institutions (DFI)	9
Insurers / Reinsurers	20
Global Banks (Private)	34

Source: Corporate Announcements, press reports, IEEFA Calculations as of February 2019.

2.1 Global Asset Managers

Released at the United Nations Climate Change Conference 2018 (COP24), the *2018 Global Investor Statement to Governments on Climate Change*[6] included within its 415 signatories some of the world's largest pension funds, asset managers and insurance companies representing over US$32 trillion in assets.

The *Global Investor Statement* detailed three overarching priorities:

- achieve the Paris Agreement's goals;
- accelerate private sector investment into low carbon transition plans, and
- commit to improve climate-related financial reporting.

Specifically, investors called for a global price on carbon emissions and a thermal coal-plant phase out across the entire OECD by 2030, throughout China by 2040, and across the rest of the world by 2050.

The investors call for the phase out of coal power worldwide by 2050.

Given the clarity of the *Global Investor Statement*, **this report makes only selective references to divestment and climate policy highlights of global asset**

[5] IEEFA defines globally significant financial institutions to be a threshold of at least US$10 billion of assets under management (AuM) or loans outstanding.
[6] The Investor Agenda, "Briefing Paper on the 2018 Global Investor Statement to Governments on Climate Change", 10 December 2018.

managers to illustrate the growing momentum and increasingly global nature of divestment in moves reflecting the historical divestment from tobacco, asbestos and munitions firms. Global asset managers are not included in the final tally of over 100 significant financial institutions restricting coal.

Storebrand, Norway's largest private asset manager holding US$85bn of assets under management has been excluding companies associated with coal since 2013 and continues to progressively tighten their definition each year. Norway’s largest pension company KLP (US$81bn AuM) announced in December 2018 it would exclude more global coal/fossil fuel firms.

Norway’s US$1 trillion sovereign wealth fund began divesting from coal in 2015, and has progressively exited other extreme carbon emitters (including tar sands, coal-fired power plant majors, and most recently oil and gas firms).

In 2015 the Governor of California committed the US$350bn Public Employees’ Retirement System (CalPERS) and the US$215bn State Teachers’ Retirement System (CalSTRS) from making new investments in thermal coal firms. In January 2018 the Mayor and Comptroller of the US$189bn New York City fund announced it would divest fossil fuel holdings over the coming five years.

In July 2018 Australian pension funds UniSuper and QSuper threw their combined A$147bn of funds under management behind Climate Action 100+, a 300 strong global investor initiative encouraging the world’s largest corporate greenhouse gas emitters to take necessary action on climate change - lifting to more than A$1 trillion the Australian funds pledged to steer energy-intensive companies away from coal. Local Government Super has consistently been recognised as Australia’s leading fund on climate change issues.

In August 2018 Sweden’s pension fund AP7 (US$54bn AuM) moved to divest 65 global corporate laggards who continue to fund climate denial lobby groups from its passive global equities fund (like World Coal Association and the Minerals Council of Australia (MCA)).

These are the first Korean financial institutions to divest from coal financing.

Europe’s leading asset manager Amundi of France, with over €1.4 trillion in AuM, has applied environmental, social and governance (ESG) criteria to its entire portfolio since October 2018.

In October 2018 Korea’s Teachers’ Pension Scheme and the Government Employees Pension System (total AuM of US$22bn) both announced their financial withdrawal from any new coal-fired power plants. These are the first Korean financial institutions to divest from coal financing.

In November 2018 France’s Caisse des Dépôts Group (€150bn AuM) reduced its investment exclusions to any mining or power firm with more than 10% exposure to coal (previously 20%), building upon FRR’s divestment in December 2016.

2.2 Multilateral Development Banks

In June 2013, then U.S. President Barack Obama released "The President's Climate Action Plan" directing agencies to support climate-resilient investment. The Plan also called for an end to U.S. government support for public financing of new coal plants both domestically and overseas, except in the world's lowest income countries where there are no other economically feasible energy alternatives, and if the most efficient coal technology is deployed.

The U.S. government is the largest shareholder in the World Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, as well as the African Development Bank.

World Bank Group

In July 2013 the World Bank Group took global climate finance leadership, releasing its policy: "Toward a Sustainable Energy Future for All: Directions for the World Bank Group's Energy Sector". This policy included no new project finance for coal-fired power plants or thermal coal mines except in "rare circumstances," which left gaps.

In December 2017, the World Bank followed their 2013 coal commitments by announcing an end to financing oil and gas extraction post 2019.

In October 2018 the World Bank made a landmark decision to cease its plans to fund a 500 megawatt (MW) coal fired power plant in Kosovo – the last coal project on its' books. The then World Bank President, Jim Yong Kim said the Bank could not finance the Kosovo plant even if it wanted to because as the alternatives to coal were so much cheaper, the institution's by-laws would not allow it.

The alternatives to coal are so much cheaper.

European Investment Bank (EIB)

In July 2013 the EIB also released a policy to restrict coal lending.

Asian Infrastructure Investment Bank

In January 2017 the Asian Infrastructure Investment Bank (AIIB) detailed its green credentials with an investment process that to-date has seen no direct project finance for coal projects, although in September 2017 AIIB's IFC Emerging Asia Fund invested in a behind the meter coal power plant for a Myanmar cement operation.

New Development Bank

In July 2018 the New Development Bank (founded by Brazil, Russia, India, China and South Africa, previously called the BRICS Bank) reconfirmed its' renewable energy infrastructure preference. While no formal policy exists, its actions are clear: of 23 global infrastructure projects funded to-date, none are in coal.

Asian Development Bank

In October 2018 the Asian Development Bank (ADB) said coal plants were becoming unviable investments. The ADB incorporates a US$36/t price on carbon on all lending decisions, has a strong bias to renewable energy (targeting US$3bn annual renewables lending by 2020) and last approved funding for an imported lignite plant in Pakistan in February 2014. Using outdated supercritical technology, this US$1.7bn project remains in the pre-permit development stage resulting in complaints by the ADB about its slow progress. The project locks in climate risk and energy poverty for low income people in Pakistan and has attracted criticism of the ADB.

