Banking on CLIMATE CHANGE

FOSSIL FUEL FINANCE REPORT **2020**

RAINFOREST ACTION NETWORK · BANKTRACK · INDIGENOUS ENVIRONMENTAL NETWORK · OIL CHANGE INTERNATIONAL · RECLAIM Finance · SIERRA CLUB

The organizations authoring the latest edition of this annual report want to acknowledge the extraordinary circumstances of this moment, given the terrible impacts of COVID-19 on lives, health, and livelihoods for people around the world.

As we write, the urgent need to respond to the pandemic and resultant economic impact is rightly taking priority, and may do so for some time. However, climate change remains an existential threat that, like the coronavirus, will require unprecedented global action in solidarity with those most vulnerable. We believe that the data and analysis in this report will prove useful in addressing that threat with the seriousness that it deserves.

— *March 18, 2020*

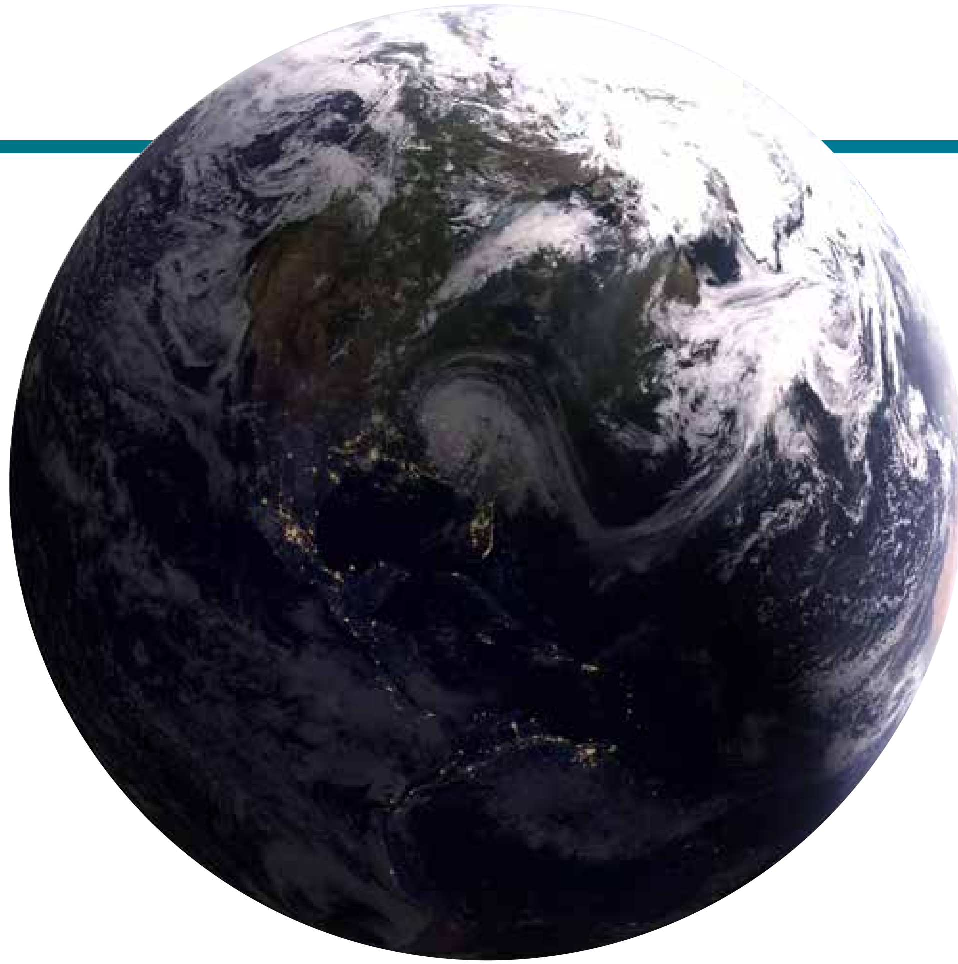


TABLE OF CONTENTS

Bank name acronyms used in this report:

ANZ:	Australia and New Zealand Banking Group
BBVA:	Banco Bilbao Vizcaya Argentaria
CIBC:	Canadian Imperial Bank of Commerce
DBS:	Development Bank of Singapore
ICBC:	Industrial and Commercial Bank of China
MUFG:	Mitsubishi UFJ Financial Group
NAB:	National Australia Bank
OCBC:	Oversea-Chinese Banking Corporation
RBC:	Royal Bank of Canada
RBS:	Royal Bank of Scotland (soon to be renamed NatWest)
SMBC GROUP:	Sumitomo Mitsui Financial Group (SMFG)
TD:	Toronto-Dominion Bank

EXECUTIVE SUMMARY

Financial companies are increasingly being recognized — by their clients, shareholders, regulators, and the general public — as climate actors, with a responsibility to mitigate their climate impact. For the banks highlighted in this report, the last year has brought a groundswell of activism demanding banks cut their fossil fuel financing, at the same time that increasingly extreme weather events have further underscored the urgency of the climate crisis.

This report adds up financing from 35 private-sector banks to the fossil fuel industry, summing their leading roles in lending and underwriting of debt and equity issuances. These 35 banks from Canada, China, Europe, Japan, and the U.S. have together funneled USD $2.7 trillion into fossil fuels in the four years since the Paris Agreement was adopted (2016-2019). The biggest fossil bank over that time was **JPMorgan Chase**, followed by its U.S. peers: **Wells Fargo**, **Citi**, and **Bank of America**. Over those four years, **RBC** was the biggest fossil bank in Canada, **MUFG** in Japan, **Barclays** in Europe, and **Bank of China** in China.

BNP Paribas was the biggest European fossil bank in 2019, despite its policy on unconventional oil and gas financing, and along with **Santander** and **CIBC** saw the biggest percentage increase in its fossil financing from 2018-2019. The biggest absolute increase in fossil financing last year came from **Bank of America**.

In addition, *Banking on Climate Change 2020* names 100 top fossil fuel expansion companies and their biggest bankers. The carbon budget leaves no room for new fossil fuel extraction or infrastructure, and yet **JPMorgan Chase**, **Citi**, and **Bank of America** have led funding to these top expansion companies, with overall bank financing to these companies on the rise last year.

This year's report shifts from an A-F system to a point-based assessment of bank policies, focusing on policies restricting financing for fossil fuel expansion, as well as commitments to phase out or exclude financing for fossil fuel companies. **Crédit Agricole** has the strongest overall fossil policy of the banks analyzed, but by earning only about 40% of total possible points, demonstrates how far the banking sector still must move in order to align with climate stability.

Banking on Climate Change 2020 also assesses bank policy and practice around financing in certain key fossil fuel subsectors, with league tables and policy assessments on:

- Tar sands oil: The biggest bankers of tar sands — the Canadian banks, led by **TD** and **RBC**, plus **JPMorgan Chase** and **Barclays** — all lack policies restricting their financing to this subsector.
- Arctic oil and gas: 2019 saw a slew of bank policies restricting financing primarily for project financing in the Arctic. But overall, bank financing to top Arctic oil and gas companies has gone up every year since Paris.
- Offshore oil and gas: This year's report looks not just at ultra-deepwater oil and gas, but rather all offshore oil and gas, where the biggest bankers since Paris are **JPMorgan Chase**, **Citi**, and **BNP Paribas**.
- Fracked oil and gas: Fracking financing is dominated by the U.S. banks: **JPMorgan Chase**, **Wells Fargo**, **Bank of America**, and **Citi**. Only a handful of banks, all European, have begun to place significant restrictions on financing for fracked oil and gas.
- Liquefied natural gas (LNG): **Morgan Stanley** and **JPMorgan Chase** are the world's biggest bankers since Paris of top companies building LNG import and export terminals, but **Mizuho** was biggest in 2019.
- Coal mining: **China Construction Bank** and **Bank of China** are the biggest bankers of coal mining, while French banks **Crédit Mutuel** and **Crédit Agricole** have the strongest policy scores.
- Coal power: This is the area where bank policy scores are strongest overall; yet funding for top coal power producers is not dropping rapidly enough. Financing is led by **ICBC** and **Bank of China**, with **Citi** as the top non-Chinese banker of coal power.

This report maps out case studies where bank financing for fossil fuels has real impact on communities — from a planned coal mine expansion in Poland, to fracking in Argentina, to LNG terminals proposed for South Texas.

Short essays throughout highlight additional key topics, such as the need for banks to measure and phase out their climate impact (not just risk) and what Paris alignment means for banks. Traditional Indigenous knowledge is presented as an alternative paradigm for a world increasingly beset with climate chaos.

November's U.N. climate conference in Glasgow, on the fifth anniversary of the adoption of the landmark Paris climate agreement, will be a crucial deadline for banks to align their policies and practices with a 1.5° Celsius world in which human rights are fully respected. The urgency of that task is underlined by this report's findings that major global banks' fossil financing has increased each year since Paris, and that even the best future-facing policies leave huge gaps.

Additional resources are available at:
RAN.org/bankingonclimatechange2020.

INTRODUCTION – Banks' Climate Half Measures are Not Enough

Over the past year, fossil fuel finance campaigning has caught fire. The role of banks, money managers, and insurance companies as drivers of climate change via their fossil financing, investing, and insuring is garnering unprecedented attention. Awareness is soaring that private-sector banks too are "carbon majors," alongside the fossil fuel producers themselves.

The climate movement is spotlighting an urgent and growing problem: since the adoption of the Paris agreement in late 2015, the 35 banks in the scope of this report have provided $2.7 trillion in lending and underwriting to the fossil fuel industry, with annual fossil financing increasing each year. **JPMorgan Chase** became the first bank to blow past the quarter-trillion dollar mark in post-Paris fossil financing, with $269 billion in 2016-2019.[1]

To bend the financing curve towards phaseout, banks must adopt policies restricting their fossil finance, and here there is positive and accelerating good news. Twenty-six of the 35 global banks in the scope of this report now have policies restricting coal finance, and a growing minority — now 16 — also restrict finance to some oil and gas sectors.[2]

The global financial system runs on endless amounts of data on risk and return. And no risk to the profits of individual companies and the financial system as a whole is greater than that posed by the climate crisis.

While banks are beginning to account for the physical and transition risks associated with climate change, another important climate-related risk is reputational risk. Financial institutions increasingly understand that with regard to their ability to attract new customers and to hire and retain employees, it's not smart to be seen as directly financing the destruction of life on earth. And right now there are large numbers of people taking to the streets to make sure that potential customers and employees are well aware of which financiers are the worst climate villains.

While banks and other financial institutions are rapidly waking up to the severity of these climate risks to their own bottom lines, the climate movement is driving home the fact that by increasing financing of fossil fuels, banks are responsible for an extremely high risk of massive harm to the planet and its people — that is, banks and the financial industry at large have enormous climate impact. Financiers need to cut their climate impact with the same urgency as they may act to reduce the risks of their exposure to areas impacted by repeated floods and fires.

