FOOL'S GOLD

The financial institutions bankrolling Europe's most coal-dependent utilities

ABOUT THIS BRIEFING

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EXECUTIVE SUMMARY

Recent years have seen a remarkable decline in the coal industry's fortunes, and a simultaneous, unprecedented rise in the financial industry's desire to put responsible investing and lending at the core of its business. However, while many banks and investors are taking their duty to not financially back destructive industry seriously, the task of mainstreaming policies that will reduce coal use quickly enough is incomplete.

Europe needs to be coal free by 2030 at the latest if we are to have a chance at avoiding climate breakdown. Not only will the coal companies that do not change be swimming against an increasingly strong tide of regulations and a worsening economic environment for non-renewable sources, but the investors and creditors associated with them will be putting themselves at greater and greater reputational and financial risk by association.

Therefore, any financial ties to Europe's most polluting utilities must either be coupled with forceful coal company engagement calling for a coal phase out in Europe by 2030, or support to these companies must cease altogether.

This report takes a close look at those eight European financial institutions with the most significant ties to the eight most polluting utilities in Europe. Financial ties are defined as issued loans and underwriting services, bonds and underwriting.

Only a handful of utilities are responsible for half of all EU coal-based CO2 emissions: RWE, PGE, EPH, Fortum/Uniper, ČEZ & Enel/Endesa. These financial institutions, who we name as the **'Exposed Eight'**, have supported these key utilities with almost **€16 billion**, since the Paris Agreement was agreed in December 2015.

This research finds that the most important **investor** associated with these utilities, the Norwegian Government Pension Fund, has invested €2.3 billion in shares and bonds. Other highly coal-exposed investors include Deutsche Bank, Crédit Agricole and Standard Life Aberdeen*.

On the **creditor** side, UniCredit was the largest bank providing €3.1 billion in loans and underwriting services, followed by Santander, Barclays and BNP Paribas**.

Generally, financial Institutions have also begun to be part of the solution, and are not just part of the problem. While some financial institutions continue to gamble on coal's ever-worsening future, many have already put policies in place which restrict their financing of coal, including several of the 'Exposed Eight'.

The exclusion of the most polluting utilities is already being implemented, or is imminent, and investor dialogue with utilities for more progressive strategies is taking place. However, these engagement efforts must be elevated through appropriate public messaging. The conversations and engagement processes are mostly not shared publicly and the assertiveness of the financial institutions is not transparent. Overall, most policies already in place will need considerable tightening so that they - and that is what counts - result in early coal plant and mine closures.

The reality is: what was once a golden investment is now a foolhardy one. There is an incredible hunger for change among financial institutions. The utilities that resist will find themselves facing divestment, and the investors and creditors that stick with them at any cost will be left with nothing but stranded assets.

* In total, these financial institutions invested in shares and bonds worth €4.6 billion.

** In total, these banks provided €11.4 billion of capital in loans and underwriting in 2016-2018.

Introduction

The coal industry is in rapid, terminal decline. Increasingly onerous regulation, market economics shifting decisively in favour of renewables, and the twin crises of air pollution and climate change are driving calls for closure plans for all coal power plants and mines in Europe. Utilities have a responsibility to ensure that their plants and mines are closed by 2030 at the very latest. However, most still are not treating these assets as obsolete, but rather are hanging onto them as if it is business as usual.

Unfortunately for them, and any financial institution still foolhardy enough to invest in them, the world has changed. Those that do not act in a responsible manner, plan for a rapid coal phase out, and embark on a full energy transition will be left stranded. This means that the utilities need to reinvent themselves and embrace new business models, which means committing to timescales to close their remaining coal plants.

For these reasons, the most polluting utilities are under pressure from their climate-conscious shareholders and lenders to demonstrate good corporate citizenship. However, the effects of the pressure already mounting will remain brittle if the financial industry as a whole does not stand as one.

Those investors and creditors still married to these coal-burning utilities through their financial ties must now rise to the occasion. Tightening regulations and rapidly growing competition from cheaper, renewable alternatives are cutting into profitability, making the industry a highly precarious one with which to be associated. Yet it is the fiduciary duty of financial institutions, as well as in their own self-interest, to carefully review their relationship with Europe's most polluting utilities.

This briefing sheds light on those European financial institutions which provide the largest support to key European coal power utilities, and reveals the ranking of the eight financial institutions most exposed to coal. These investors and creditors cannot keep such high-carbon assets in their portfolios without taking action, and have only two responsible options: exclude or engage forcefully.

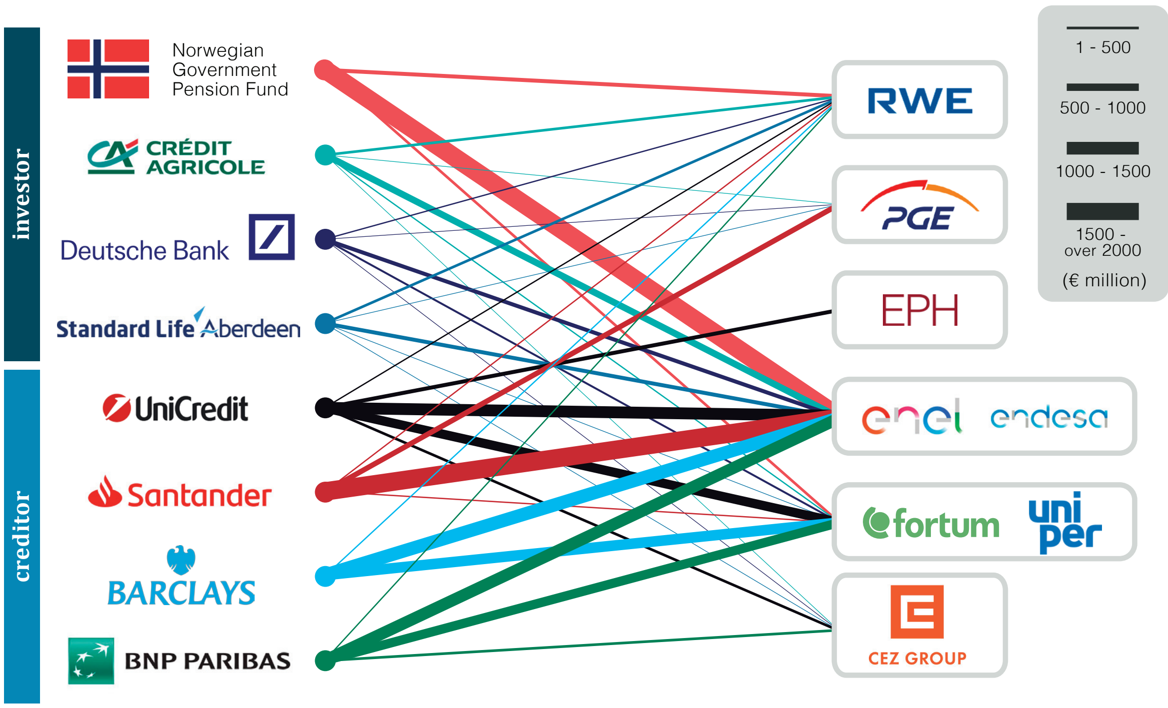

Figure 1: The 'Exposed Eight' and the financial ties to European coal power utilities