Coal plants are becoming unviable investments.

International Finance Corporation

In October 2018 the World Bank Group's International Finance Corporation (IFC) committed to closing a material loophole that saw the IFC continue to fund private financial institutions who were on-lending to coal projects. Having spent the prior two years reducing its indirect exposure to coal projects via intermediaries, IFC's new policy now ringfences almost all indirect lending to ensure it excludes coal and reaches its priorities of energy efficiency and renewables in the energy sector.

European Bank for Reconstruction and Development

In December 2018 the European Bank for Reconstruction and Development (EBRD) expanded its no new financing for coal projects policy to most upstream oil projects, and removed specific country exclusions.

Table 2.3: Multilateral Development Banks Restricting Coal

	Multilateral Development Banks	First Restriction	Latest Restriction
1	World Bank	2013	Oct 2018
2	European Investment Bank		July 2013
3	Asia Infrastructure & Investment Bank		Jan 2017
4	New Development Bank (BRICS bank)		July 2018
5	International Finance Corporation (part of the World Bank)		Oct 2018
6	Asian Development Bank		Oct 2018
7	European Bank for Reconstruction and Development		Dec 2018

Source: Corporate Announcements, press reports, IEEFA Calculations.

In November 2017 the **Nordic Investment Bank** (NIB) further tightened its climate policies. Although the bank spans eight countries it has been excluded from our list of globally significant institutions restricting coal given loans of just €600-800m per annum.

2.3 Export Credit Agencies

IEEFA notes 35 export credit agencies (ECA's) have included restrictions on coal.

Organisation for Economic Co-operation and Development

In November 2015 the Organisation for Economic Co-operation and Development (OECD) designated categories of coal plants ineligible for export credits in a policy that covers 35 export credit agencies (ECA). As of January 2019, OECD guidelines for large coal-fired power plants allows financing of only ultra-supercritical technologies, or with an emissions intensity below 750g of carbon dioxide per kilowatt hour (CO2/kWh). Putting "<750g CO2/kWh" into context means excluding every operating coal-fired power plant in Australia and India. The OECD has mandated a significant further tightening by January 2021.

No new financing for coal fired power plants.

France's ECA Coface

In September 2015 France's ECA Coface reconfigured its export policy to cease all support for coal and coal-fired power plants unless they had operational carbon capture and storage (CCS) facilities. The initial 2014 Coface proposal allowed capital subsidies to continue if the coal-fired power plant was deemed "CCS-ready", rather than "CCS operational". Four years later in 2019, there are still no commercial scale, viable coal-fired power plants that are CCS operational, nor any commercial scale projects under construction.

Export Development Canada

In January 2019 Canada's ECA, Export Development Canada (EDC), revealed its new Climate Change Policy to include: "No new financing for coal-fired power plants, thermal coal mines or dedicated thermal coal-related infrastructure – regardless of geographic location."

2.4 National Development Finance Institutions

Development Finance Institutions (DFI) are usually majority-owned by national governments and generally provide capital access for development projects that the private sector is not willing or ready to finance. DFIs lend in their home domestic market, but also often finance projects in developing countries.

IEEFA notes that as of February 2019, there are 12 national development finance institutions restricting financing for coal, with nine considered globally significant.

Table 2.4: National Development Finance Institutions Restricting Coal

	Development Finance Institutions	Latest Restriction
1	FMO of Netherlands (1)	2016
2	KfW	May 2016
3	BNDES of Brazil	Oct 2016
4	Denmark	Sept 2017
5	Finland	Sept 2017
6	Iceland (1)	Sept 2017
7	Norway	Sept 2017
8	Sweden	Sept 2017
9	US	Sept 2017
10	UK	Sept 2017
11	France's AFD	2017
12	SIFEM of Switzerland (1)	2018

Source: Corporate Announcements, press reports, IEEFA Calculations.
Note: (1) Excluded from globally significant financial institutions count due to AUM < US$10bn.

Denmark, Finland, Iceland, Norway, Sweden, United States, U.K.

In September 2013 Denmark, Finland, Iceland, Norway, and Sweden joined the United States in a policy to end public financing by DFI for new coal-fired power plants overseas, except in rare circumstances. The UK joined this policy in November 2013, inserting an exclusion for the world's lowest income nations.

France, Germany and Europe

In May 2016 France's AFD (French Development Agency), the Council of European Development Bank (CEB), the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD), the KfW Development Bank of Germany and the NIB released a joint policy for the adoption of international best practice in all climate risk assessments. IEEFA notes this policy is yet to specifically exclude coal.

The KfW Development Bank of Germany established its own specific guidelines on coal finance in 2015. In June 2016 KfW complied with OCED export credit agency guidelines.

In 2017 France's Agence Française de Développement (AFD) aligned its entire lending with the Paris Agreement, building on its 2013-2015 coal divestment announcements and further expanding its renewables lending program.

Brazil

In October 2016 Brazil's BNDES announced it would no longer support coal- or oil-fired plants, and at the same time it stepped up proactive investment in renewables infrastructure.

In December 2016 the **Dutch Development Bank FMO** (Netherlands Development Finance Company) exited coal and coal power plant financing. In 2018 Switzerland's **SIFEM** announced an exclusion for any financing relating to the construction of new or an extension of any existing coal-fired thermal power plants. Iceland's national development finance institutions have also announced their exit plans. These have all been excluded from the list of global financial institutions exiting coal as they have an AUM < US$10bn.

2.5 Global Insurers and Reinsurance Companies

To date, 20 globally significant insurers with more than $6 trillion in assets and representing 20% of global insurance assets (which stand at US$30 trillion in aggregate) have adopted coal divestment policies, including the four largest European insurers.[7] When smaller insurers and partial divestments are included the total is 25 financial institutions globally.