Keeping the Money Flowing

This report measures that climate impact, and the numbers are damning. Overall fossil fuel financing from the 35 banks covered in this report to 2,100 fossil fuel companies has grown each year since the adoption of the Paris Agreement in late 2015.[3] Finance to 100 of the biggest expanders of coal, oil, and gas fell by 20% between 2016 and 2018, but last year bounced back at a shocking 40%.[4]

JPMorgan Chase was the world's worst banker of climate chaos by a huge margin in each year between 2016 and 2019. While **JPMorgan Chase**'s total fossil finance fell slightly from 2017-2018 and 2018-2019, the gap between **JPMorgan Chase** and the next worst bank actually grew massively between 2018 and 2019. **Citi** and **Bank of America** were second- and third-worst in 2019; **Wells Fargo** was fourth, after being the second-worst fossil bank in 2018. Total fossil fuel finance from both **Citi** and, in particular, **Bank of America** rose substantially between 2018 and 2019. Taking total finance over the past four years, **Wells Fargo** was in second worst position, 36% behind **JPMorgan Chase**.[5]

Though the U.S. banks dominate the global league table, they are not alone in their banking of climate destruction. The world's fifth biggest fossil funder is Canada's **RBC**. Japan's biggest fossil funder since Paris is **MUFG**, and China's is **Bank of China**. In Europe, **Barclays** is the biggest funder of fossil fuels over 2016-2019 — though last year, French bank **BNP Paribas** took the place of biggest fossil banker in Europe, which is ironic given the bank's talk of climate action.[6]

This report shows the only somewhat bright spots in terms of declining finance are in coal mining and power — the areas where bank policies restricting financing have been in place the longest. Finance to the top 30 coal mining companies declined by 6% between 2016 and 2019; finance to the top 30 coal power companies shrank by 13%. In both cases, the biggest absolute drops in coal finance came from the Chinese banks — though the four Chinese banks still account for more than half of total finance to the top coal mining and power companies. **Credit Suisse** is the biggest non-Chinese funder of coal mining over the last four years, though its funding has been on the decrease since 2017.[7]

Though **UBS** saw massive increases in its financing for coal mining last year, it was one of only a handful of banks with reductions in financing for the top 30 coal power companies in each year since 2016 — the others being **China Construction Bank**, **Deutsche Bank**, and **BPCE/Natixis**.[8]

Our data show that **Citi** has been the worst coal power funder outside China over the past four years, although its amounts have declined in each of the past two years. **Bank of America** is the eighth biggest funder of coal power from 2016-2019, but an almost doubling of its financing between 2018 and 2019 means that it was the largest non-Chinese coal power funder in 2019 (showing the toothlessness of its April 2019 policy barring funding for developed-world coal power projects).[9] **BNP Paribas** also doubled its coal power finance over the past year, underscoring the point that even the strongest policies among those analyzed in this report still have a long way to go. **JPMorgan Chase** and **SMBC Group** were the only banks with increases in coal power finance in each year since 2016.[10]

Bank finance for tar sands shows major variation from year to year. 2017 was a big year for tar sands financing as the sector consolidated, and though finance from all 35 banks analyzed here has fallen since then, 2019 levels remain higher than 2016. Over the past four years the big five Canadian banks provided two-thirds of finance from the banks analyzed in this report to the top 35 tar sands extraction and pipeline companies. The only non-Canadian bank in the worst six tar sands banks from 2016-2019 is **JPMorgan Chase**, in third place behind **TD** and **RBC**.[11]

JPMorgan Chase is also the biggest funder of Arctic oil and gas from 2016-2019. However taking just 2019 numbers, **Barclays** was the worst bank for fossil fuels in the Arctic, narrowly beating **Citi** in second worst place. Overall Arctic oil and gas funding from the 35 banks in this report grew by 34% in the past year.[12]

Financing for offshore oil and gas grew more rapidly than any other spotlight fossil fuel sector over the past year, with a leap of 134% between 2018 and 2019. **JPMorgan Chase** is the worst offshore oil and gas bank since Paris. Taking just 2019 financing, **BNP Paribas** is worst, with **Citi** second worst and **JPMorgan Chase** third.[13]

JPMorgan Chase is also the worst banker of fracking from 2016-2019. In 2019, however, it was second worst, just behind **Bank of America**. **Wells Fargo** and **Citi** were close behind in third and fourth places. Total fracking finance from all 35 banks grew by 3% in 2019, an improvement compared to 19% and 21% growth in the previous two years.[14]

Morgan Stanley was the worst banker of the 30 biggest LNG companies from 2016-2019, although in 2019 it was narrowly beaten to the top of the league table by **Mizuho**. **JPMorgan Chase** was the second worst over the past four years. **ICBC**, **Bank of China**, and **Deutsche Bank** were the only banks whose LNG finance fell in each of the past three years.[15]

This report shows that the private banking sector as a whole continues to take a position of extreme irresponsibility in the face of the climate crisis. While coal finance is slowly shrinking, this trend is being more than compensated for by growth in finance for the oil and gas industry.

PHOTO: WIKIPEDIA COMMONS

Policy Acceleration

Phasing out fossil financing will require banks to adopt restriction policies, and they are increasingly doing so — in response to pressure to stop fueling the climate crisis from the public, from inside the financial system, and from regulators and legislators. Most of the policies address coal, but a growing number are now starting to restrict some oil and gas funding, especially for tar sands and Arctic oil and gas.

Under the scoring system used in this report, the banks with the best scores for their overall policies across the coal, oil and gas sectors are all European, led by **Crédit Agricole**, **RBS**, and **UniCredit**. The leading non-European bank is **Goldman Sachs**, in 12th place. And yet, even the banks with the strongest policy scores among their peers have a long way to go in order to align their businesses with the goals of the Paris Climate Agreement.[16]

The five Canadian banks included in our analysis are all in the bottom ten for their overall fossil policies, as are the four Chinese banks.[17]

Crédit Agricole's strong policy score comes from its June 2019 commitment to stop working with companies developing or planning to develop any new coal infrastructure, whether that be in mining, services or power. It also pledged to phase out all coal from its portfolios by 2030 in the EU and OECD, and by 2040 in the rest of the world.[18]

Crédit Agricole's prohibition of coal developers is highly significant as more than half of the 258 companies that German NGO urgewald has identified as having plans to build new coal power plants are not traditional coal-based utilities.[19] Most banks' coal policies, which restrict only direct finance to coal mines and power plants, or to companies with a high share of their revenue from coal, would fail to limit funding to these diversified companies.

Two recent improvements in coal policies from the big U.S. banks came from **Goldman Sachs** in December 2019, and **JPMorgan Chase** two months later. While these policies are both a step forward, they are still weaker than required, in particular because they address only finance for coal projects and for some coal mining companies.[20]

There is a wide gulf between most bank coal policies and what is needed: **Crédit Mutuel**, **Crédit Agricole**, and **Société Générale** are the only banks that earn more than half the possible policy points in the coal sector.[21]

The situation is even worse for oil and gas. **BNP Paribas** is the leading bank on oil and gas, but earns only a quarter of the possible points.[22]

While many European and two Australian banks have policies restricting some tar sands financing, none of the big Canadian banks that dominate tar sands finance have adopted any restrictions — nor have **Barclays** and **JPMorgan Chase**, the biggest non-Canadian tar sands funders.[23]

Twenty bank policies analyzed also restrict Arctic oil and gas finance, but all but six focus on finance for projects and do not limit corporate funding for the oil and gas companies that have the most Arctic reserves under production.[24]

Bank policies on other oil and gas subsectors are few and far between. Two of note are from **BNP Paribas** and **UniCredit**, which both restrict finance for fracking and LNG projects and companies.[25]

Altogether, policy improvement is accelerating: of the banks with the five strongest policy scores, all introduced improved policies since May 2019.[26] There is a clear trend of banks strengthening their policies over time, often starting with tepid policies that only address coal projects, and building on them by, for example, adding restrictions on corporate finance in coal and adding prohibitions on oil and gas, often starting with finance in the Arctic and/or tar sands. We need to see this trend rapidly accelerate. The remaining loopholes in the coal sector must be closed, more and tougher restrictions on the Arctic and tar sands must be adopted, and restrictions must be ramped up across the rest of the oil and gas industry.

While drawing increasingly restrictive red lines around the most egregious parts of the fossil fuel industry is important, these are just steps to the ultimate goal, which is for banks and other financiers to draw a net around the entire sector.

In that, **RBS**'s February 2020 policy has the potential to be truly ground-breaking. It announced that it would at least halve the climate impact of its financing activity by 2030 and will end financing for major oil and gas companies "unless they have credible transition plans in place by the end of 2021, to align with the Paris . . . goals."[27] Much hinges on **RBS**'s forthcoming criteria for Paris-alignment. If requiring all clients to shun fossil expansion is a central litmus test, this new policy could become the new gold standard among private banks.

While this report is focused on private-sector banks, major policy progress is also being made by public sector funders, insurance companies and asset owners and managers — for example, the European Investment Bank, the world's largest multilateral development funder, announced in November 2019, after years of public pressure, that it will stop most of its fossil fuel financing in 2021.[28] Debanking, deinsurance and divestment are now operating together in synergy.

Numerous quotes have appeared over the past year, mainly from coal executives, but also from executives in oil and gas, bemoaning the impacts of the finance sector giving them the cold shoulder.[29] The *Financial Times* reported in February 2020 that:

> *Peabody Energy recently struggled to close a refinancing deal due in part to banks' ESG concerns, said Ben Nelson, Moody's analyst. And energy companies are increasingly disclosing that they could be cut off from the lending and bond markets as banks assess the impact of climate change. Devon Energy Corp, a US oil and gas provider, said in a filing this month that banks' concerns over climate change could "make it more difficult to fund our operations".*[30]

Growing outrage and pressure could ensure that we soon hit peak fossil banking. But what the climate requires is not a plateauing, or a slow decline, in fossil finance. We need a rapid and sustained drop on a 1.5° Celsius compatible pathway. To achieve this banks are going to have to step up their game and do far more than they have thus far shown themselves willing to do.