1. FOCUS UTILITIES – TO EXCLUDE OR ENGAGE?

Beating the clock: why European coal must vanish from power production and portfolios by 2030

According to the latest climate science, to have a chance to avoid dangerous climate change to humans and nature alike, we need to limit global warming to 1.5°C. Without overshoot, this requires global CO2 emissions to decline by 58% from 2010 levels by 2030, and reach net zero slightly before 2050[1].

This has two major implications for coal power. First, scientific research has shown that new investments in coal-fired power are already not feasible[2]. Second, existing coal needs to retire early: even with no new coal plant construction, emissions from coal power generation in 2030 would still be 150% higher than what is consistent with the well below 2°C target[3].

Investors have recently acknowledged climate science research that supports the need to **phase out coal by 2030 in OECD countries and the European Union**; by 2040 in China; and by 2050 in the rest of the world[4]. More recent analysis from the International Energy Agency (IEA) well below 2°C scenario (called Beyond 2 Degree Scenario, B2DS) indicates that **non-OECD countries should phase out production from coal power even earlier, by 2040**[5]. Similarly, this timeline implies that no new mines may be opened and mine closures should be foreseen.

In the European Union, scientific research shows that a quarter of the coal plants already in operation need to be switched off before 2020, and a further 47% should go offline by 2025. According to ClimateAnalytics, **this means that three quarters of EU coal plants must be closed by 2025**[6] **to align with climate science**.

Powering ahead – energy transition in the hands of the utilities

In Europe, the CO2 emissions of companies are concentrated: a handful of utilities account for approximately half of all coal-related emissions in Europe. In fact, the emissions of single utilities are as significant as those of many EU member states. Therefore, these companies and their coal plants must be at the front and centre of attention in order to slash Europe's emissions deeply and promptly.

Focus utilities

RWE	RWE is the most polluting utility in Europe with 118 Mt[7] of CO2 in 2018 – similar to Romania's CO2 emissions[8]. RWE will be affected by Germany's Coal Commission's decision to retire coal plants. However, the phase-out deadline in 2038 put forward by the Commission is far too late to limit global warming to 1.5°C[9]. Yet RWE's CEO Rolf Martin Schmitz has demanded massive compensation for closing plants early. In Germany, the claim is between 1.2 and 1.5 billion euros for every gigawatt (GW) that is taken off the grid[10]. The company is associated with severe, reputationally risky projects such as the cutting down of the Hambach Forest and encroaching on local villages to expand its opencast lignite mining operations, even though closures of adjacent plants are expected and needed by 2022.
PGE	91% of PGE's electricity is generated from lignite and hard coal, by far the highest proportion of any major European utility. PGE also owns the EU's most polluting power plant: Bełchatów. PGE is currently building two new coal units. The company is also currently seeking to expand its lignite mine in the Turów area and has a plan to start excavating the Złoczew lignite deposit, involving 600 million tonnes of lignite reserves. If it the Złoczew mine goes ahead, 3000 villagers would lose their homes[11]. PGE is Poland's biggest power group, and is state-run. In 2018, emissions at its power plants totalled 70.2 Mt[12] of CO2.
EPH	EPH has grown from being a small Czech business to a Europe-wide non-listed company, owned by the billionaire Daniel Křetínský, with coal plants in several countries. It purchases old polluting power plants that those utilities seeking to reduce their carbon footprint no longer want to assume responsibility for, including German lignite plants and mines previously owned by Vattenfall. EPH is associated with several upcoming deals, including Uniper's French coal plants. EPH's emissions in 2018 totalled 76.4 Mt[13] of CO2.
fortum uniper	The state-owned Finnish energy company Fortum is the biggest single owner of the German company Uniper. As of mid-2018, Fortum has consolidated Uniper as an associated company and is expected to increase its stake. Fortum currently owns 49.9 percent of Uniper. The two companies' strategies differ significantly: Uniper's business model largely revolves around fossil-based energy, while Fortum's strategy is mostly based on a low-carbon energy system. However, despite this, Fortum still has an operational coal fleet of its own. Uniper is in the final stages of completing the highly controversial Datteln IV (1.1 GW) coal plant that is, however, likely to turn into a stranded asset following the German Coal Commission's recommendations.The Finnish state itself has approved a legal coal ban to take effect as of 2029. The emissions of Fortum and Uniper were 20.1 Mt and 59.5 Mt of CO2 respectively in 2018[14] [15].
enel endesa	Endesa is majority owned by the Italian company Enel (with 70.1% ownership). While Enel is making some steps toward moving beyond coal in Italy, the company has still failed to set closure dates and plans for its two largest and most polluting Italian plants. Worryingly, in early 2019 Enel challenged in court the decree by the Italian Environmental Ministry instructing the adoption of closure dates by 2025 for all coal plants in Italy. In Chile, Enel has three coal plants and has not taken any position on the 2030 coal phase out being discussed by the national government. Endesa's share of coal power production (31.7%) is above the 30% threshold adopted by many investors and it owns more than half of Spain's 10 GW of coal-fired power plants. At its 2019 AGM, Endesa's management stated its intention to operate the two main coal plants in Spain beyond 2030. Therefore, both Endesa and Enel have work to do to phase out coal. In 2018, Enel's overall emissions were 94.8 Mt of CO2, while Endesa's emissions were 34.8 Mt of CO2 in 2017[16].
ČEZ	ČEZ, a Czech power utility, has a high share of coal power generation (46% in 2017[17]). The company is still planning to extend the operation of its Bílina lignite mine and is planning to build a new lignite-fired combined heat and power unit in the Kolín area. Its newest lignite unit at Ledvice is scheduled to operate for 40 years, and the recently retrofitted coal plants at Prunerov and Tusimice for 25 years. ČEZ has a climate neutrality target to be reached by 2050, yet it lacks detail and a pathway. ČEZ has achieved emissions reductions to a large extent by selling coal power plants, and the company is still planning to sell its biggest plant at Počerady. The company presents itself as a progressive utility, though its share of renewable power generation remains very low at 5.7%. Its majority shareholder is the Czech government which owns 70% of shares. In 2018, ČEZ's annual emissions were 26.8 Mt of CO2[18].