Coal exclusion policies cover one-third of the global reinsurance market. Policies continue to be enhanced and deepened, with AXA and Allianz now excluding firms who undertake significant capital expenditures in new coal projects.

Coal exclusion policies cover one-third of the global reinsurance market.

These substantive moves by Axa and Allianz focus investor and corporate attention both on existing firms that are high emitters, and on those firms that continue to build new coal capacity, locking in additional emissions for decades to come. Some examples include: Glencore, KEPCO of Korea, Chinese firms in general, and Indian firms Adani Group and NTPC Ltd. There is a recognition that building new capacity drives carbon lock-in for decades to come, which is neither commercially sensible nor strategically aligned with the Paris Agreement.

It is no coincidence that 2017 saw the greatest insurance industry losses in history due to natural disasters - US$138bn (on a total economic loss of US$340bn), clearly raised by climate-related losses.

The progressive tightening of policies in the global insurance industry is a key positive. Institutions are moving from initial greenwash (refer page 30) to substantive polices with real impact in driving systemic change.

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[7] For a full review of the 24 largest insurance firms globally, and their climate risk performance to-date, refer Unfriend Coal, "Insuring Coal No More: 2018 Scorecard on Insurance, Coal and Climate Change" December 2018.

Axa

In May 2015 Axa (US$1,380bn AuM) became the first global insurance firm to divest coal from its investment portfolio. Axa followed up in 2017 with a further policy to restrict coal insurance. Showing global climate leadership similar to Storebrand of Norway which has been excluding companies associated with coal since 2013 (refer Section 2.1), Axa lowered its revenue threshold from 50% to 30% and now excludes all firms producing more than 20 million tonnes per annum (Mtpa) or developing more than 3 gigawatts (GW) of new coal-fired power.

Allianz

In November 2015 Allianz (US$1,000bn AuM) followed suit, also divesting coal from its investment portfolio. Allianz in 2018 with a further policy to restrict coal insurance. Allianz built on Axa's lead by excluding firms building more than 500MW of new coal-fired power plant capacity, and by committing to zero coal by 2040.

Aviva UK

In July 2015 Aviva UK announced a global climate policy statement highlighting the financial and climate risks in its coal investment portfolio, but with a policy of engagement over divestment. To date Aviva has undertaken only limited divestment action and remains a key financier of coal.

CNP Assurances

In 2015, French CNP Assurances began divesting from coal firms, cutting its coal threshold to 15% of turnover, while committing to doubling the volume of its green investments by the end of 2017. In November 2018 CNP Assurances further cut its coal threshold from 15% to 10% of turnover, building on its coal divestment policy first introduced in 2015.

Aegon N.V.

In May 2016 Aegon N.V., an insurance and investment management firm based in the Netherlands (US$908bn AuM), announced a policy of divestment from coal mining (with a 30% revenue threshold). This was followed in February 2017 with a call for the cessation of fossil fuel subsidies in the international forum G20 by 2020.

Zurich

In November 2017 Zurich (US$192bn AuM) announced it would cease providing insurance for thermal coal mining companies and utilities with more than 50% of their revenues derived from coal-fired power (with a two-year transition period).

Markel Corporation

Markel Corporation (U.S.) is reported to have undertaken coal divestments in 2017.

Lloyd's (UK)

Lloyd's announced divestment from coal in November 2017, effective April 2018.

Hannover Re

In June 2018 the world's third largest reinsurer, Hannover Re (US$73bn AuM), introduced a 25% revenue maximum for its investments in coal mining. The firm continues to insure coal-fired power plants.

SCOR, Macif, AG2R La Mondiale, Groupama of France

In September 2017 SCOR of France (US$22bn AuM), the fifth largest reinsurance firm in the world, expanded their coal exclusion investment criteria, cutting the limit to 30% of revenues (down from 50% set in 2015), and also limiting coal insurance.

In July 2018 French insurers including Macif, AG2R La Mondiale and Groupama all announced policies to no longer invest in companies planning new coal-fired power plants. Macif is excluded from the global list as its AuM being less than US$10bn.

Munich Re, Swiss Re

Reinsurance giants Swiss Re (US$116bn AuM) in July 2018 and Munich Re (US$245bn AuM) in August 2018 announced underwriting restrictions, building on 2017 coal investment restrictions aligning with the Paris 2.0°C target.

Generali of Italy

In November 2018 Generali of Italy (US$581bn AuM) limited coal insurance, having divested from coal in February 2018.

Storebrand

In November 2018 Norway's Storebrand (US$85bn AuM) announced it would completely exit all coal exposures globally by 2026. Storebrand has been excluding companies associated with coal since 2013.

Varma of Finland & VIG of Austria

In January 2019 Varma of Finland (€45bn AuM) announced it would adopt the requirements of the Task Force on Climate-related Financial Disclosures (TCFD) and no longer invest in firms relying on lignite or coal for more than 30% of sales. The firm is recognising the greater significance of climate risks in its Principles for Responsible Investment (PRI), and building on its previous blacklisting of tobacco, cluster bombs, nuclear and biological weapons firms.

In February 2019 VIG of Austria (€42bn AuM) announced it would cease providing insurance to new coal mines and coal-fired power plants, and phase out existing insurance, and prevent new investments in coal mining and coal-fired power plant firms in its portfolio, as well as investing more in zero emissions alternatives.

California State Compensation Insurance Fund, Natixis

Other insurers reported to have undertaken coal divestments include the California State Compensation Insurance Fund, Natixis of France, and Oslo Pension and Insurance (which exited back in 2015).

In November 2018 Australia's IAG highlighted the drastic need for climate action, stating that failure to do so would make the world virtually uninsurable. February 2019 saw Suncorp report a 45% decline in profitability due to increased extreme weather events, resulting in CEO Michael Cameron calling for "I'd like to see government impose a compulsory adoption for climate change action plan for Australian corporates." We have not included IAG nor Suncorp in our total list of global insurers divesting from coal given there has been no divestment across eithers' investment portfolio to date. HCF (a private health fund insurer in Australia) divested in 2017.