PHOTO: GREENPEACE / PETR ZEWLAKK VRABEC; TOBEN DILWORTH / RAN

LEAGUE TABLE - *Banking on Fossil Fuels*

Bank financing for over 2,100 companies active across the fossil fuel life cycle

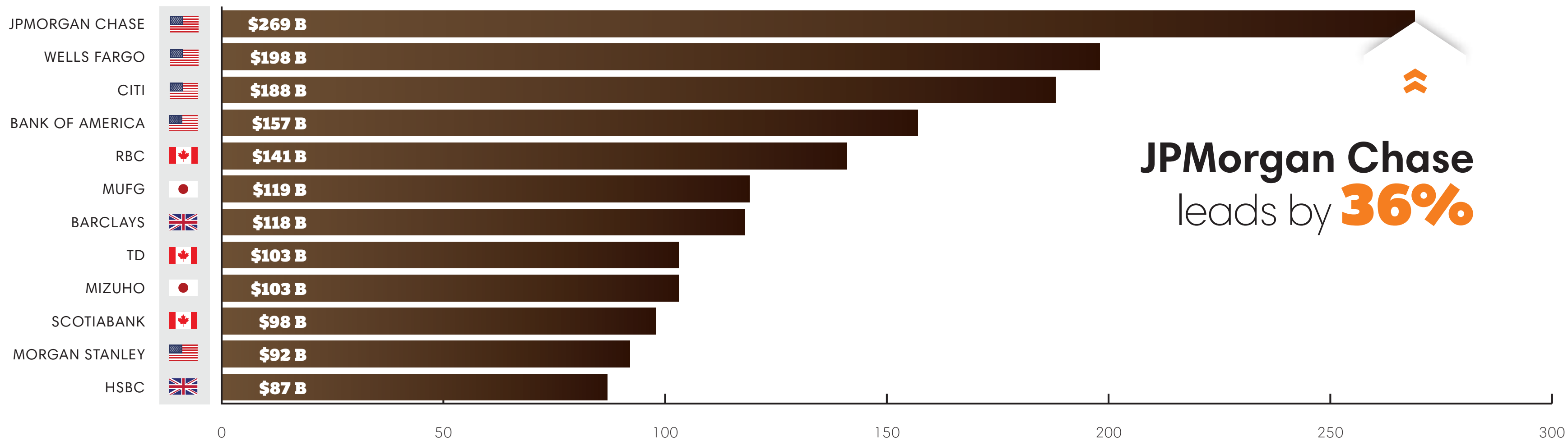
RANK	BANK	2016	2017	2018	2019	TOTAL
1	JPMORGAN CHASE	$63.986 B	$70.654 B	$69.028 B	$64.925 B	$268.593 B
2	WELLS FARGO	$34.504 B	$54.931 B	$63.237 B	$45.242 B	$197.914 B
3	CITI	$43.066 B	$46.090 B	$46.101 B	$52.409 B	$187.666 B
4	BANK OF AMERICA	$37.593 B	$36.331 B	$34.926 B	$48.075 B	$156.925 B
5	RBC	$30.346 B	$38.268 B	$36.962 B	$35.108 B	$140.683 B
6	MUFG	$25.640 B	$27.056 B	$33.879 B	$32.235 B	$118.811 B
7	BARCLAYS	$31.072 B	$30.733 B	$26.633 B	$29.667 B	$118.106 B
8	TD	$20.328 B	$29.071 B	$26.140 B	$27.893 B	$103.431 B
9	MIZUHO	$21.826 B	$19.861 B	$29.191 B	$32.201 B	$103.079 B
10	SCOTIABANK	$18.786 B	$23.876 B	$29.043 B	$26.040 B	$97.745 B
11	MORGAN STANLEY	$24.441 B	$24.772 B	$19.929 B	$22.826 B	$91.969 B
12	HSBC	$17.814 B	$22.319 B	$19.847 B	$26.549 B	$86.528 B
13	BNP PARIBAS	$17.762 B	$18.069 B	$17.774 B	$30.618 B	$84.223 B
14	GOLDMAN SACHS	$23.609 B	$20.372 B	$17.678 B	$22.095 B	$83.754 B
15	BANK OF CHINA	$23.410 B	$15.987 B	$23.423 B	$20.856 B	$83.676 B
16	BANK OF MONTREAL	$17.270 B	$21.212 B	$21.160 B	$22.472 B	$82.115 B
17	CREDIT SUISSE	$19.849 B	$22.333 B	$17.456 B	$14.667 B	$74.305 B
18	ICBC	$19.307 B	$13.731 B	$15.196 B	$20.706 B	$68.940 B

RANK	BANK	2016	2017	2018	2019	TOTAL
19	DEUTSCHE BANK	$21.751 B	$19.916 B	$15.312 B	$11.907 B	$68.885 B
20	SMBC GROUP	$11.037 B	$12.423 B	$15.927 B	$20.172 B	$59.559 B
21	CIBC	$12.218 B	$14.129 B	$12.000 B	$19.381 B	$57.728 B
22	SOCIÉTÉ GÉNÉRALE	$13.646 B	$11.512 B	$13.689 B	$15.252 B	$54.099 B
23	CHINA CONSTRUCTION BANK	$16.784 B	$10.902 B	$9.227 B	$14.234 B	$51.148 B
24	CRÉDIT AGRICOLE	$8.799 B	$11.447 B	$13.274 B	$12.343 B	$45.863 B
25	ING	$9.718 B	$8.304 B	$10.831 B	$8.609 B	$37.462 B
26	AGRICULTURAL BANK OF CHINA	$12.084 B	$5.417 B	$7.240 B	$11.203 B	$35.945 B
27	UBS	$8.384 B	$9.457 B	$10.804 B	$6.416 B	$35.061 B
28	BPCE/NATIXIS	$5.612 B	$6.474 B	$10.659 B	$7.738 B	$30.483 B
29	SANTANDER	$6.301 B	$5.335 B	$5.123 B	$8.977 B	$25.736 B
30	STANDARD CHARTERED	$2.344 B	$4.869 B	$8.807 B	$7.997 B	$24.017 B
31	UNICREDIT	$6.692 B	$7.032 B	$4.840 B	$4.682 B	$23.245 B
32	BBVA	$4.741 B	$3.368 B	$4.551 B	$4.792 B	$17.452 B
33	INTESA SANPAOLO	$4.201 B	$1.920 B	$4.176 B	$1.821 B	$12.118 B
34	RBS	$3.741 B	$3.029 B	$3.655 B	$1.692 B	$12.116 B
35	COMMERZBANK	$1.077 B	$2.565 B	$2.546 B	$3.817 B	$10.005 B
	GRAND TOTAL	$639.739 B	$673.766 B	$700.263 B	$735.618 B	$2.749 T

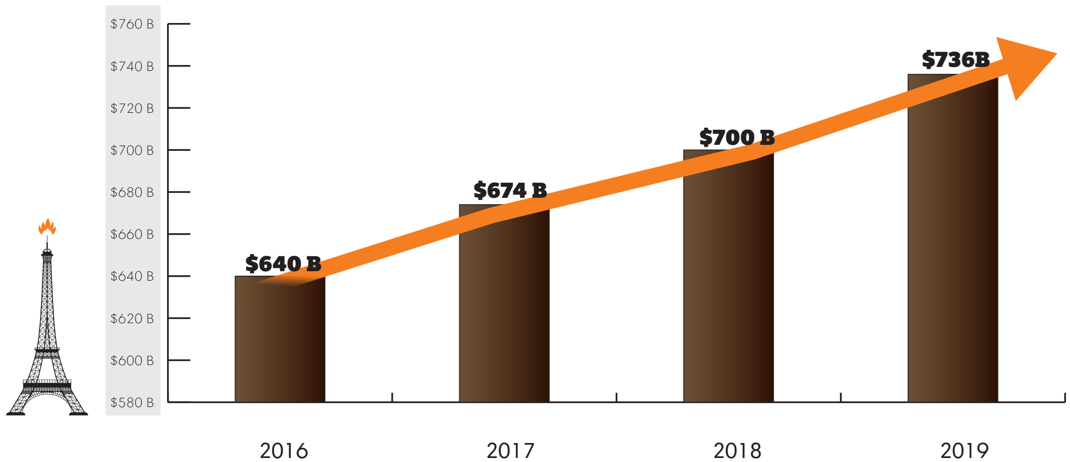
KEY FINDINGS

DIRTY DOZEN: Worst Banks Since the Paris Agreement (2016-2019)

Finance for All Fossil Fuels Globally ($USD)



TOTAL FINANCING for Fossil Fuels ($USD)

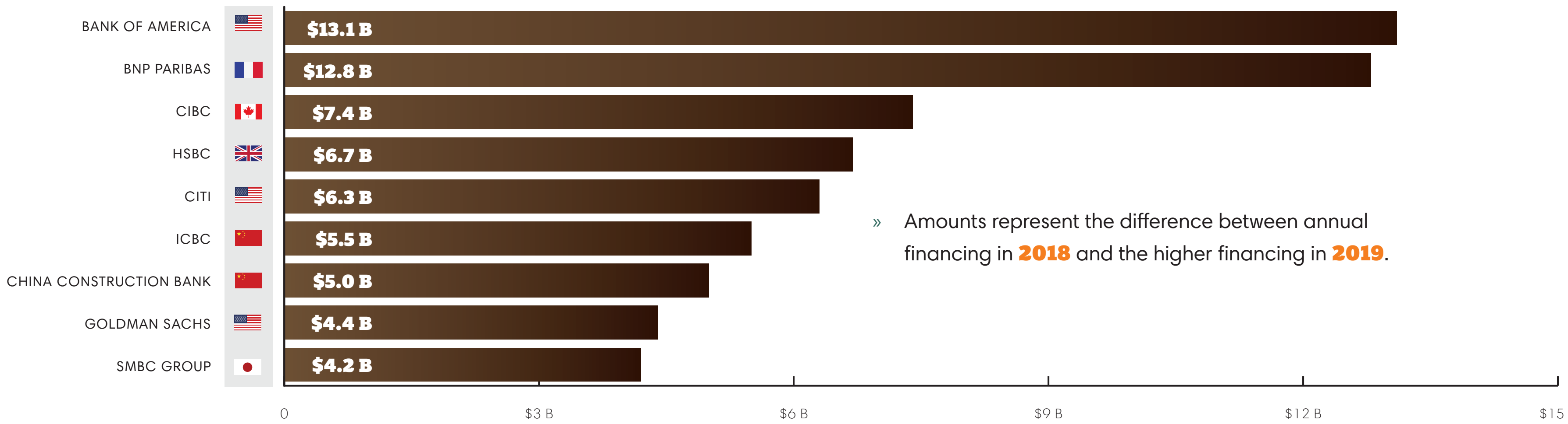


» **35** global banks financed fossil fuels with **$2.7 trillion** since Paris.

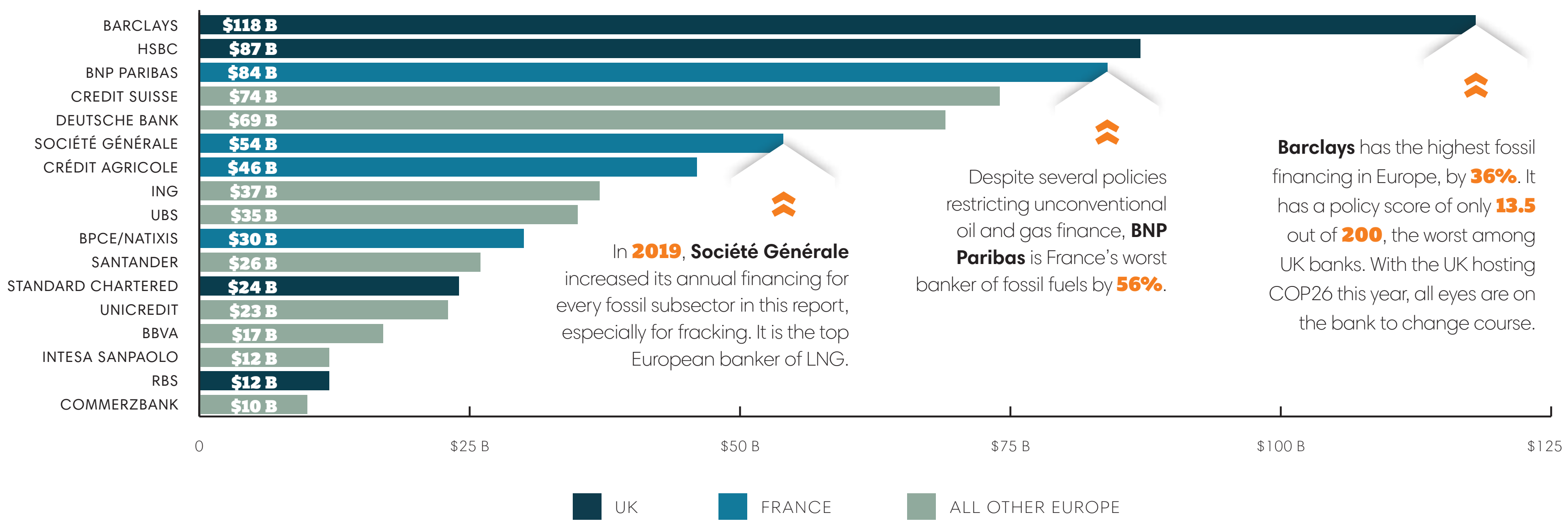
» Bank financing for fossil fuels has increased each year since the Paris Agreement.