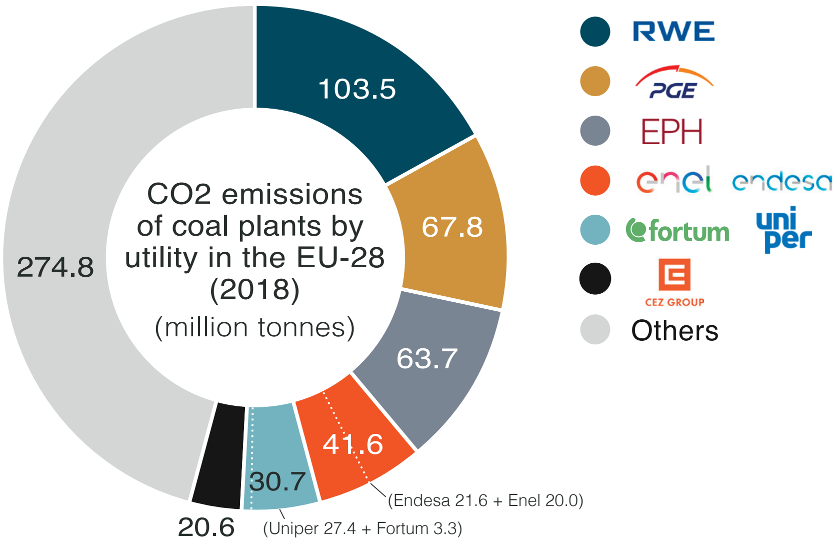

Figure 2: In 2018, the emissions share of EBC's focus utilities was 54% (coal power only)

(Source: calculations based on EUTL)

Principles and approaches for impactful and meaningful public coal policies

No-coal policies are emerging as a standard practice amongst financial institutions. However, the quality and effectiveness of these policies vary widely and, in order to prevent greenwashing, it is essential to define what is good enough.

The box below defines the approaches and principles (A - D) by the Europe Beyond Coal campaign intended to guide financial institutions and to set the bar high enough to align portfolios with the Paris Agreement.

A. Overall commitment

To mitigate climate and financial risks associated with the coal sector*, finance actors should adopt a public "no coal policy", which supports the alignment of their business models with climate science-based targets that are consistent with the goals of the UN Paris Climate Agreement. This implies that finance actors should commit to over time (2030 in OECD/Europe, 2040 globally) eliminate coal assets from all business lines, and that all coal companies in which they are involved should either be actively engaged with or divested from.

B. Exclusion criteria for coal projects

Finance actors should not provide or renew direct support to coal plants/mines/infrastructure worldwide – including project finance and other dedicated finance support, advisory mandates, insurance underwriting and investments.

C. Assessment criteria for exclusion of coal companies

The criteria below capture companies that are currently either expanding or are highly exposed to coal, in relative as well as absolute terms:

- Companies with coal expansion plans, including the construction/development/expansion of coal plant/mine/infrastructure, and life extension of existing coal plants through retrofit, acquisition of existing coal assets;

- Companies producing more than 20 Mt of coal per year, or which have over 10 GW of coal power capacity;
- Companies that generate more than 30% of revenues from coal mining or produce more than 30% of power from coal.

By applying these criteria to their financial universe, finance actors can identify which companies are currently unlikely to be able or are unwilling to transition rapidly enough to a 100% renewables-based energy system, and reconsider their financial support** accordingly.

These criteria should become stricter over time, as the deadline for a complete coal phase-out is approaching***.

D. Criteria for engagement with coal companies

An additional criteria needs to apply to companies that own coal assets, but are considered to still have an opportunity to transition rapidly enough to a 100% renewables-based energy system. By applying targeted and impactful engagement****, finance actors should ask those respective companies to:

- Adopt, within one year maximum (by 2020), a decarbonisation target to gradually align their business model with the UN Paris Climate Agreement.
- Publish, within two years maximum (by 2021), a clearly articulated and detailed implementation plan for the gradual closure (not sale) of existing coal plants and mines, exiting coal at the latest by 2030 in the OECD and in Europe, and by 2040 in the rest of the world.

Box 1: Europe Beyond Coal's principles and approaches for impactful and meaningful public coal policies for financial actors.

Exclusion

An investor can screen out of their portfolio companies in which corporate responsibility is not implemented in an acceptable manner. Several financial institutions, investors and banks alike have published exclusion lists, thus making it fully visible to the public which companies are falling short of expectations. For example, the Nordic banks Osuuspankki[19] and Nordea[20] publish on their website those companies which do not meet their criteria. In some cases the divestment decision has been accompanied with proactive media work: the CEO of the Norwegian Storebrand, for example, has openly stigmatised the corporate conduct of RWE following the clearing of the Hambach forest in Germany[21].

At best, exclusion can have both financial and reputational implications for the company through public signalling. It can raise the cost of capital for the company and make accessing finance difficult as the company becomes increasingly deserted by the capital markets[22]. However, its true impact is arguably more related to generating bad publicity which communicates that customers and shareholders want rapid changes. This could also affect the company's ability to attract high quality employees, especially amongst millennials[23]. Consequently, reputational damage can truly affect the financial bottom lines of laggards.

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* Finance actors include banks, insurers and investors.

** Financial services include lending, underwriting, advisory, insurance coverage and investment with regards to own accounts as well as third parties.

*** Such a time-bound policy that tightens over time has already been adopted by, for example, the Norwegian Storebrand.

**** Financial institutions must gradually reduce/remove financial support within set timeframes (6, 12, 18, 24 months) if the engagement process does not lead to significant results.

At worst, an investment boycott can reallocate shares from 'socially responsible' to more indifferent investors. The primary goal of divestment is, therefore, not necessarily to reduce companies' profitability by directly reducing their share prices. This is why the public signalling aspect of any exclusion remains central.