Table 2.5: Insurance and Reinsurance Companies Restricting Coal

	Insurers and Reinsurers	Country	First Restriction	Latest Restrictions
1	AXA	France	May 2015	Dec 2017
2	Aviva	U.K.	July 2015	2017
3	Allianz	Germany	Nov 2015	May 2018
4	Oslo Pension & Insurance (2)	Norway	2015	
5	Aegon N.V.	Netherlands	May 2016	Feb 2017
6	State Compensation Insurance Fund	U.S.		2017
7	Markel Corporation	U.S.		2017
8	SCOR	France		Sept 2017
9	Zurich	Switzerland		Nov 2017
10	Lloyds	U.K.		April 2018
11	Dai-ichi Life (1)	Japan		May 2018
12	Hannover Re	Germany		June 2018
13	Macif (2)	France		June 2018
14	AG2R La Mondiale	France		July 2018
15	Swiss Re	Switzerland		July 2018
16	Munich Re	Germany		Aug 2018
17	Generali	Italy		Nov 2018
18	Natixis	France		
19	Storebrand	Norway		
20	Meiji (1)	Japan		2018
21	Nippon Life (1)	Japan		2018
22	Groupama	France		2018
23	CNP Assurances	France		2018
24	Varma	Finland		Jan 2019
25	VIG	Austria		Feb 2019

Source: Corporate Announcements, press reports, IEEFA Calculations.
Notes:
(1) Japanese insurers Dai-ichi Life, Meiji and Nippon Life are excluded from the globally significant count because their policies do not involve divestment of coal investments.
(2) Macif and Oslo Pension & Insurance have also been excluded due to AuM <US$10bn.

California – A World-Leading State on Renewables, Insurance and Pensions Climate Risk Management

Governors Arnold Schwarzenegger (2003-2011) and Jerry Brown (2011-2018) have made California a global leader in decarbonisation. California has led the world in building the then-largest solar projects, both for solar PV and solar thermal, showing the power of scale and learning by doing.

The Government in August 2018 passed its SB100 bill to mandate a move to 60% renewables by 2030 and legislation to require all new houses have solar by 2020, and commercial buildings must also have solar by 2025, given it is now the low cost source.

The California Air Resources Board has led the U.S. in automotive emission standards, driving productivity up and reducing imported oil dependence to build American energy security.

2015 saw California's legislature pass a bill requiring California's state pension funds Calpers and CalSTRS to divest their investments in coal companies.

2018 saw California's P&GE launch the world's two largest utility scale battery projects to-date: a 300MW/1,200MWh project by Vistra Energy and a 182.5MW/730MWh project (both to be supplied by Tesla) 2-3 times the size of the largest lithium battery storage facility in operation (Tesla's South Australian Hornsdale Power Reserve at 100MW/129MWh).

California has done this in clear recognition of the need for urgent action to address the growing pressures of climate change in terms of more extreme weather events, happening more frequently. January 2019 saw the Insurance Commissioner assess the losses from unprecedented forest fires in November 2018 at US$11.4bn, and as a direct result PG&E filed for bankruptcy protection, providing global financial markets yet another stark reminder of the financial risks of climate change.

January 2016 saw California Insurance Commissioner Dave Jones announce a Climate Risk Carbon Initiative to evaluate the impact of a 2°C scenario on insurer investments, calling on a voluntary divestment of all thermal coal investments, as well as instituting annual disclosure requirements of carbon risk. California is the six largest insurance market globally, with annual premiums of US$259bn.

November 2018 saw Commissioner Dave Jones release the results of the "2018 Climate Risk Carbon Initiative Coal Divestment Follow-Up Survey", which reported an increase in the number of Californian insurers that divested or committing to divest from thermal coal investments. 123 insurers have now committed to divesting some or all of their coal investments, a doubling from the 66 firms who committed to do so in 2016. 621 Californian insurers reported they already had zero coal exposure. The survey covers 1,185 property-casualty and life insurance companies each with premiums of >US$100m annually.

This Survey details that the California State Compensation Insurance Fund and the Markel Corporation have both divested coal.

2.6 Leading Global Banks

To-date, 34 globally significant private banks have thermal coal lending restrictions in place. Particularly for the private sector, climate policy statements have both commonalities and individual nuances.

Most bank policies have restricted lending and/or underwriting for both thermal coal mining and coal-fired power plants. Others have just announced restrictions specifically on coal-fired power plants or thermal coal mining.[8] Many policies explicitly include only project finance while more comprehensive policies also include bans on corporate finance and underwriting and extend to coal-related services such as facilitating rail and port infrastructure.

Leading Global Banks: Excluding Both Thermal Coal Mining and Coal-Fired Power Plants

Crédit Agricole S.A. and Natixis of France

In May 2015 Crédit Agricole S.A. of France ceased financing for coal mining projects. In November 2016 this was tightened to exclude financing for coal-fired power plants, saying: “In view of the Climate Finance Day conference… and of COP22… Crédit Agricole has decided to stop financing new coal-fired power stations or extensions to these.”[9]

October 2015 saw Natixis commit to end financing of coal-fired power plants and thermal coal mines worldwide, as well as general lending to corporates with a greater than 50% exposure to coal, saying: “Ending financing for the thermal coal-based economy marks a major stage in Natixis’ engagement in favour of energy transition.”[10]

Morgan Stanley

In November 2015 Morgan Stanley (U.S.) reoriented its lending away from coal towards low emissions technologies. Morgan Stanley excluded any financing for coal mining involving mountain top removal (a key environmental issue in the U.S.), while new coal mining lending was to be constrained, but not banned. The firm also ceased lending for coal-fired power plants in developed countries unless the plants were CCS enabled. Non-OECD coal power plant lending was curtailed (and will diminish over time) but not banned. By June 2018 Morgan Stanley’s coal exposure

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[8] BankTrack provides an online up-to-date reference for coal mining and coal-fired power plant polices for all the global banks, “List of banks that ended direct finance for new coal mines/plants”, accessed January 2019.
[9] Crédit Agricole Group, “Crédit Agricole to stop financing new coal-fired power stations”, 27 October 2016.
[10] Natixis Press Release, “Natixis to cease financing coal industries worldwide”, 15 October 2015.

had dropped 84% in absolute size post their 2015 announcement, a very credible and real policy impact.[11]

Citi

In October 2015 Citi announced a similar coal mining lending policy restriction to Morgan Stanley's. From having the largest exposure to pure play coal mining firms of major U.S. banks, Citi reduced their direct loan exposure by 87% to June 2018.