» At this rate, fossil financing will hit **$1 trillion** per year by **2030**.

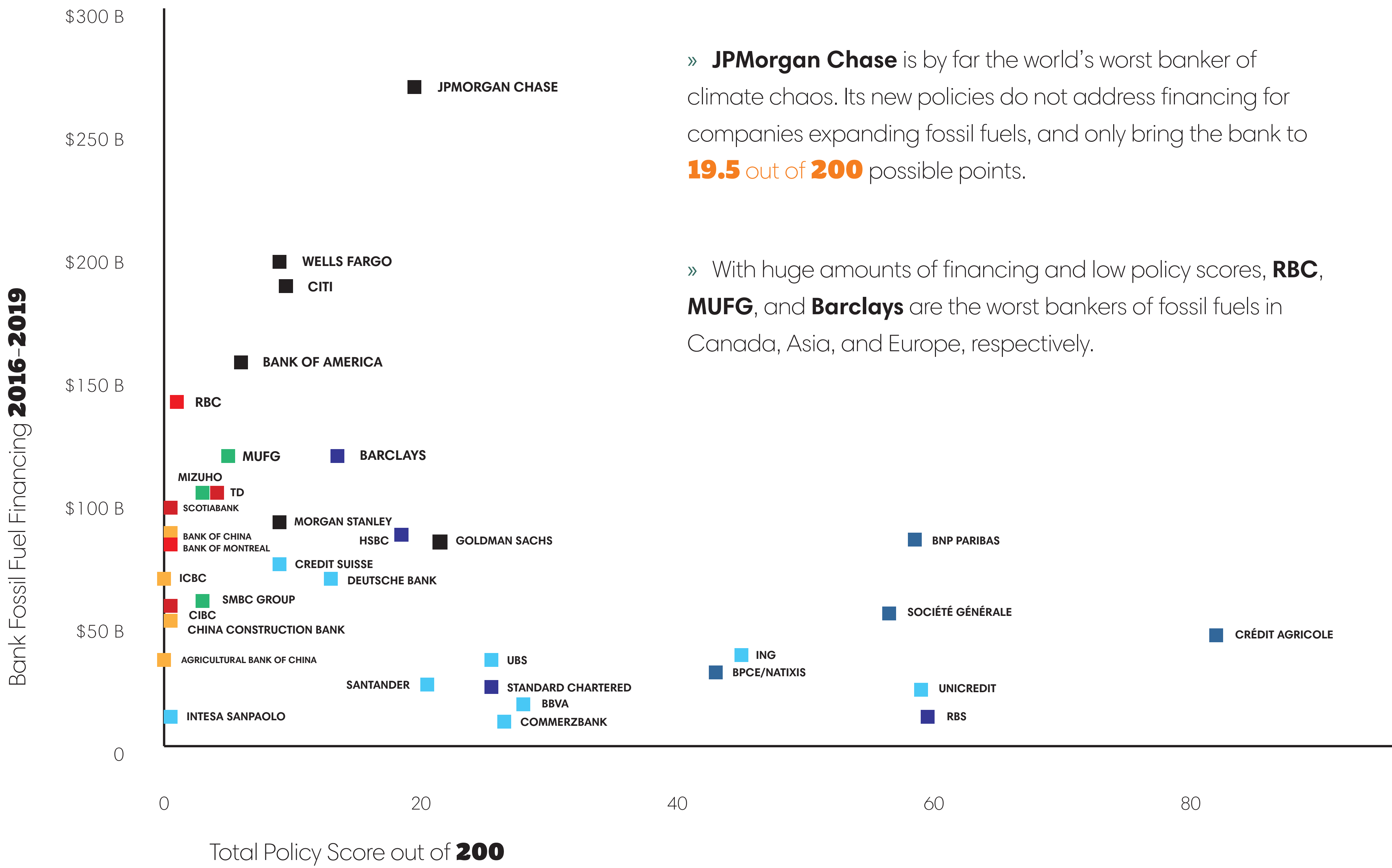
BIGGEST INCREASES in Annual Fossil Fuel Finance ($USD)



EUROPEAN BANKS: Financing for All Fossil Fuels (2016-2019) ($USD)



BANK FOSSIL FUEL FINANCING 2016-2019 V. TOTAL POLICY SCORE (OUT OF 200)



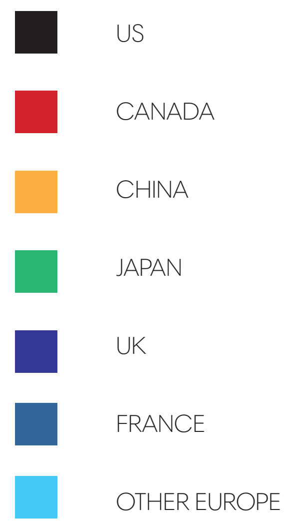
» **JPMorgan Chase** is by far the world's worst banker of climate chaos. Its new policies do not address financing for companies expanding fossil fuels, and only bring the bank to **19.5** out of **200** possible points.

» With huge amounts of financing and low policy scores, **RBC**, **MUFG**, and **Barclays** are the worst bankers of fossil fuels in Canada, Asia, and Europe, respectively.

» Although **BNP Paribas** has some of the best policies on unconventional oil and gas, its high fossil financing (which jumped up significantly last year) shows how far the bank is from aligning with a stable climate.

» **Crédit Agricole** has one of the strongest coal policies so far. But with **$46 billion** of fossil financing since the Paris Agreement, including a large amount to companies expanding fossil fuels, the bank keeps profiting off the destruction caused by oil and gas companies.

» **RBS** (soon to be renamed **NatWest**) slashed its fossil financing in 2019 and significantly strengthened its policies in February 2020.



TOP 3 RECIPIENTS OF FOSSIL FUEL FINANCING[31]

#1 — **OCCIDENTAL PETROLEUM** — **$64 BILLION**

A top offshore and fracking company. Has the second biggest fracking expansion plans of any company in the world.[32]

#2 — **ENBRIDGE** — **$62 BILLION**

Planning a massive new tar sands pipeline, Line 3, which violates Ojibwe treaty rights and greatly threatens the climate.[33]

#3 — **TC ENERGY** — **$59 BILLION**

Building the Coastal GasLink and Keystone XL pipelines in the face of powerful Indigenous-led resistance.[34] The Wet'suwet'en are standing firm against the construction of Coastal GasLink on their unceded territory.[35]

JPMORGAN CHASE IS THE WORLD'S WORST BANKER OF CLIMATE CHAOS

In the **4 years** since the Paris Agreement, **JPMorgan Chase** has been:

#1 Banker of Fossil Fuels (BY **36%**)

$269 BILLION TOTAL

Worst in the world each year since Paris: **2016**, **2017**, **2018**, and **2019**

The first bank to blow past a **QUARTER TRILLION DOLLARS** for fossil fuels since the Paris Agreement!

#1 Banker of FOSSIL FUEL EXPANSION

#1 Banker of FRACKING

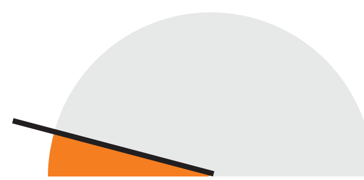
#1 Banker of ARCTIC OIL & GAS

#1 U.S. Banker of COAL MINING

#1 Banker of OFFSHORE OIL & GAS

#1 U.S. Banker of TAR SANDS OIL

TOTAL POLICY SCORE: 19.5 OUT OF **200**



» Even with new Arctic and coal policies, **JPMorgan Chase** will still fund **companies actively expanding Arctic drilling and coal plants**

MAP: CASE STUDIES

This map surveys just a few of the places where big banks' financing for fossil fuels impacts communities and ecosystems. For video versions of these stories from the frontlines, visit RAN.org/bankingonclimatechange2020

1 - Tar Sands: **LINE 3 PIPELINE**

Enbridge Inc., North America's largest energy infrastructure company, has a long track record of oil spills and Indigenous rights violations.[36] The company has been pushing to replace its existing Line 3 pipeline with a larger pipe that would carry 760,000 barrels of tar sands oil per day from Edmonton, Alberta, to Superior, Wisconsin.[37] Projects like Line 3 are linked to violence against and trafficking of Native American women due to the installation in rural areas of temporary housing facilities for mostly male construction workers, known as "man camps".[38] Locally, the Line 3 expansion project is violating Ojibwe treaty rights and putting the state's water, ecosystems, and communities at risk.[39] **TD**, **Wells Fargo**, and **MUFG** remain some of Enbridge's leading bankers.[40]

2 - Tar Sands: **TECK'S FRONTIER MINE** (WITHDRAWN)

Teck Resources had proposed to build what could have become the largest-ever open-pit tar sands mine. Tar sands production has been documented to have toxic impacts on the air, water, and surrounding wildlife, with members of surrounding communities — including First Nations — experiencing elevated rates of rare cancers, an increase in cases of premature births, and rashes and asthma.[41] The Frontier Project was planned to produce 260,000 barrels per day of this particularly dirty fossil fuel.[42] While Teck pushed Frontier through the regulatory process, **CIBC** and **JPMorgan Chase** were the company's leading bankers.[43] In February 2020, Teck withdrew its application for the project, noting Canada must deal with important "questions about the societal implications of energy development, climate change, and Indigenous rights."[44]

3 - Arctic: **ARCTIC NATIONAL WILDLIFE REFUGE**

The Arctic National Wildlife Refuge, one of the world's least disturbed ecosystems, is home to some of the most abundant and diverse wildlife anywhere in the Arctic.[45] The Arctic Refuge's coastal plain is critical to the food security and way of life of the Gwich'in Nation, who have called this place home for thousands of years.[46] The coastal plain has long been protected from industrial activity, but the Trump administration is rushing to sell it off to the oil and gas industry, threatening to destroy this precious area, violate the rights of the Gwich'in, and worsen the climate crisis.[47] **Goldman Sachs**, **JPMorgan Chase**, and **Wells Fargo** recently joined more than a dozen global banks in ruling out direct finance for drilling in the Arctic, but **Citi**, **Morgan Stanley**, and **Bank of America** have so far failed to make similar commitments.[48]

4 - Offshore: **GUYANA**

Guyana, a small South American country with less than one million people, is a newcomer to oil production at a time when the world must move away from fossil fuels.[49] ExxonMobil, Hess, and China National Offshore Oil Corporation declared the start of oil production in late 2019, extracting from depths of over 1,500 meters.[50] Production is expected to soar to over one million barrels per day by 2030.[51] Corruption, mismanagement, authoritarian government, and damage to the environment threaten Guyana's future development; the country's allegedly fraud-ridden election in March 2020 is inextricable from tension over who will reap the rewards from oil development.[52] Many locals are concerned about this oil production, which faces ongoing litigation in the Guyana courts.[53] While it may be public banks that end up directly financing the latest exploration bonanza, **JPMorgan Chase**, **Citi**, **Bank of America**, and **Barclays** were the leading private bankers of the companies behind it in 2019.[54]