Those utilities that are particularly relevant in the context of exclusion or divestment are PGE and EPH. Most utilities should, however, be influenced by the right balance of exclusion and engagement.

Company engagement

Many within the financial sector are becoming assertive, with real clout. This is thanks to some forceful investors who are often associated with collaborative initiatives, which have led to coal companies cleaning up their businesses following investor pressure[24].

Similarly, investors have become active in the public debate, with a group of investors overseeing more than $11tn in assets calling for a 2030 deadline for the power sector to exit coal in Europe[25]. Recently, investors have publicly put pressure on banks, such as UniCredit, to adopt strict coal policies[26].

However, most investor engagement processes have significant room for improvement. All too often engagement practices display a lack of impetus, the processes last longer than is appropriate, and they lack credibility without the 'stick' of potential divestment. Therefore, engagement – or 'forceful stewardship' – with the coal-mining and coal-burning power utilities should entail clear and public targets, as well as strict and verifiable deadlines for improving company behaviour. Most of these engagement processes are still subdued and not time-bound.

Still, a few utilities have taken positive steps by reducing coal exposure in their own power production. Utilities that are particularly well suited for forceful engagement include Enel and Fortum, which need to ensure that the utilities in which they have significant shares, namely Endesa and Uniper, move towards a more rapid coal phase out.

Climate Action 100+, the global initiative led by investors boasting more than $33 tr in assets, urges the world's biggest greenhouse gas emitting firms to slash their carbon footprints.

The initiative is primarily set up for investors. However, many banks do appear in the list of signatories of the initiative - either the bank as a whole or often their asset management branch. Therefore, this briefing also considers CA100+ as an initiative that covers both the investors and banks.

The coalition has been associated with a few landmark announcement from high-carbon companies. First, the management-backed resolution at BP to align the oil giant's business strategy with the Paris goals (however, crucially, including only scopes 1 and 2). Second, a public commitment by Glencore to cap its coal production. The commitment does not lead to a rapid decline of fossil assets and, consequently, is not Paris-aligned, either. Successes with similar impact have yet to materialise with European utilities.

The following key utilities are amongst the CA100+ target companies: ČEZ, Enel, Fortum, PGE and RWE.

Box 2: Climate Action 100+

Closing vs selling of assets

As power companies gradually opt to green their business models, an emerging strategy to jettison problematic assets has emerged: to sell the plants on the market instead of decommissioning them. This 'internal divestment' has already been the preferred choice of action for several utilities such as ČEZ, Engie and possibly also Fortum/Uniper.

There are concrete examples to show how decommissioning was, at the minimum, delayed because of the selling of the assets. In 2013, ČEZ sold the Chvaletice lignite power plant to the private company Sev.en Energy after ČEZ stated it would close the power plant. Five years later, the power plant produced a record amount of CO_2 emissions (4.6 Mt) and Sev.en Energy is investing in its life extension. In early 2019, Enel concluded the sale of the gigantic 3.8 GW Reftinskaya coal-fired power plant in Russia to ESN and other Russian investors.

Therefore, from the atmospheric carbon perspective, this strategy is highly controversial as it has not proven to decarbonise the economy as such – only the company's own portfolio.

In conclusion, it is consistent with investors' fiduciary duties to ask for 'close not sell' or managed decline of high-carbon assets in order to prevent the occurrence of this emissions hot potato.

Just Transition

The asset-level road map for the gradual closure of existing coal plants should also feature a commitment to develop a socially fair transition plan. The plan should include, as a minimum, the measurable steps the utility is making to minimise the risks to workers and communities of the short-term impacts of the closures, as well as the necessary long-term measures to facilitate a sustainable future for workers and communities. Furthermore, the transition plan should be developed in consultation with affected communities themselves. It must also be in line with the objectives of the UN Paris Climate agreement and a climate-neutral future.

An important consideration is also to spare villagers and farmers from losing their homes and farmland from mining expansion, and European citizens from the health impacts from mining and burning coal.

2. ‘EXPOSED EIGHT’

Findings

According to the data obtained from commercial databases, we are able to identify the eight financial institutions – the ‘Exposed Eight’ – most involved in the eight focus coal utilities.

The ranking shows which financial institutions can have the relatively most impactful role in moving the most polluting power utilities. Therefore, this is where collective attention needs to be steered in order to ensure a managed transition away from coal.

<u>They are as follows:</u>

The research finds that the most important **investor** associated with these utilities, **Norwegian Government Pension Fund**, has invested **€2.29 billion** in shares and bonds, followed by **Crédit Agricole** with **€1.04 billion**, **Deutsche Bank** with **€0.69 billion** and **Standard Life Aberdeen** with **€0.58 billion**. Both Deutsche Bank and Crédit Agricole also provide significant loans for the utilities, as they play a dual role as investors and creditors*.

On the **creditor** side, **UniCredit** was the largest bank providing **€3.13 billion** in loans and underwriting services. **Santander** follows with **€2.99 billion**, **Barclays** with **€2.71 billion** and **BNP Paribas** with **€2.57 billion**.

Figure 3: The ‘Exposed Eight’

Investors

Bond- and shareholdings were researched at their most recent filing dates: for bonds in the timeframe 2016-2018, for shares mainly December 2018.

The data does not include corporate, individual and government shareholders. For this reason many of the state-owned utilities’ results do not reflect the respective Czech, Finnish, Italian and Polish state shareholdings. Company ownerships, such as Enel’s and Fortum’s ownership of Endesa and Uniper, are omitted. Similarly, many of RWE’s shareholders are also municipalities, such as the city of Essen, which also does not feature in the results.

The methodology of the research is described in Appendix 1.

None of the investors listed below have set coal policies that would ensure a complete coal phase out in the EU/OECD countries by 2030 and globally by 2040.