In December 2018 Citi, the number one U.S. banker of coal power in 2017, announced an updated coal policy excluding project financing new coal-fired power plants. However, there are loopholes in its policy as it allows financing if the project: uses ultra-supercritical (USC) technology; the host country has less than 90% electrification; and it is aligned with the host country's plans under the Paris Agreement. Citi's policy only covers project finance (not corporate finance), which IEEFA notes is a major gap.[12]

JPMorgan Chase

In March 2016 JPMorgan Chase announced a curtailment of lending to coal mining. Reportedly, JPMorgan Chase's direct lending book reduced 62% by June 2018. JPMorgan Chase maintains a weak policy restricting project lending for non-ultra-supercritical (USC) coal-fired power plants.

U.S. Bancorp

In June 2016 U.S. Bancorp excluded new coal mining or power plant project finance.

Ilmarinen & OP Financial Group of Finland

2016 saw Ilmarinen of Finland implement a 30% threshold for coal divestments and winning a AAA rating from the Asset Owners Disclosure Project (AODP) in 2017.

OP Financial Group (€140bn AuM), the largest financial services firm in Finland, put in a coal exclusion with a 25% threshold in 2017.

Deutsche Bank, Rabobank and ABN Amro

In January 2017 both Deutsche Bank and Rabobank announced policies to cease new project financing for greenfield thermal coal mining and new coal power plant construction, with ABN Amro following suit in May 2017. In May 2018, Deutsche Bank expanded their policy to also not finance new coal-related infrastructure.

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[11] Alison Kirsch, Jason Opeña Disterhoft and Grant Marr via Rainforest Action Network (RAN), "Banking on Coal Mining: U.S. Banks' Performance Against Their Targets Since 2015", August 2018.

[12] For more detail on Fossil Fuel funding, refer Rainforest Action Network's "Banking on Climate Change: FOSSIL FUEL FINANCE REPORT CARD 2018" and their January 2019 Citi oped (forthcoming).

Australian Banks

In April 2017 Westpac Group of Australia announced a climate policy for project finance. While it has a number of exceptions, including the exclusion of new coal basins and new coal mine projects unless the energy content is above 6,000kcal (net as received), and the exclusion of new coal-fired power plants unless they reduce the overall grid emissions intensity, the policy is the best to-date in Australia. This is particularly given as new ultra-supercritical (USC) power plants still emit an entirely unsustainable >800kg/kWh in light of the ongoing failure to commercialise coal carbon capture and storage (CCS).

Bank Australia has the strongest climate aligned policy domestically, excluding all fossil fuel lending with no exceptions, saying: "Bank Australia has not made and will not make any loans to the fossil fuel industry, including coal and coal seam gas projects." Bendigo and Adelaide Bank excluded coal lending in 2014.

The practical outcome of various new climate policies has meant new coal-fired power plant financing from domestic banks across Australia is now no long available. The latest new coal plant proposal cited the need to rely on Chinese financing on a heavily Australian Government subsidised proposal.

ING

Having introduced a no new coal financing policy in January 2016, ING sharpened its coal exclusion policy in December 2017 by announcing that by 2025, it will no longer finance clients in the utilities sector that are over 5% reliant on coal-fired power.

Société Générale and BNP Paribas

In 2017 French firms Société Générale and BNP Paribas followed Crédit Agricole S.A.'s lead, no longer financing new coal-fired power plants globally. Importantly, these respective policies apply to both project finance and corporate finance lending, though while project finance has been comprehensively ended by these banks, their corporate financing of both mining and power clients is governed for now by only partial exclusions or indirect reductions.

KBC Group N.V.

In September 2017 KBC Group N.V. of Belgium excluded coal, and tightened the policy in 2018.

Commerzbank AG

In August 2016 Commerzbank AG of Germany ceased direct coal mine and coal power plant project finance, with a three year grace period to transition towards zero emissions alternatives as part of its commitment to the UN Global Compact. From 2021 onwards, German utility clients with over 30% coal share of power generation will be excluded from the Commerzbank portfolio and for non-German utility clients, the exclusion threshold is 50%.

HSBC

In April 2018 HSBC committed to end financing for new coal-fired power plant projects, but left a loophole in its policy allowing the bank to finance (up to the end of 2023) new coal plants in Bangladesh, Indonesia and Vietnam – countries which rank in the top five globally in terms of planned coal power capacity. This builds on HSBC's exit from thermal coal mining policy announced in October 2016.

Royal Bank of Scotland

In May 2018 the Royal Bank of Scotland (RBS UK) announced a coal mine and power plant exclusion.

Lloyds Banking Group

Lloyds Banking announced a coal mine and power plant exclusion in August 2018.

Standard Chartered

In September 2018 Standard Chartered solidified their coal lending exclusion of May 2016, removing country exceptions.

BBVA and Banco Santander of Spain

February 2018 saw BBVA introduce a policy of no lending to new coal mines and coal plants plus an exclusion of clients who derive >40% of revenue from mining.

In November 2018 Banco Santander introduced a new coal exclusion policy.

Barclays Bank

In January 2019 Barclays Bank expanded its April 2018 exclusion of project finance for coal mining to also exclude coal plants.