5 - Fracking: **WINK TO WEBSTER PIPELINE**

The Wink to Webster Pipeline would run 650 miles from the Permian Basin in West Texas to the Gulf Coast near Houston, carrying over one million barrels per day of fracked oil to refineries and export terminals.[55] The project — a joint venture of ExxonMobil, Plains All American Pipeline, MPLX, Delek US, Lotus Midstream, and Rattler Midstream LP — would enable expansion in the world's most prolific oil basin, locking in decades of overproduction and threatening the health of communities near the fracking sites.[56] There is no project financing specific to this pipeline, meaning the banks that provide general corporate financing to the joint venture partners — like **Barclays**, **Bank of America**, and **JPMorgan Chase** — are helping to light the fuse to one of the world's largest carbon bombs.[57]

6 - Fracking: **VACA MUERTA**

Vaca Muerta is a fracking megaproject: fossil fuel companies are drilling enormous shale oil and gas reserves in the northern Patagonian region of Argentina and expanding the enabling infrastructure (such as pipelines and LNG terminals) so they can increase production even more.[58] Argentina's shale gas reserves alone account for 11% of the world's remaining 1.5°C carbon budget.[59] A UN human rights body recommended against fracking Vaca Muerta in order to align with the Paris Agreement and preserve the economic and social rights of future generations.[60] Development of Vaca Muerta currently threatens the rights of the Mapuche Indigenous community, who have opposed the fracking activities imposed on their land.[61] Companies active in Vaca Muerta range from ExxonMobil to Mexico's Vista and Argentina's YPF.[62] **JPMorgan Chase**, **Citi**, **Credit Suisse**, and **HSBC** and are top bankers of these companies since Paris.[63]

7 - LNG: **RIO GRANDE LNG, TEXAS LNG, AND ANNOVA LNG**

Three companies (NextDecade, Texas LNG, and Exelon) want to dump the United States' gas glut onto the rest of the world by shipping gas, fracked from the Permian Basin and the Eagle Ford Shale, overseas.[64] LNG terminals drive further extraction of fossil fuel sources that need to be phased out. These terminals proposed on the Texas Gulf Coast would mean hazardous air pollution for nearby low-income Latinx communities, "permanent and significant" impacts to endangered animals such as ocelots, destruction of sacred Indigenous sites, and the same damage to the climate as approximately 61 coal plants.[65] **Société Générale** is financial advisor to NextDecade, and all three projects are hoping to secure financing in 2020.[66]

8 - Coal Mining: **TURÓW MINE**

PGE (Polska Grupa Energetyczna) is the largest producer of electricity and heat in Poland, 91% of which it derives from burning coal.[67] PGE's plans to develop Europe's deepest lignite mine at Złoczew appear now to be in jeopardy due to increasing costs, but the company is controversially seeking to expand its huge open-pit lignite mine at Turów in southwest Poland.[68] The proposal, which would wreak further environmental and social devastation in surrounding areas, is being resisted by communities in Poland and in the neighboring Czech Republic and Germany. Czech authorities fear that expanding the mine could jeopardize drinking water for 30,000 people.[69] **Santander**, **MUFG**, and **Intesa Sanpaolo** are the most recent banks to back PGE.[70] The company's lack of a coal phase-out policy has led ten European banks to blacklist it; all banks should follow suit rather than provide further backing for PGE's destructive coal expansion strategy.[71]

9 - Coal Power: **PAYRA PORT**

In its most recent coal policy update of July 2018, **HSBC** opted to rule out project finance for new coal-fired power plants globally, with — controversially — the exception of Bangladesh, Indonesia, and Vietnam.[72] The bank continues to finance coal expansion by providing corporate financing for companies developing coal plants, and also by financing coal-related infrastructure.[73] For example, though **HSBC** is not currently known to be planning project financing for proposed coal plants in Bangladesh, it is still supporting coal power expansion in this country: at the beginning of 2019, **HSBC** led a consortium of banks financing the expansion of the Payra Port in southern Bangladesh.[74] This project aims to allow the import of 20 million tons of coal every year for potential use in as many as eight new coal power plants planned in the region.[75]

10 - Expansion: **AMAZON OIL**

Despite widespread concern over the vulnerability of the Amazon rainforests, four companies (Andes Petroleum, GeoPark, Frontera, and Amerisur) are actively pushing to expand fossil fuel extraction deep into the western Amazon region. In addition to the disaster that drilling in the Amazon spells for the climate and for biodiversity, much of the planned expansion directly overlaps the ancestral territory of Indigenous peoples, including some living in voluntary isolation and at risk of extinction. Despite Indigenous rights and sustainability pledges, **Citi**, **Goldman Sachs**, **HSBC**, and **JPMorgan Chase** have served as the top bankers of Amazon oil drilling.[76]

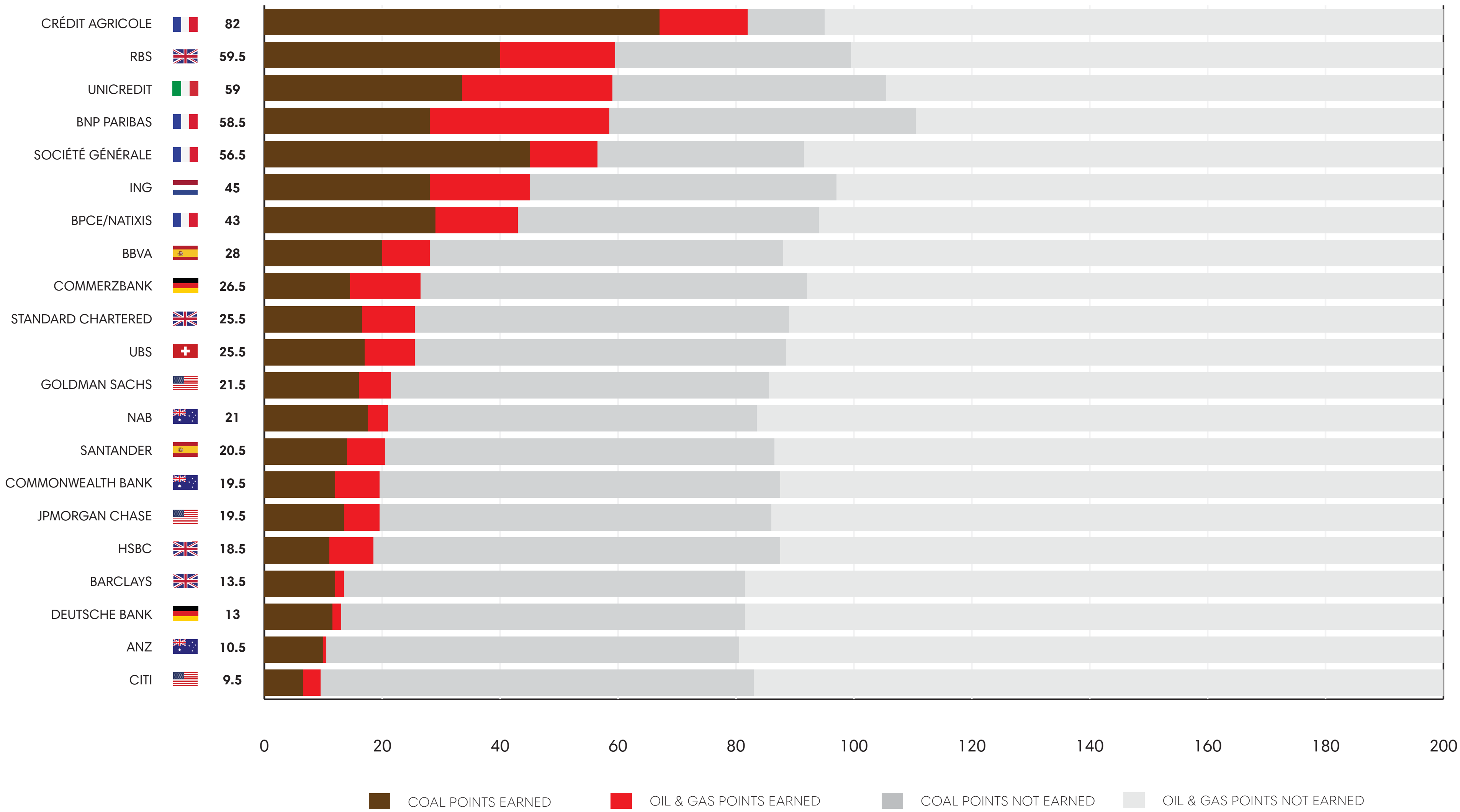
11 - Climate Impact: **MIAMI**

Banks are not only responsible for the local impacts of projects they fund — by financing fossil fuels, they are also implicated in climate change's devastating impacts on communities worldwide. By 2060, sea levels in Miami are projected to be 14-26 inches higher than 1992 levels.[77] Even before coastal communities are fully flooded, they may find themselves economically punished, with banks and insurers protecting themselves from loss by withdrawing local financial services like mortgages and property insurance.[78] The biggest bankers of fossil fuels — such as **JPMorgan Chase**, **Wells Fargo**, and **Citi** — stand to pummel places like Miami twice: first by backing fossil fuel projects that set sea rise in motion (while denying responsibility) and then, knowing full well that sea level rise is coming, by withdrawing services that residents may need in the transition.[79] Of course, Miami is just one community being affected by rising seas; banks' fossil financing is impacting coastal and island communities worldwide.