* Deutsche bank provided loans and underwriting worth of €1.8 billion (2016-2018), Crédit Agricole provided loans and underwriting worth of €905 million (2016-2018)

Existing coal policies of investors

Ranking	Investor	CA100+ member?	Coal Policy & Analysis
#1	Norway's Government Pension Fund Global	No	Review or divestment only from companies that generate over 30 per cent of their power or revenue from thermal coal. The policy has already excluded PGE and ČEZ. However, the Fund failed on divesting from all companies meeting their criteria. RWE, for example was still in the Fund's portfolio in 2018. Note: The Norwegian Government is proposing to change the country's sovereign wealth fund guidelines to exclude investments in companies that produce over 20 million tonnes of thermal coal or have over 10 GW of coal power plants. The proposed new limits could force the fund to divest from RWE, ENEL and Uniper.
#2	Crédit Agricole	Yes, through Amundi, one of its investment branches	Crédit Agricole has stopped providing project finance to the construction or expansion of coal mines and plants. It has also committed to not provide financing to companies generating more than 50% of their revenue from coal extraction, and with coal utilities generating more than 50% of their revenues from coal power production. For existing clients above this threshold, it can still provide financial services dedicated to non-coal activities such as gas or renewables. These criteria do not fully apply to Crédit Agricole's asset managers. However, Crédit Agricole's main investment branch, Amundi, has gone further with coal mining companies and also excludes those companies deriving over 30% of their revenue from coal extraction. As is illustrated by the current investments in RWE, ČEZ and PGE, these policies leave room for some investment in companies with a coal share exposure above 50%. Or, alternatively, the policy is not fully implemented.
#3	Deutsche Bank	Yes, through DWS Investment GmbH, one of its investment branches	Deutsche Bank has stopped providing project finance to the construction or expansion of coal mines and plants. In 2016, Deutsche Bank adopted a three-year target for a gradual reduction of its existing credit exposure to the thermal coal mining sector. This applies at the company level. However, neither Deutsche Bank nor its asset managers apply thresholds for the exclusion of coal companies.
#4	Standard Life Aberdeen	Yes, through Aberdeen Standard Investments, one of its investment branches	No

Creditors

The time period for the financial data in the research is January 2016-December 2018. The types of finance researched are loans as well as share- and bond issuances. The methodology of the research is described in Appendix 1.

The period since the UN Paris Climate Agreement was signed coincides with the chosen timeframe for these institutions: from 2016 until the fourth quarter of 2018.

None of the creditors listed below have set coal policies that would ensure a complete coal phase out in the EU/OECD countries by 2030 and globally by 2040.

Existing coal policies of Creditors

Ranking	Creditors	CA100+ member?	Coal Policy & Analysis
#1	UniCredit	No	UniCredit has never disclosed a detailed policy on coal-fired power plants. The bank has introduced a Coal Fired Power Generation Policy that mentions issues such as air emissions and compliance with environmental laws, regulations and permits. A new coal policy is, however, expected by the end of 2019 and the bank's management has committed to publish it.
#2	Santander	No	Santander has committed to not support new clients with coal-fired power plants or thermal coal, but does not have exclusion criteria for existing clients. According to its Energy Sector policy, which covers coal power production but not coal extraction, Santander "engages with its clients specifically to reduce coal dependency and overall to transition to a low carbon economy." In 2018, Santander still provided finance for PGE.
#3	Barclays	No	Barclays has stopped providing project finance to the construction or expansion of thermal coal mines and plants, and has committed to reduce its credit exposure to clients that derive more than 50% of their revenues from coal mining or of their power generation from coal. According to its policy, Barclays "engages with its existing clients in the coal mining and coal-fired power sector to discuss broader climate strategy and plans for transitioning to a lower carbon business model". However, to date Barclays has not publicly published any strict exclusion criteria.

Ranking	Creditors	CA100+ member?	Coal Policy & Analysis
#4	BNP Paribas	Yes, through BNP Paribas Asset Management	BNP Paribas has stopped providing project finance to thermal coal mines and coal plants, and has restricted all financial services (including both financing and investment) to companies active in the coal sector. On coal mining, BNP Paribas excludes companies predominantly active in extracting coal (more than 50% of the business) and that do not have a diversification strategy. On coal power, BNP Paribas excludes companies that do not have diversification strategies translated into a reduction of the share of coal in their power generation mix. BNP Paribas does not require absolute reduction of coal power production. Consequently, companies such as RWE can acquire renewables assets and secure BNP Paribas' support while continuing to expand its mines and failing to close its coal plants consistently with climate targets. BNP Paribas has also committed to align its lending portfolio with the Paris Agreement climate targets. BNP Paribas will not meet this commitment if lending to RWE continues (unless RWE commits to a total coal phase-out by 2030). In March 2019, BNP Paribas' asset management and insurance branches went further than the group's policy by adopting new restrictions for their investments in the coal sector. BNP Paribas Cardif (insurance) divested from companies generating more than 30% of their power from coal or listed in Urgewald's 120 coal plant developers list. BNP Paribas Asset Management divested from companies whose carbon intensity is above the 2017 global average of 491. These three criteria cover RWE. On coal mining, BNP Paribas AM excludes companies that derive more than 10% of their revenue from mining thermal coal and/or account for 1% or more of total global production. This last criteria also cover RWE.

3. ANALYSIS AND RECOMMENDATIONS

Towards forceful stewardship and public exclusion

It is noteworthy that almost all of the eight financial institutions highlighted in this briefing have some form of a coal policy in place. These policies often include a mix of both excluding coal-base utilities from their portfolios, and engagement with said utilities. This provides different financial institutions the opportunity to choose a tailored strategy.

In spite of these policies being in place, Europe's most polluting utilities are still very far off the path leading towards coal phase-out that is desperately needed for the European power sector. This divergence signals a very real need for financial industry actors to implement comprehensive policies for appraising coal investments, particularly in light of the real financial risk that coal investments represent for their portfolios, let alone the success of the Paris Agreement. In other words, financial institutions seem to be failing to implement their own comprehensive policies in a way that can bring about real world changes in the European power mix.

One of the most oft-repeated arguments for continuing to hold shares in a coal-burning utility (with or without mining operations) – instead of excluding these businesses or divesting from them entirely – is the notion that holding shares empowers the investor to ask for changes in a company's behaviour. However, while company engagement can be a valuable tool to bring about change, to be credible it must be backed by a real threat of divestment from the utility in question. With overly generous timeframes, absence of clear targets and softly implemented interventions, engagement as it stands today can hardly be trusted as a justification for providing financial services or holding shares in these utilities.

Some of the financial institutions highlighted in this report are themselves Climate Action 100+ members, directly or indirectly through their asset management arms. Yet, they still remain strongly tied to Europe's most polluting utilities – most of the latter being companies that are targeted by the CA100+ initiative. Given the public objectives that the CA100+ members have announced, it is therefore a justified expectation that these financial institutions live up to their commitments and to the spirit of the initiative they or their asset management branches have voluntarily signed up to.