In May 2018 Japan witnessed their first thermal coal exclusion move, with the **Dai-ichi Life Insurance** company's announcement restricting finance to coal power plants. By the end of 2018 three of Japan's largest life insurance firms, **Nippon Life**, Dai-ichi Life and **Meiji Yasuda Life** each announced they would no longer fund new coal projects. These announcements are excluded from the total of 20 globally significant insurers divesting from coal given there is no associated divestment decision to date.

Leading Global Banks: Excluding Thermal Coal Mining

Bank of America

In May 2015 Bank of America announced a curtailment of lending to coal mining. Similar to Morgan Stanley, Bank of America's direct lending book reportedly reduced a material 80% by June 2018 from a relatively small overall starting point versus its U.S. peers.

Wells Fargo

In December 2015 Wells Fargo introduced a relative non-committal coal mining lending policy restriction, although reports project finance lending has halved to June 2018.

Credit Suisse, UBS, National Australia Bank and the Development Bank of Singapore

Several other globally significant banks have announced policies to reduce thermal coal mine lending, including: Credit Suisse in March 2017; UBS in April 2017; National Australia Bank in December 2017; and the Development Bank of Singapore (DBS) in January 2018, albeit for OECD countries only.

Leading Global Banks: Excluding Coal-fired Power Plants

SEB, PNC, and DZ Bank

Various global banks have announced policies to cease lending to new coal-fired power plants, including: SEB of Sweden in November 2016; PNC U.S. in March 2017; and DZ Bank, Germany's second largest bank, in March 2017.

Japan

In July 2018 Sumitomo Mitsui Trust Bank (assets of US$483bn) become Japan's first bank to put in place a policy precluding project finance for new coal-fired power plants, with no geographic exclusions.

The three largest banks in Japan - Mitsubishi UFJ Financial Group, Mizuho Financial Group, and Sumitomo Mitsui Banking Corporation, all announced updated policies for lending to the coal-fired power sector over 2018 but each stopped short of discontinuing financing for coal power projects. These banks are excluded from our tally of globally significant financial institutions exiting coal.

Nedbank, Standard Bank and FirstRand Bank of South Africa

In April 2018 Nedbank of South Africa announced a new coal power exclusion policy. Nedbank of South Africa showed real progress with its January 2019 decision to withdraw funding from two proposed new coal-fired power stations at Thabametsi and Khanyisa, saying it would redirect its funding to energy efficiency and low cost renewables instead.

In September 2018 Standard Bank of South Africa announced a withdrawal from new coal power plant financing as well.

In February 2019 FirstRand Bank withdrew from funding commitments for the Thabametsi and Khanyisa coal-fired power plant projects in South Africa. This decision seems predicated largely on the entirely unviable state of coal plants rather than a formal climate policy.

Table 2.6: Leading Global Banks Restricting Coal

	Banks	Country	First Restriction	Latest Restriction
	Both coal mining and coal fired power plants			
1	Morgan Stanley	U.S.	Nov 2015	
2	Credit Agricole SA	France	May 2015	Nov 2016
3	Societe Generale	France	May 2015	Nov 2016
4	BNP Paribas	France	May 2015	Nov 2016
5	Natixis	France		Oct 2015
6	ING	Netherlands	Jan 2016	Dec 2017
7	US Bancorp	U.S.		Jun 2016
8	Deutsche Bank	Germany		Jan 2017
9	Rabobank	Netherlands		Jan 2017
10	ABN Amro	Netherlands		May 2017
11	Westpac Group	Australia		Apr 2017
12	KBC Group	Belgium	Sept 2017	2018
13	BBVA	Spain		Feb 2018
14	Commerzbank	Germany	Aug 2016	Mar 2018
15	HSBC	U.K.	Oct 2016	Apr 2018
16	RBS	U.K.		May 2018
17	Lloyds Banking Group	U.K.		Aug 2018
18	Standard Chartered	U.K.	May 2016	Sept 2018
19	Barclays Bank	U.K.	Apr 2018	Jan 2019
20	Banco Santander	Spain		Nov 2018
21	Citi	U.S.	Oct 2015	Dec 2018
22	Australia Bank (1)	Australia		
23	Bendigo Bank (1)	Australia		
	Excluding Thermal Coal Mining Only			
24	Bank of America	U.S.		May 2015
25	Goldman Sachs (2)	U.S.	Nov 2015	
26	Wells Fargo U.S.	U.S.	Nov 2015	
27	JP Morgan Chase (3)	U.S.		Mar 2016
28	Ilmarinen	Finland		2016
29	OP Financial Group	Finland		2016
30	Credit Suisse	Switzerland		Mar 2017
31	UBS	Switzerland		Apr 2017
32	National Australia Bank	Australia		Dec 2017
33	DBS (4)	Singapore		Jan 2018
	Excluding Coal Fired Power Plants Only			
34	SEB	Sweden		Nov 2016
35	PNC	U.S.		Mar 2017
36	DZ Bank	Germany		Mar 2017
37	Sumitomo Mitsui Trust Bank	Japan		Jul 2018
38	Nedbank	South Africa	Apr 2018	Jan 2019
39	Standard Bank	South Africa		Sept 2018

Source: Corporate Announcements, press reports, IEEFA Calculations.

Notes: Some global banks have been excluded, including:

(1) Bendigo Bank and Bank Australia: Excluded, AUM < US$10bn.

(2) Goldman Sachs: Excluded because there is no disclosure, the exposure is increasing not decreasing, and off-balance sheet activity is extreme.

(3) JP Morgan Chase: Excluded because it has a coal-fired power plant restriction, but only for project lending, and only for non-USC, and no reporting of progress.

(4) DBS: Excluded because its power plant exclusion is only for OECD countries.