POLICY SCORES SUMMARY

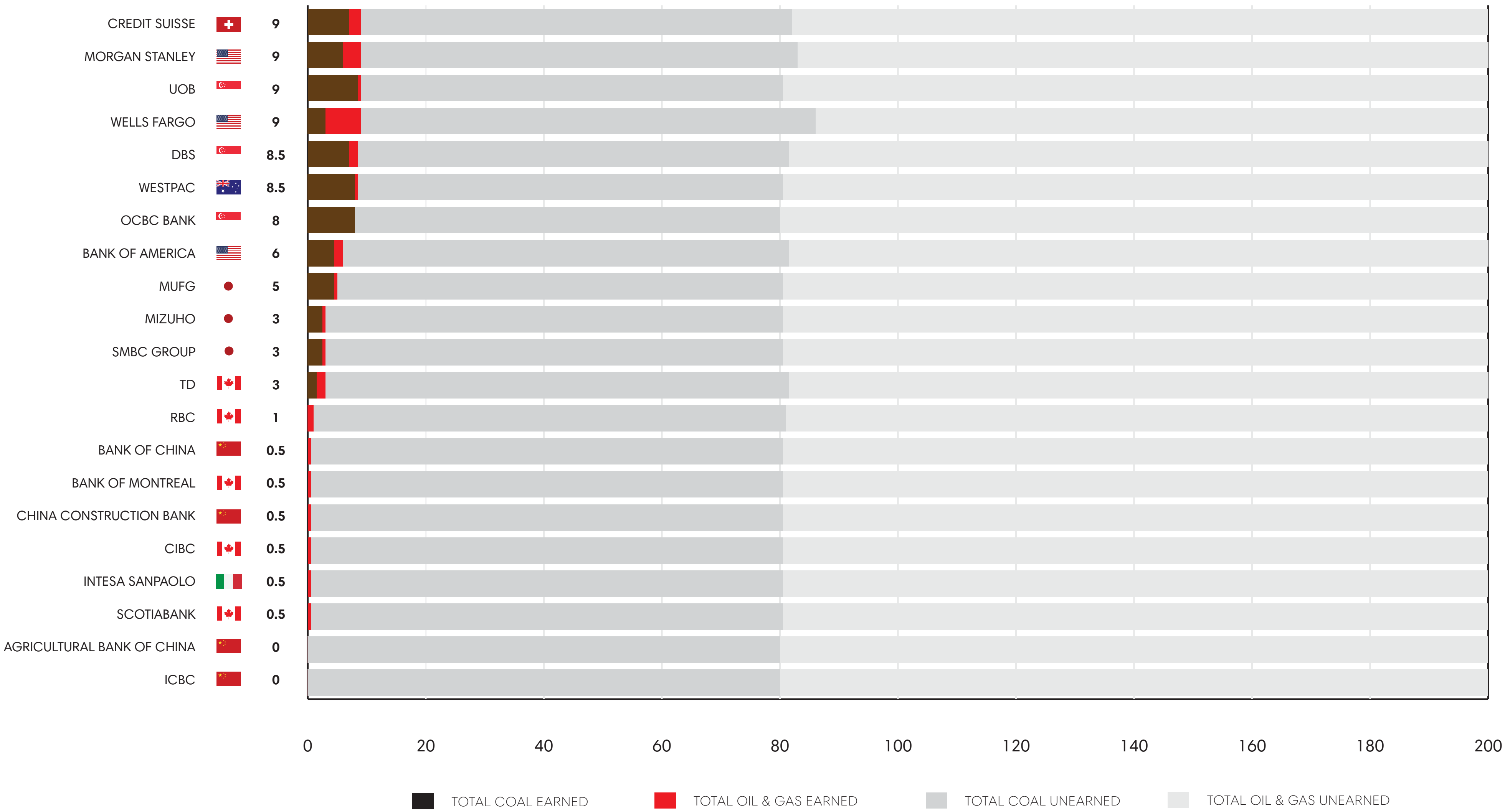
Instead of grading banks on an A through F scale, this year a new point system was used to assess bank policies on ending financing for fossil fuel expansion and phasing out overall fossil fuel financing.

TOTAL POLICY SCORE (OUT OF 200)

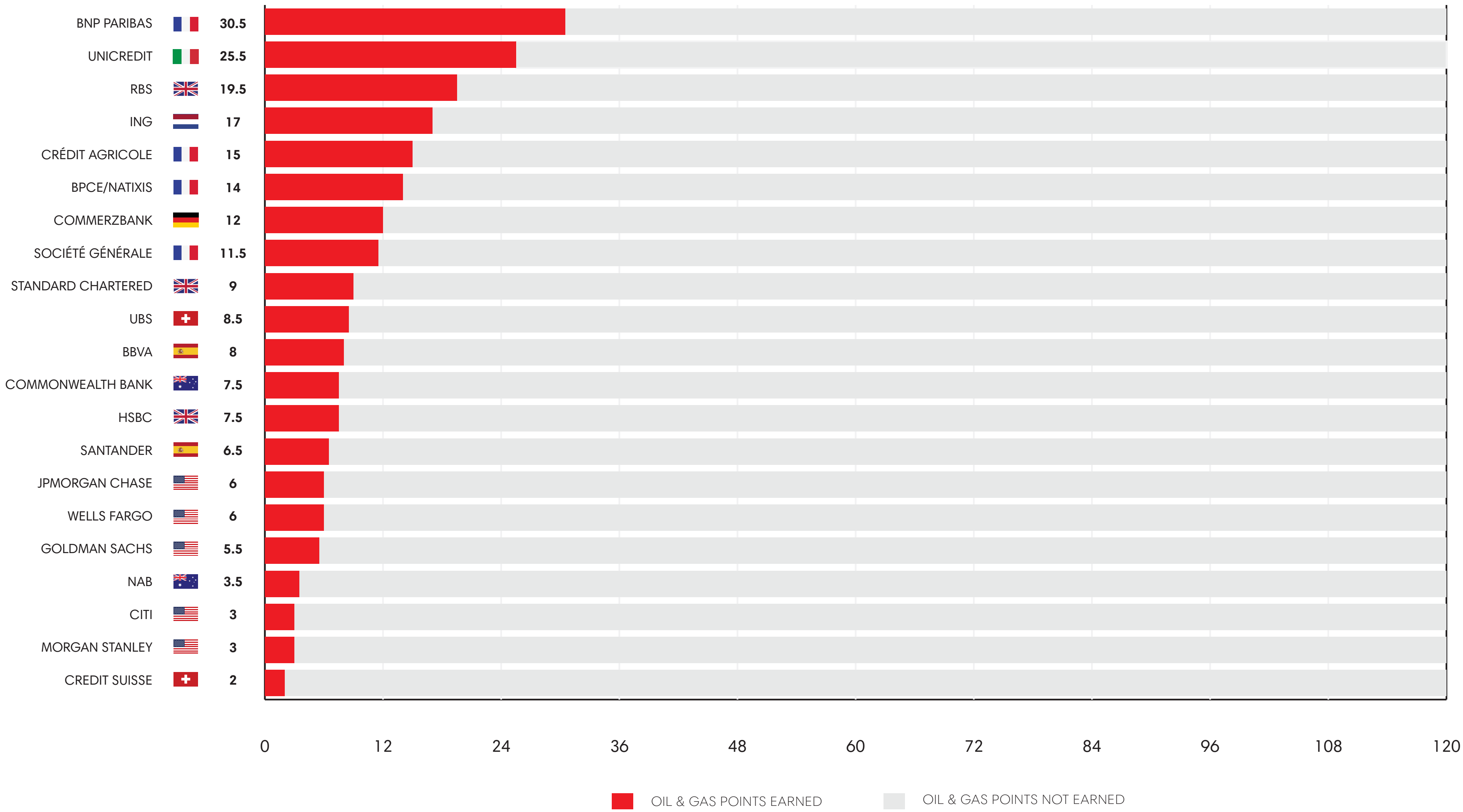


Even the banks at the top of this chart still have a long way to go to truly align their policies with the goals of the Paris Agreement.

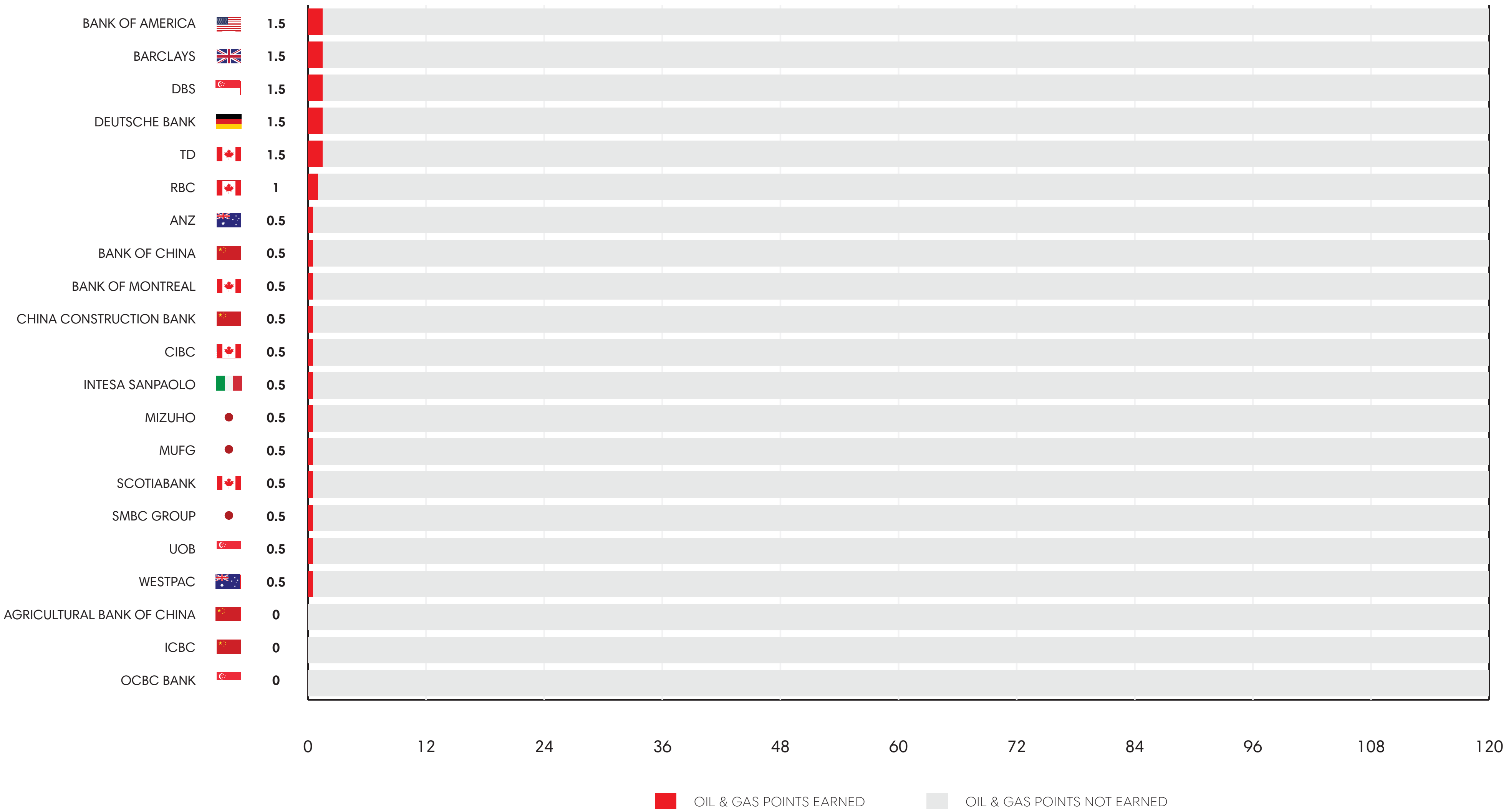
See the appendix for the scoring criteria (for each of the fossil fuel subsectors) that go into this overall score.