Furthermore, the full potential of excluding coal-dependent utility companies from investor portfolios and divesting from any such existing financial ties investments, including via third party assets, needs to be thoroughly used in order to withdraw all support for coal. Large-scale exclusion will impact coal-dependent utilities by raising the cost of capital, however its true power lies in signalling more widely and publicly that such financial ties are not sound. To maximise this effect, as financial institutions decide to exclude heavily-polluting utilities from their financial universe, efforts should be made to publicise these exclusion actions.

Some of the financial institutions mentioned in this study hold very large portfolios of investments, such as in the case of the Norwegian Government Pension Fund. As such, the large size of their investments in coal-power companies is not surprising, but it also means that their divestment from such utility companies would have an influence at scale.

In conclusion, the details of financial investors' coal policies and the appropriate implementation of these has an important impact on improving the power mix in Europe. It is not enough to simply have a coal policy: it must be comprehensive, public, science-based and – ultimately – its effectiveness will be measured by the reduction in out-size investment risk as well as the concrete closure of coal plants and mines (rather than the sale or transfer of these risky assets to another investor). The impact of coal policies will be visible in multiple ways: a reduction in CO2 emissions, as well as in pollutants with adverse impacts on human health. Similarly, they will spare villagers and farmers from losing their homes and agricultural land in Europe and abroad.

For these reasons, the authors of this briefing have the following recommendations.

We recommend that the financial institutions:

1. Adopt Europe Beyond Coal's principles and approaches for impactful and meaningful public coal policies for financial actors (see page 8-9).

2. Demand that all power utilities adopt and publish a time-bound 1.5°C transition plan that includes:
    - A time-bound climate science-based CO2-emission reduction target
    - An immediate end to capital expenditure for coal;
    - A clearly articulated asset-level roadmap for the gradual closure of existing coal plants and mines, leading to a phase out by 2030 or earlier and addressing the need for a just transition for affected communities and workers.

Box 3: Recommendations to the financial institutions

4. APPENDIX

Methodology

The research has been commissioned by Europe Beyond Coal and was conducted by Profundo. Data was extracted from the Bloomberg Terminal and Thomson EIKON, both accessed in February 2019.

The research covers financial services to key European coal utilities, defined by Europe Beyond Coal[27] as priorities for European coal phase-out. Support for projects or subsidiaries with no relation to the coal business are excluded from the scope of this research.

Types of financing covered are separated into investments, holdings in shares and bonds, and credit activities, namely provision of project finance or corporate loans and issuance of bonds and shares.

The chosen timeframe is 2016 to 2018 and coincides with the period since the UN Paris Climate Agreement was signed. For bond- and shareholdings, only the most recent filings are accounted for.

While the research covers banks and institutional investors worldwide, this paper displays only European financial institutions. The international financial institutions are included in the appendices.

The institutional investors covered are banks, pension funds, asset managers and insurances with their investments in equity (shares) and debt (bonds).

Pension funds are often not fully covered by the financial databases, with some exceptions such as Norwegian Government Pension Fund. It is also to be taken into account that assets of pension funds often appear under the name of funds' asset managers.

The opposite is true for banks: investments appear usually under the name of the parent bank. Though undertaken by their investment branches, these entities are still controlled by the respective banks.

Non-financial-corporate, individual and government or municipal shareholders are removed from the data.

As creditors, the research covers private and public banks, providing corporate or project finance and issuing shares or bonds.

Insurances' underwriting activities are not covered, as information on insurance coverage of companies or projects is confidential and is not collected in central databases. Thus, only scattered information is available that does not qualify for producing a ranking.

Investor data in full (Top 150)

			European Coal Utilities								(€ million)
Rank	Investor	Country of HQ*	CEZ	Endesa	Enel	EPH	Fortum	PGE	RWE	Uniper	TOTAL
1	BlackRock	U.S.	138	292	3,823		359	79	1,121	379	6,191
2	Vanguard	U.S.	151	184	1,694		250	49	375	127	2,830
3	Norwegian Government Pension Fund - Global	Norway		103	1,555		180		377	78	2,293
4	Capital Group	U.S.	0		1,778						1,778
5	Elliott Management Corporation	U.S.								1,472	1,472
6	Credicorp	Peru			1,242						1,242
7	Crédit Agricole	France	33	277	434		74	23	179	21	1,041
8	JPMorgan Chase	U.S.	0	81	572		26		124	35	839
9	Deutsche Bank	Germany	14	39	345		114	8	138	27	685
10	Standard Life Aberdeen	U.K.	17	33	346		2	1	178	1	578
11	Dodge & Cox	U.S.			566						566
12	Allianz	Germany	15	7	449		28	8	27	24	558
13	Prudential (UK)	U.K.	6	1	422		2	0	75	0	505
14	UBS	Switzerland	13	34	298		20	19	67	23	473
15	Pictet	Switzerland	4	4	223		95	2	104	27	458
16	Franklin Resources	U.S.		0	446		0	0	1	0	448
17	AXA	France	35	3	345		7	1	31	4	427
18	Dimensional Fund Advisors	U.S.	74	16	109		46	44	74	61	424
19	Knight Vinke	U.S.								415	415
20	State Street	U.S.	17	31	246		40	5	53	20	411
21	TIAA	U.S.	49	45	212		30	3	57	8	406
22	Sun Life Financial	Canada	1	2	318		1		51	0	374
23	NN Group	Netherlands	49	2	101	2	3	202	2	1	360
24	Deka Group	Germany	19	23	149		25	14	117	12	359
25	Société Générale	France	12	27	16		60	7	88	4	357
26	Anima	Italy		0	310				29		339
27	BPCE Group	France	4	29	251		6	0	23	7	320
28	Prudential Financial (US)	U.S.	1	33	214		0	1	53	0	303
29	Principal Financial Group	U.S.		3	278		17		1	1	301
30	APG Group	Netherlands	10	19	252		12	1			294
31	American International Group (AIG)	U.S.	11	24	253			0	1	0	289
32	American Family	U.S.	92		169						260
33	Fidelity International	Bermuda	0	2	136		16	0	106	0	260
34	California Public Employees' Retirement System	U.S.	8	27	145		17	9	34	17	257
35	Banco Bilbao Vizcaya Argentaria (BBVA)	Spain		8	230		4		14	0	257
36	T. Rowe Price	U.S.		1	253		2	0	0	0	256
37	Intesa Sanpaolo	Italy	2	17	204		6	0	24	1	255
38	Santander	Spain	0	159	61		1	25	0	0	247