Table 2.7: Global Financial Institutions Restricting Coal During 2018-2019

	Global Financial Institution	Country	New Announcement	Enhancement to Existing Policy	Date
	During 2018				
1	SIFEM	Switzerland	*		2018
2	KBC Group	Belgium	*		2018
3	Meiji	Japan	*		2018
4	Nippon Life	Japan	*		2018
5	Groupama	France	*		2018
6	CNP Assurances	France	*		2018
7	DBS	Singapore	*		Jan-18
8	BBVA	Spain	*		Feb-18
9	Commerzbank	Germany		*	Mar-18
10	Lloyds	U.K.	*		Apr-18
11	HSBC	U.K.		*	Apr-18
12	Allianz	Germany		*	May-18
13	Dai-ichi Life	Japan	*		May-18
14	RBS	U.K.	*		May-18
15	Hannover Re	Germany	*		Jun-18
16	Macif	France	*		Jul-18
17	AG2R La Mondiale	France	*		Jul-18
18	Sumitomo Mitsui Trust Bank	Japan	*		Jul-18
19	Swiss Re	Switzerland	*		Jul-18
20	Munich Re	Germany	*		Aug-18
21	Lloyds Banking Group	U.K.	*		Aug-18
22	Standard Bank	South Africa	*		Sep-18
23	Standard Chartered	U.K.		*	Sep-18
24	World Bank	Global		*	Oct-18
25	ADB	Asia		*	Oct-18
26	Generali	Italy	*		Nov-18
27	Banco Santander	Spain	*		Nov-18
28	Citi	U.S.		*	Dec-18
29	EBRD	Europe		*	Dec-18
	During Janury 2019				
1	Varma	Finland	*		Jan-19
2	Barclays Bank	U.K.	*		Jan-19
3	Export Development Canada	Canada		*	Jan-19
4	Nedbank	South Africa		*	Jan-19
5	VIG	Austria	*		Feb-19
34	**Total**				

Source: Corporate websites, IEEFA Calculations.

The Risk of Greenwash

Over 100 globally significant financial institutions have now restricted or banned coal project and/or corporate finance, divested coal investments and/or insurance.

Institutions with the best policies are absolute bans on financing coal projects and the parent companies, and/or divestments from such companies entirely.

Other policies that only restrict project finance can be strengthened, and the follow-on policy developments we have tracked in this report illustrate the progressive tightening up of policies, showing a greater commitment / alignment with the Paris Agreement and the progressive removal of loopholes and exceptions.

However, there are still outliers financing coal while presenting to shareholders and communities climate policies that claim alignment – known as greenwashing.

Policy loopholes include failure to be consistent across the breadth of the institution's entire business. For example, project finance for coal is excluded but corporate finance to the parent entity is not. In other cases, an institution may be divesting thermal coal investments but continuing to insure coal-fired power plants. Different definitions of what constitutes a material exposure to thermal coal or coal power plants are used, often defined as a 25% or 30% revenue threshold.

Non-profit group Urgewald has developed an online tracking of coal exposed corporations globally, which highlights the need to prioritise the exclusion of the largest new coal mine and coal-fired power plant developers[13] given they facilitate the lock-in of new carbon emissions for decades to come. The global carbon budget is already on track to be well-exceeded by existing fossil fuel operations.

A key issue is that almost all financial institutions still fail to properly implement policies aligned with the Paris Agreement which targets limiting global temperature rises to 1.5-2.0°C. Full alignment would require evaluating and incorporating the IEA's Beyond 2°C Scenario (B2DS), rather than the NPS or SDS (refer Section 1).

In insurance and reinsurance, Unfriend Coal has rated institutions in terms of:

1. coal insurance underwriting exclusions (including the threshold applied);
2. divestment policies for coal mining, coal-fired power plants and their associated infrastructure providers and probably most importantly, new thermal coal mine and coal-fired power plant developers, in the asset management arm of the insurer, both for bond, infrastructure and equity portfolios, as well as core assets owned by the institution as well as assets managed by the firm on behalf of policy holders (including the threshold applied); and
3. Other criteria, including: inclusion of other fossil fuels (e.g. tar sands, deep sea drilling); transparency of reporting; investment in clean energy investments; Board accountability for climate action; and public advocacy for climate action.

[13] Urgewald, "Global Coal Exit List", November 2017, Heffa Schuecking.

Exclusions from the Global List of 100 and Counting

Actual progress to restrict coal lending by the world's top two fund managers with a collective US$11 trillion of assets under management have been less than impressive.

In 2017 **Blackrock** stated that "coal is dead",[14] rather hypocritically given that even today it is yet to produce a climate policy. Blackrock was recently reported to be the single largest fossil fuel owner globally. The Chief Executive Officer Larry Fink's Letter to CEOs in January 2019 speaks to Fiduciary Duty but fails to mention climate change.

Both Blackrock and **Vanguard** have been underwhelming in terms of failing to vote against Board members who are climate deniers. Vanguard has started talking about climate issues but actions to date are limited, particularly when it comes to proxy voting or excluding the worst corporates on climate/emissions intensity.

In November 2015 **Goldman Sachs** claimed it was curtailing lending to coal mining. Over 2015-2018 Goldman Sachs was reportedly the leading arranger of finance for coal companies of the U.S. majors, and while its direct lending book was relatively small, total exposure increased 50% over this period and there is no ongoing public monitoring of this policy.

We have not included Blackrock, Vanguard or Goldman Sachs in the total number of global financial institutions restricting coal.

In this report we somewhat arbitrarily used a US$10bn threshold to categorise financial institutions as globally significant. This count is only for insurance firms, plus public and private banks, it does not include asset managers, for whom there have been over one thousand globally whom have excluded thermal coal to-date.

Clean Energy Lending Targets – US$1.4 Trillion

In this report we have tracked zero emissions lending targets as the flip-side of global banks exiting thermal coal. Many of the same globally significant financial institutions that have historically financed coal are rapidly awakening to the enormous opportunities and growth in financing renewables.

To date, nine of the largest banks in the world have each committed to financing at least US$100bn of clean energy investments, a staggering US$1,388bn total. These nine global bank leaders have provided critically important support for the development of the global green bond market, which hit a record US$167bn of new issuance in 2018. This market is giving positive support for clean energy investing globally and in particular opening up access to the global pension capital pool of over US$41 trillion for emerging markets.