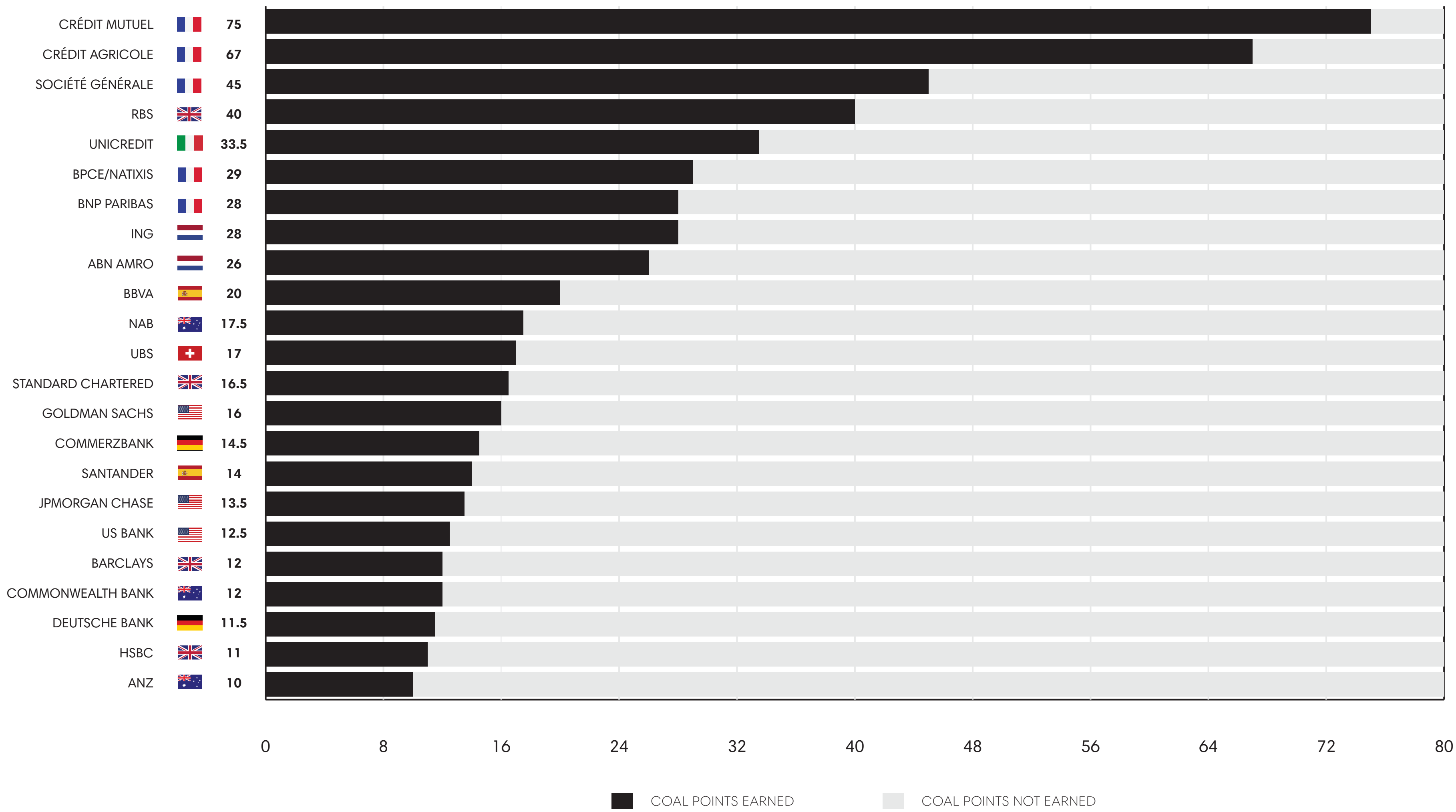
TOTAL OIL AND GAS POLICY SCORE (OUT OF 120)



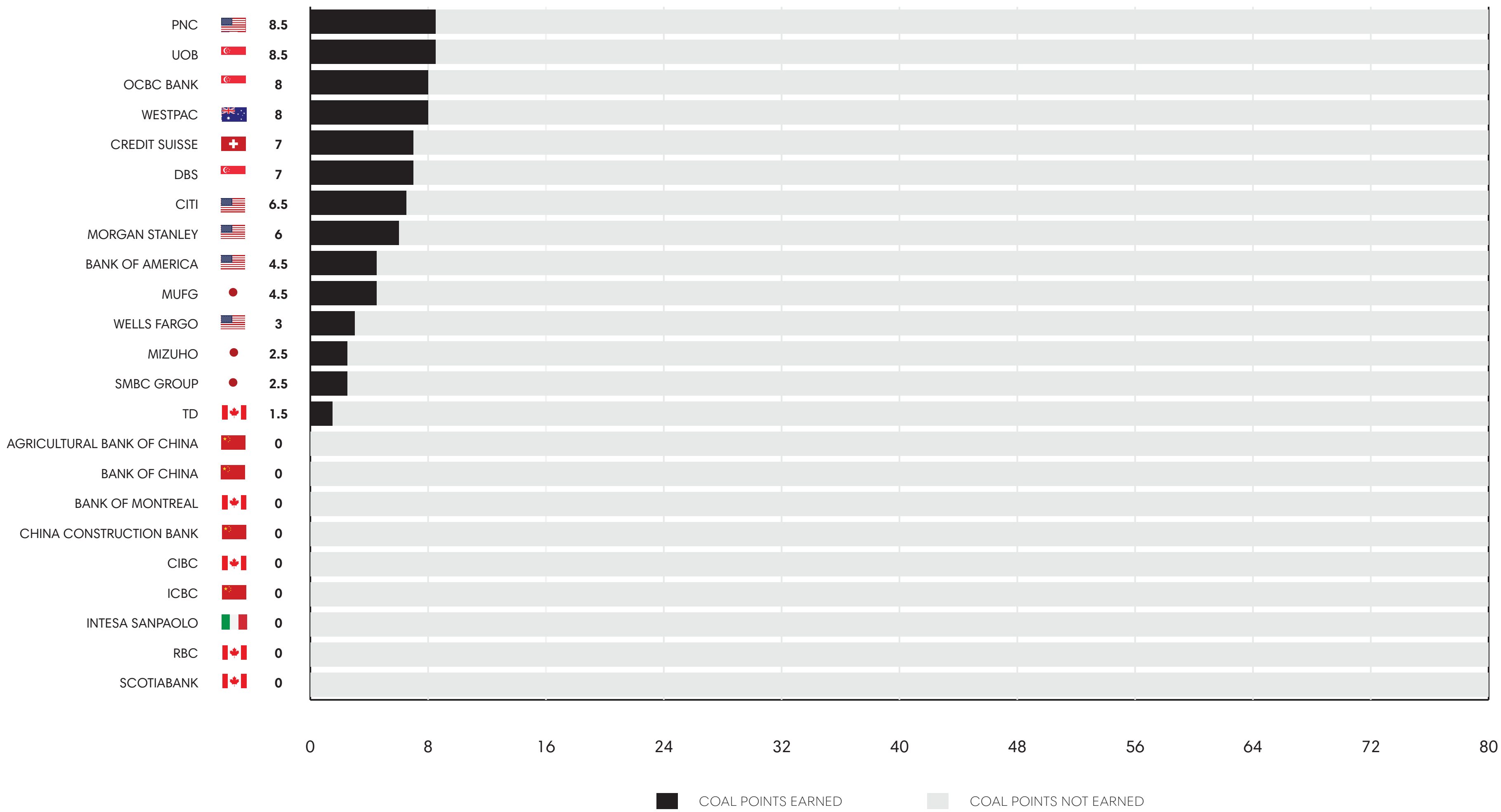
See the appendix for the scoring criteria (for each of the oil and gas subsectors) that go into this score.



TOTAL COAL POLICY SCORE (OUT OF 80)



See the appendix for the scoring criteria (for each of the coal subsectors) that go into this score.



METHODOLOGY

This 11th edition of the annual fossil fuel banking report builds on the previous edition's approach for analyzing private bank financing for the fossil fuel sector as a whole, as well as for top expanders of the fossil fuel industry. In addition, bank support for and policies regarding certain spotlight fossil fuels are highlighted: tar sands oil, Arctic oil and gas, offshore oil and gas, fracked oil and gas, LNG, coal mining, and coal-fired power. Previous versions of this report looked only at drilling in ultra-deep waters; this year's report looks at all offshore oil and gas, no matter the depth, reflecting the urgent need to prevent the expansion of climate-threatening extraction that is projected to occur offshore. These fossil fuels are highlighted due to their high environmental, social, and climate impacts and their heightened risk of becoming stranded assets.[80]

Banking Industry Scope

This report analyzes fossil fuel financing and policies from 35 large, private-sector commercial and investment banks based in Canada, China, Europe, Japan, and the United States. These include all of the commercial and investment banks in the world's top 20 banks by assets (19 total), as well as 16 other regionally significant players, all of whom are among the world's top 60 banks by assets.[81] Additional policy scores from banks in these regions, as well as from Australia and Singapore, are highlighted in some sections as further examples of progress in fossil fuel policies, or lack thereof.

Fossil Fuel Industry Scope

All Fossil Fuels:

Scope: Approximately 2,100 companies that received financing led by one of the 35 banks analyzed, and that are: involved in the extraction, transportation, transmission, combustion, or storage of any fossil fuels or fossil-based electricity, globally, according to the Bloomberg Industry Classification Standard; or are on the Global Coal Exit List; or are in the scope of any of the other tables in the report, as described below[82]

Source: *Bloomberg Finance L.P. and urgewald e.V.*[83]

Fossil Fuel Expansion:

Scope:

Oil and Gas: Top 60 companies by reserves projected to be produced by 2050 from shale wells and from non-shale projects reaching final investment decision from 2016-2030 (hereafter written as "expansion reserves"), and 15 companies behind key pipelines and LNG terminals that would expand extraction upstream

Coal: 11 companies by coal production that have mining expansion plans (selecting one per country except for China, where three are included), and top 16 companies proposing new coal power plants (selecting one per country except for India (four) and China (two) — totaling 25 coal companies due to overlap)[84]

Source: *Rystad Energy AS provided by Oil Change International, company reporting, and urgewald e.V.*[85]

Tar Sands Oil:

Scope: Top 30 companies by tar sands reserves under production plus expansion reserves, and the five companies with existing or proposed pipelines to carry tar sands oil out of Alberta

Source: *Rystad Energy AS provided by Oil Change International and Oil Sands Magazine*[86]

Arctic Oil and Gas:

Scope: Top 30 companies by onshore and offshore Arctic oil and gas reserves under production plus expansion reserves

Source: *Rystad Energy AS provided by Oil Change International*[87]

Offshore Oil and Gas:

Scope: Top 30 companies by offshore oil and gas reserves under production plus expansion reserves

Source: *Rystad Energy AS provided by Oil Change International*[88]

For full lists of the companies included in the analysis, see the appendix to this report, beginning on page ***84***.

Fracked Oil and Gas:

Scope: Top 30 companies by shale oil and gas reserves under production plus projected shale production between 2019 and 2050 from currently undrilled wells, and 10 key fracked oil and gas pipeline companies

Source: *Rystad Energy AS provided by Oil Change International and company reporting*[89]

Liquefied Natural Gas (LNG):

Scope: Top 30 companies by attributable capacity in current and planned LNG import or export terminals worldwide

Source: *Bloomberg New Energy Finance*[90]

Coal Mining:

Scope: Top 30 companies by annual coal production[91]

Source: *urgewald e.V.*[92]

Coal Power:

Scope: Top 30 coal power companies by installed plus planned coal power capacity

Source: *urgewald e.V.*[93]

Calculating Finance Flows

For the companies included in this analysis, we assessed each bank's leading involvement in corporate lending and underwriting transactions — including project finance where data were available — between January 1, 2016, and December 31, 2019, inclusive. All amounts in this report are expressed in U.S. dollars unless otherwise indicated. Transaction data were primarily sourced from Bloomberg Finance L.P., where the value of a transaction is split between leading banks.[94] Additional project finance transactions in the LNG and coal power subsectors were researched using the IJGlobal database, where all involved banks received credit for their participation in a deal.[95]

Each transaction was weighted based on the proportion of the borrower or issuer's operations devoted to the subsector in question. For the league tables measuring financing for all fossil fuels, and the top fossil fuel expanders, transactions were adjusted based on each company's overall fossil fuel-based assets or revenue.[96] For the upstream oil and gas subsectors, transactions were adjusted based on a company's reserves in the particular subsector out of its total oil and gas reserves in a given year. For LNG and coal mining, transactions were adjusted based on a company's total LNG-related or coal assets as a percentage of the company's total assets. For coal power, transactions were adjusted based on a company's share of coal in its generation capacity. For pipeline companies in a particular subsector, transactions were adjusted based on an estimation of the company's assets or revenue in that subsector.