* Headquarter

(€ million)

Rank	Investor	Country of HQ	CEZ	Endesa	Enel	EPH	Fortum	PGE	RWE	Uniper	TOTAL
39	DZ Bank	Germany	4	6	47		74	1	101	6	239
40	Geode Capital Holdings	U.S.	6	19	138		25	3	29	17	237
41	Fidelity Investments	U.S.	1	2	207		5	1	17	2	235
42	AQR Capital Management	U.S.	0	75	102		32	3	13		225
43	BNP Paribas	France	0	4	119		31	0	67	1	222
44	Nordea	Sweden	0	1	108		106	1	1	0	217
45	Bank of New York Mellon	U.S.	16	40	126		12	1	9	12	216
46	Aviva	U.K.	3	7	15		10	166	2	5	209
47	Macquarie Group	Australia			202			0	1		203
48	Thornburg Investment Management	U.S.			201						201
49	Danske Bank	Denmark	2	2	158		33	0	3	1	200
50	AFP Cuprum	Chile			195						195
51	Invesco	U.S.	2	19	101		2	1	65	1	192
52	Janus Henderson	U.K.	2	1	114		1		69	1	188
53	Baird	U.S.			174						174
54	Royal London Group	U.K.	0	1	65		9	0	97	1	173
55	Ilmarinen	Finland					171				171
56	Varma	Finland					163				163
57	Charles Schwab	U.S.	8	15	83		14	6	25	12	162
58	MainFirst	Germany		0					84	77	160
59	Credit Suisse	Switzerland	4	6	114		8	2	16	9	158
60	Orix Corporation	Japan	47	34	47		3	14	7		152
61	AFP Habitat	Chile			149						149
62	HSBC	U.K.	2	6	103		6	2	25	3	148
63	Stonebridge Capital Advisors	U.S.			148						148
64	La Caixa Group	Spain		7	136				4		146
65	Schroders	U.K.	1	2	133		4		5		144
66	New York Life Insurance	U.S.	1	9	74		7	0	41	7	139
67	Grupo SURA	Colombia			138						138
68	Scotiabank	Canada		0	137		0				137
69	CPP Investment Board	Canada	15	13	63		32	7	6		136
70	Safra Holdings International	Luxembourg	0	4	121		1		8	0	135
71	Caisse de dépôt et placement du Québec	Canada	16	21	72		6	6	12		134
72	Kela	Finland					134				134
73	PGGM	Netherlands	8	19	92		2	3	6	3	134
74	Ameriprise Financial	U.S.	0	60	9				61		130
75	Skandinaviska Enskilda Banken	Sweden	14	74	12		16	4	10	0	129
76	Lord, Abbett & Co	U.S.			127						127
77	Legal & General	U.K.	3	4	57		6	2	48	3	123
78	AFP Capital	Chile			123						123

(€ million)

Rank	Investor	Country of HQ	CEZ	Endesa	Enel	EPH	Fortum	PGE	RWE	Uniper	TOTAL
79	Power Financial Corporation	Canada	0	5	40		25	0	29	22	121
80	Morgan Stanley	U.S.	0	1	101		0		17	0	121
81	Mediolanum	Italy			120					0	120
82	Artisan Partners	U.S.			0		117		0	0	118
83	Goldman Sachs	U.S.	4	14	70		2	0	20	1	112
84	Banco de Chile	Chile			110						110
85	Northern Trust	U.S.	5	16	54		10	2	15	6	107
86	PFR Partners Management	Cayman Islands			107						107
87	Baillie Gifford	U.K.		2	89		1		11	0	103
88	Aegon	Netherlands	0	7	32		2	42	18	1	103
89	Florida State Board of Administration	U.S.	2	4	57		6	1	17	11	100
90	Legg Mason	U.S.	0	5	85		5	1	3	0	99
91	Allstate	U.S.			95						95
92	DNB	Norway		1	74		13		1	0	90
93	Valtion Eläkerahasto	Finland					88				88
94	Assicurazioni Generali	Italy	10	4	58		1	3	11	0	87
95	Sjunde AP-fonden (AP7)	Sweden	5	6	48		9	3	10	5	87
96	Eleva Capital	U.K.							85		85
97	Elo Mutual Pension Insurance Company	Finland					84				84
98	Liberty Mutual Insurance	U.S.			84						84
99	OP Financial Group	Finland					78				78
100	Wellington Management	U.S.	6	6	27			0	39		77
101	Eaton Vance	U.S.	13	0	39		1	8	15	1	76
102	Zürcher Kantonalbank	Switzerland	3	3	57		3	1	8	1	75
103	GMO	U.S.	8	8	48		0	1	10	1	75
104	Wells Fargo	U.S.		6	63		4		0	1	74
105	Lazard	U.S.	0	1	62		9	1	1	0	74
106	Voya Financial	U.S.	9	5	56		1		1	1	73
107	Arca SGR	Italy		11	58		0		4	0	73
108	DJE Kapital	Germany			2		3		25	42	72
109	KBC Group	Belgium	4	1	45		5	1	14	0	71
110	Anbang Insurance Group	China	0	2	26		35		4	2	69
111	La Banque Po stale	France		23	35		7		3	1	69
112	LarrainVial	Chile			69						69
113	Merian Global Investors	U.K.	0	40			7		20		68
114	AFP Modelo	Chile			68						68
115	Western & Southern Financial	U.S.			67						67
116	Mondrian Investment Partners	U.K.			64						64
117	MetLife	U.S.	5	0	56		1	1	1	0	64

(€ million)