[14] Australian Financial Review, "BlackRock says coal is dead as it eyes renewable power splurge", 26 May 2017.

In 2015 Citigroup announced a new US$100bn 2025 target for investment in renewable technologies, having already delivered on its US$50bn target by 2015 ahead of schedule. Goldman Sachs, Bank of America, Credit Agricole of France, BBVA of Spain and HSBC UK have all made pledges similar to Citi.

The largest low carbon solutions commitment globally to date was from Morgan Stanley in April 2018. This firm has committed US$250bn by 2030, having to date already funded US$84bn since 2006. This commitment was closely followed by Wells Fargo with US$200bn by 2030, building upon JPM Chase's August 2017 commitment of US$200bn by 2025 which in particular backed the development of the global green bond market.

Table 2.8: Global Finance Investing in Clean Energy (US$bn)

Financial Institution	Clean Energy Pledge	Date of Pledge	US$bn
Citigroup	Pledged US$100bn by 2025 (US$50bn done by 2013)	February 2015	150
Bank of America	Pledged US$125bn by 2025	July 2015	125
Goldman Sachs	Pledged US$150bn by 2025	November 2015	150
JPM Chase	Pledged US$200bn by 2025	August 2017	200
HSBC	Pledged US$100bn by 2025	November 2017	100
BBVA	Pledged US$100bn by 2025	March 2018	100
Morgan Stanley	Pledged US$250bn by 2030	April 2018	250
Wells Fargo	Pledged US$200bn by 2030	April 2018	200
Credit Agricole SA	Euro100bn in green investments by 2020	May 2018	113
		Total (US$ billion)	**1,388**

Source: Corporate websites, IEEFA Calculations.

IEEFA would note there is a serious inconsistency with some global financial institutions both financing the clean energy future and claiming to endorse the Paris Agreement, while also being some of the largest coal lenders. Over 2016-2018, we note that Citi (#7), HSBC (#8), JPM Chase (#14), Goldman Sachs (#16) and Credit Agricole SA (#28) were all in the world's top 30 of coal-fired power plant lenders.[15]

Leading Global Banks: 40% of Top 40 Global Banks Starting to Align with Paris

As detailed, 16 of the top 40 global banks by market capitalisation (40%) have formal policies that either exclude thermal coal mining and/or coal-fired power plants, and/or commit to very material clean energy finance targets.

Given recent moves by the likes of Dai-ichi Life, Sumitomo Mitsui Trust, Marubeni and ITOCHU in Japan, the ADB, Varma of Finland, Barclays Bank, Citi, Nedbank and VIG of Austria, there is a clear probability of continued policy announcements over 2019 to see global action to tighten coal exclusions materially, and for loopholes to be progressively closed; a clear case of rising stranded asset risk.

[15] Banktrack/Urgewald, "Coal plant developers: 2018 analysis", December 2018, Greig Aitken.

China is positioned as a lender of last resort for coal-fired power plants, but given China is concurrently building the world's leading exposure to vertically integrated zero emissions industries of the future, a lending change in China against foreign coal would be great for the global climate and a catastrophic hit for any with new coal power plants in development, or even those left owning/financing newly commissioned coal plants. With five of the ten largest banks globally, China is a pivotal player – but as yet, none of these institutions are known to have any formal restrictions on coal financing in place.

Japan remains a very significant investor and lender to coal mines and coal-fired power plants globally, particularly in emerging markets. Over 2016-2018, Mizuho Financial and Mitsubishi UFJ Financial were the top two lenders to new coal power plant developments globally.[16] However, IEEFA has detailed the start of what looks to us to be a major pivot away from coal, with ongoing positive statements combined with actions from leading corporates, financial institutions and government ministers. IEEFA notes that Marubeni Corp, Mitsui & Co and most recently ITOCHU in February 2019 have all announced coal industry restrictions.

As Warren Buffett says: "Only when the tide goes out do you discover who's been swimming naked." Mark Carney has been consistently sounding the stranded asset warning for four years; the financial risks are rising, the tide is ebbing.

In February 2019, a report released on The Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry in Australia gave a damning assessment of financial institutions, highlighting repeated dishonesty, corruption and systematic failures of management and Boards in terms of implementing their Fiduciary Duties. We mention this in light of the commitments of most global financial institution majors to implement policies consistent with a 1.5-2.0°C limit to global temperature rises. This report shows there is progress being made but that it is far from sufficient, and governments and civil society must continue to hold these global institutions to look beyond their myopically near-term horizons and align their policies with global accords such as the Paris Agreement, and to call out the laggards, as has been the case with Glencore.

[16] Banktrack/Urgewald, "Coal plant developers: 2018 analysis", December 2018, Greig Aitken.

Coal Policy Announcements by Global Financial Institutions

In preparing this report, IEEFA reviewed the original source documents where possible to confirm the wording, dates and nature of policies and any loopholes. Any mistakes or omissions in this report are ours.

If we have omitted an announcement by a globally significant financial institution, please contact the author so that we may update our figures.

IEEFA would like to acknowledge the significant, ongoing efforts by civil society in assisting financial institutions to better recognise the need for a social licence to operate and giving consideration to other stakeholders.

About IEEFA

The Institute for Energy Economics and Financial Analysis conducts research and analyses on financial and economic issues related to energy and the environment. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

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Tim Buckley, IEEFA's director of energy finance research, Australasia, has over 25 years of financial market experience covering the Australian, Asian and global equity markets from both a buy and sell side perspective. Tim was a top-rated Equity Research Analyst and has covered most sectors of the Australian economy. Tim was a Managing Director, Head of Equity Research at Citigroup for many years, as well as co-Managing Director of Arkx Investment Management P/L, a global listed clean energy investment company that was jointly owned by management and Westpac Banking Group.