Rank	Investor	Country of HQ	CEZ	Endesa	Enel	EPH	Fortum	PGE	RWE	Uniper	TOTAL
118	Affiliated Managers Group	U.S.	0	9	21		24		11		64
119	Julius Bär	Switzerland		11	47				6		64
120	Muzinich & Co	U.S.			52				11		63
121	Pacific Century Group	China	22		41						63
122	Royal Bank of Canada	Canada	0	2	42		4	0	13		62
123	Banque Degroof Petercam	Belgium	1	1	48		2	1	2	7	62
124	Vontobel	Switzerland		0	44		0		17	0	61
125	Macif	France		3	13		45				60
126	Dai-Ichi Life	Japan			60						60
127	ABN Amro	Netherlands	22	1	31		0		4	0	58
128	MassMutual Financial	U.S.	0	0	51		1	0	4	0	57
129	BT Investment Management	Australia	0		29				27		55
130	Commerzbank	Germany		1	8		6		36	5	55
131	Azimut	Italy	0		48		0		5		54
132	Cohen & Steers	U.S.			51						51
133	Rothschild Group	France			2		14		34	1	50
134	Assenagon	Luxembourg	0	4	12		26		3	4	49
135	Keva	Finland					49				49
136	Thrivent Financial	U.S.			47						47
137	Prosperity Capital Management	U.K.			46						46
138	Landesbank Hessen-Thüringen	Germany	10		15		3	2	15	1	45
139	AG2R La Mondiale	France		7	38		0				45
140	Landesbank Baden-Württemberg (LBBW)	Germany		2	16		17		1	9	45
141	Loews Corporation	U.S.			45						45
142	RAM Active Investments	Switzerland	9	3	3			3	7	20	45
143	Van Lanschot Kempen	Netherlands	0		42		2				44
144	Munich Re	Germany	0		30		9		3	0	43
145	First Trust Advisors	U.S.	0	3	6		22	4	6	2	43
146	American Financial Group	U.S.			42						42
147	White Mountains Insurance	Bermuda			19				23		42
148	Swedbank	Sweden	5	1	9		17		10	0	42
149	Investec Group	South Africa			41		0				42
150	Svenska Handelsbanken	Sweden	1	1	6		32	0		1	40
	TOTAL		1,076	2,202	25,673	2	3,144	801	4,972	3,075	40,945

Source: Thomson EIKON (2019, February), EMAXX; Thomson EIKON (2019, February), Shareholdings; Thomson EIKON (2019, February), Bond Issuances; Bloomberg (2019, February), Aggregated Debt.

Creditor data in full

Rank	Creditors / Banks	Country of HQ	European Coal Utilities								(€ million)
			CEZ	Endesa	Enel	EPH	Fortum	PGE	RWE	Uniper	TOTAL
1	Citigroup	U.S.	65	144	2,009	293	111		133	710	3,465
2	UniCredit	Italy	196		1,330	424	260		133	789	3,134
3	JPMorgan Chase	U.S.			2,277				133	590	3,001
4	Santander	Spain		346	1,911			476	133	120	2,987
5	Barclays	U.K.			1,382		515		133	679	2,709
6	BNP Paribas	France	174		1,292		260		133	710	2,570
7	Morgan Stanley	U.S.			1,687				133	710	2,531
8	Société Générale	France	75		1,168	397	44		133	710	2,528
9	ING Group	Netherlands			716	293	111		133	799	2,052
10	Goldman Sachs	U.S.			1,095				133	710	1,938
11	Intesa Sanpaolo	Italy	100		690	264	260	476	133		1,924
12	Mitsubishi UFJ Financial	Japan		31	819		260	476	133	120	1,839
13	Deutsche Bank	Germany			792		111		133	799	1,834
14	HSBC	U.K.	90		1,311	131			133		1,666
15	Banco Bilbao Vizcaya Argentaria (BBVA)	Spain			1,466				133		1,599
16	Mizuho Financial	Japan		31	965		260		133	120	1,509
17	Commerzbank	Germany			241	299			133	789	1,462
18	Bank of China	China			1,129	333					1,461
19	SMBC Group	Japan	100		1,053	306					1,459
20	Bank of America	U.S.			1,233	87			133		1,454
21	Credit Suisse	Switzerland			1,222				133		1,356
22	European Investment Bank	Europe		835	500						1,335
23	Skandinaviska Enskilda Banken	Sweden					305		133	710	1,149
24	BayernLB	Germany			158				133	789	1,080
25	Royal Bank of Scotland	U.K.			530		260		133		924
26	Crédit Agricole	France		31	875						905
27	Lloyds Banking Group	U.K.							133	710	844
28	Erste Group	Austria	100		125	601					826
29	Raiffeisen Bank International	Austria	100			720					820
30	La Caixa Group	Spain			497	312					810
31	Landesbank Hessen-Thüringen	Germany							133	590	724
32	UBI Banca	Italy			643	20					664
33	BPCE Group	France			663						663
34	Mediobanca Banca di Credito Finanziario	Italy			633						633
35	Scotiabank	Canada			501						501
36	PKO Bank Polski	Poland						476			476
37	Banco de Chile	Chile			459						459
38	Agricultural Bank of China	China			389						389
39	Banco BPM	Italy			389						389
40	KBC Group	Belgium				386					386

(€ million)

Rank	Creditors / Banks	Country of HQ	CEZ	Endesa	Enel	EPH	Fortum	PGE	RWE	Uniper	TOTAL
41	Nordea	Sweden					351				351
42	Danske Bank	Denmark					328				328
43	Industrial and Commercial Bank of China	China				311					311
44	Landesbank Baden-Württemberg (LBBW)	Germany							293		293
45	Sberbank	Russia				207					207
46	J&T Finance Group	Czech Re-public				186					186
47	Banco de Sabadell	Spain			158						158
48	Banca Popolare di Sondrio	Italy			158						158
49	Standard Chartered	U.K.			158						158
50	Banca Monte dei Paschi di Siena	Italy			158						158
51	United Overseas Bank	Singapore			158						158
52	BPER Banca	Italy			158						158
53	Royal Bank of Canada	Canada							133		133
54	Sumitomo Mitsui Financial Group	Japan							133		133
55	ABN Amro	Netherlands							133		133
56	UBS	Switzerland							133		133
57	DZ Bank	Germany							133		133
58	Itaú Unibanco	Brazil		133							133
59	Gazprombank	Russia			126						126
60	OP Financial Group	Finland					111				111
61	Swedbank	Sweden					111				111
62	BNDES	Brazil			111						111
63	European Bank for Reconstruction and Development	U.K.	97								97
64	World Bank	Global	97								97
65	Banco Estado	Chile		31	25						56
66	Export Development Canada	Canada		31	25						56
67	Svenska Handelsbanken	Sweden					44				44
68	Bradesco	Brazil		42							42
	TOTAL		1,194	1,653	33,384	5,573	3,704	1,905	4,160	11,157	62,729

Source: Thomson EIKON (2019, February), Loans; Thomson EIKON (2019, February), Share Issuances; Thomson EIKON (2019, February), Bond Issuances; Bloomberg (2019, February), Loan Search; Bloomberg (2019, February), Aggregated Debt.

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