For more detailed methodology and frequently asked questions, visit: RAN.org/bankingonclimatechange2020.

Policy Scores

For each particular spotlight fossil fuel and for fossil fuels overall, the point-based policy ranking assesses bank policies in four ways:

- Does the bank restrict financing for expansion, via (**1**) restrictions on direct financing for projects and/or (**2**) restrictions on financing for expansion companies?
- Does the bank commit to (**3**) phase out financing for and/or (**4**) exclude companies active above a certain threshold?

This new approach assesses banks on the same types of policies as the previous A-F scale and leads to similar rankings as last year's A-F grading. Each bank profiled in this report was sent its policy assessment in advance and given the opportunity to comment.

Detailed explanations of how the points are allocated, as well as full breakdowns of each bank's policy assessment, are available at RAN.org/bankingonclimatechange2020.

FOSSIL FUEL EXPANSION

PHOTO: © GREENPEACE / JOHN WOODS

EXPLORATION COMPANIES

Burning all coal, oil, and gas reserves already in production would exhaust a 2°C carbon budget, while burning in-production oil and gas alone would take us past 1.5°C.[97] Despite this, governments and companies currently plan to extract 120% more fossil fuels by 2030 than is compatible with a 1.5°C carbon budget.[98]

In this context, exploration for new reserves is simply indefensible. And yet, exploration is, by and large, unquestionably accepted as standard practice for fossil fuel extraction companies, as under current accounting standards their net worth is to a large extent determined by their proven reserves.

This report calls on banks to immediately end financing for expansion of fossil fuels, which includes fossil fuel exploration. The following charts name the top oil and gas explorers — recognizable as some of the biggest fossil fuel companies in the world — as well as the top companies whose primary business is exploring for new oil and gas reserves.

We urge banks to rule out financing for fossil fuel exploration projects and companies conducting fossil fuel exploration.

TOP OIL AND GAS EXPLORERS

Companies that have discovered the most new reserves since the Paris Agreement[99]

1. Total
2. Saudi Aramco
3. ExxonMobil
4. Abu Dhabi NOC
5. BP
6. Gazprom
7. CNOOC
8. Delfin LNG
9. Hess
10. Pemex

Top banks supporting these companies since Paris are **JPMorgan Chase**, **HSBC**, and **Citi**.[101]

TOP PURE-PLAY OIL AND GAS EXPLORERS

Exploration-focused companies that have discovered the most new reserves since the Paris Agreement[100]

1. Calima Energy
2. Springfield Exploration and Production
3. Almex Plus
4. Carnarvon Petroleum
5. i3 Energy
6. Global Petroleum
7. Borealis Alaska Oil
8. Pandawa Prima Lestari
9. Wellesley Petroleum
10. Africa Energy

Carnarvon Petroleum was the only company on this list to receive financing since Paris led by banks in this report's scope, from **JPMorgan Chase** and **RBC**.[102]

LEAGUE TABLE - *Banking on Fossil Fuel Expansion*

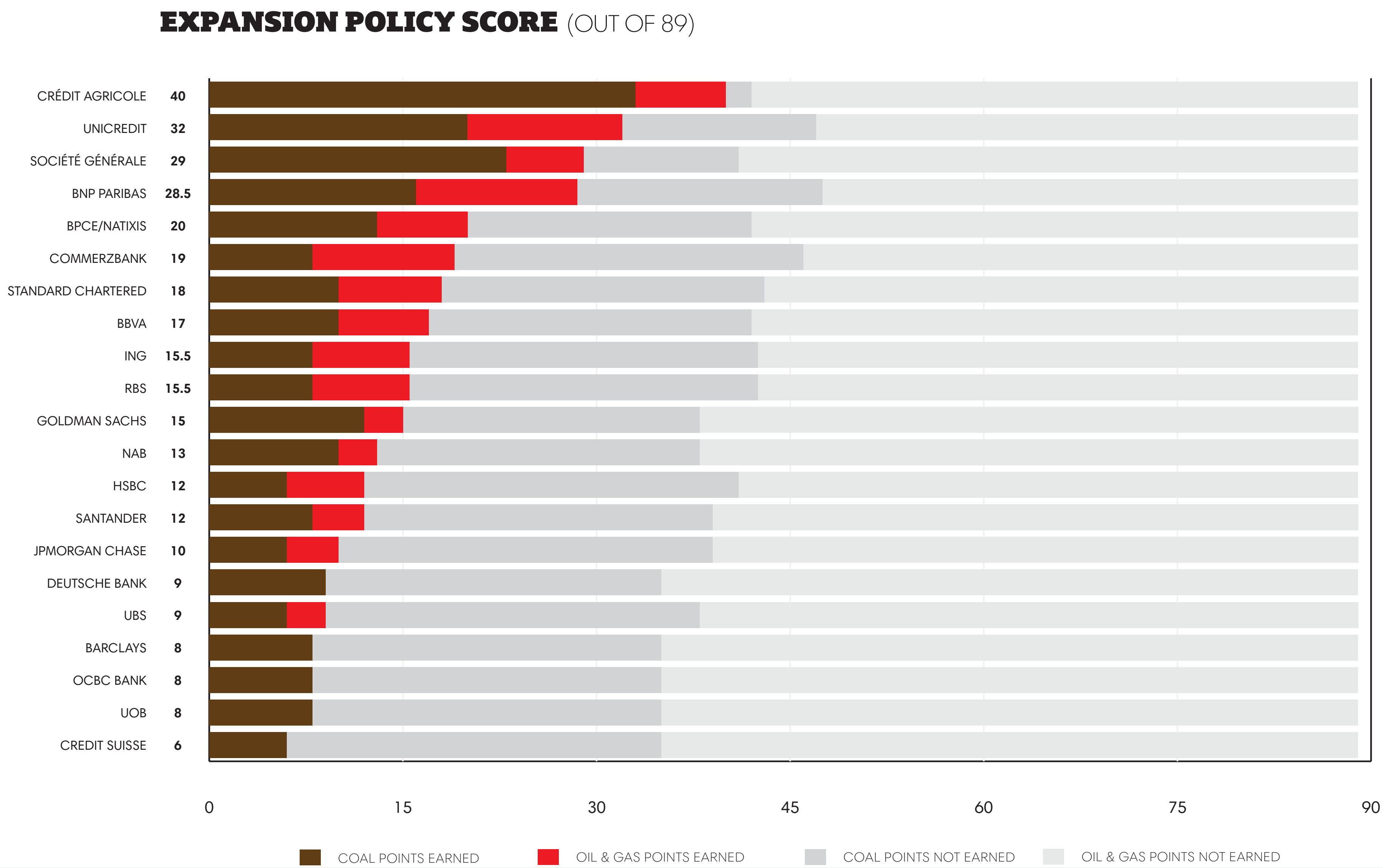
Bank financing for 100 key oil, gas, and coal companies expanding fossil fuels

RANK	BANK	2016	2017	2018	2019	TOTAL
1	JPMORGAN CHASE	$31.632 B	$21.519 B	$22.802 B	$26.351 B	$102.304 B
2	CITI	$19.144 B	$12.083 B	$14.072 B	$26.386 B	$71.685 B
3	BANK OF AMERICA	$16.873 B	$12.466 B	$11.680 B	$20.636 B	$61.655 B
4	WELLS FARGO	$8.771 B	$13.101 B	$14.520 B	$15.789 B	$52.181 B
5	TD	$9.898 B	$14.043 B	$9.303 B	$10.484 B	$43.727 B
6	RBC	$10.750 B	$9.665 B	$8.760 B	$10.940 B	$40.115 B
7	MUFG	$7.683 B	$10.975 B	$10.379 B	$10.824 B	$39.860 B
8	SCOTIABANK	$6.322 B	$9.644 B	$11.338 B	$11.851 B	$39.155 B
9	BANK OF MONTREAL	$9.896 B	$8.428 B	$8.445 B	$9.949 B	$36.718 B
10	BARCLAYS	$12.110 B	$6.699 B	$6.307 B	$9.816 B	$34.931 B
11	MIZUHO	$8.682 B	$5.863 B	$8.916 B	$10.872 B	$34.333 B
12	MORGAN STANLEY	$9.992 B	$8.857 B	$3.719 B	$10.966 B	$33.533 B
13	HSBC	$6.445 B	$9.622 B	$5.564 B	$11.755 B	$33.385 B
14	ICBC	$10.368 B	$5.995 B	$6.122 B	$9.952 B	$32.437 B
15	BANK OF CHINA	$9.436 B	$7.113 B	$8.243 B	$7.069 B	$31.862 B
16	GOLDMAN SACHS	$10.291 B	$5.271 B	$4.366 B	$10.863 B	$30.791 B
17	BNP PARIBAS	$6.526 B	$4.861 B	$3.996 B	$14.245 B	$29.628 B
18	DEUTSCHE BANK	$9.219 B	$6.839 B	$5.767 B	$3.326 B	$25.150 B

RANK	BANK	2016	2017	2018	2019	TOTAL
19	SMBC GROUP	$5.043 B	$5.202 B	$5.805 B	$8.720 B	$24.769 B
20	CREDIT SUISSE	$8.854 B	$5.383 B	$3.984 B	$4.760 B	$22.981 B
21	SOCIÉTÉ GÉNÉRALE	$4.658 B	$3.034 B	$5.250 B	$7.792 B	$20.735 B
22	CRÉDIT AGRICOLE	$3.913 B	$4.327 B	$4.000 B	$6.464 B	$18.704 B
23	AGRICULTURAL BANK OF CHINA	$6.811 B	$2.640 B	$3.052 B	$5.162 B	$17.665 B
24	CHINA CONSTRUCTION BANK	$7.339 B	$3.158 B	$2.423 B	$3.411 B	$16.331 B
25	CIBC	$2.410 B	$4.945 B	$2.718 B	$4.710 B	$14.783 B
26	SANTANDER	$4.157 B	$2.711 B	$2.262 B	$4.612 B	$13.742 B
27	UBS	$2.090 B	$3.443 B	$3.352 B	$3.535 B	$12.420 B
28	BBVA	$1.974 B	$1.731 B	$1.618 B	$2.355 B	$7.678 B
29	STANDARD CHARTERED	$600 M	$1.584 B	$1.370 B	$2.198 B	$5.753 B
30	INTESA SANPAOLO	$1.442 B	$895 M	$2.877 B	$410 M	$5.624 B
31	ING	$1.223 B	$579 M	$2.050 B	$1.218 B	$5.070 B
32	UNICREDIT	$1.965 B	$786 M	$1.447 B	$656 M	$4.854 B
33	BPCE/NATIXIS	$891 M	$928 M	$727 M	$1.924 B	$4.470 B
34	COMMERZBANK	$321 M	$699 M	$983 M	$1.361 B	$3.364 B
35	RBS	$1.158 B	$564 M	$563 M	$370 M	$2.654 B
	GRAND TOTAL	$258.884 B	$215.653 B	$208.780 B	$291.732 B	$975.049 B

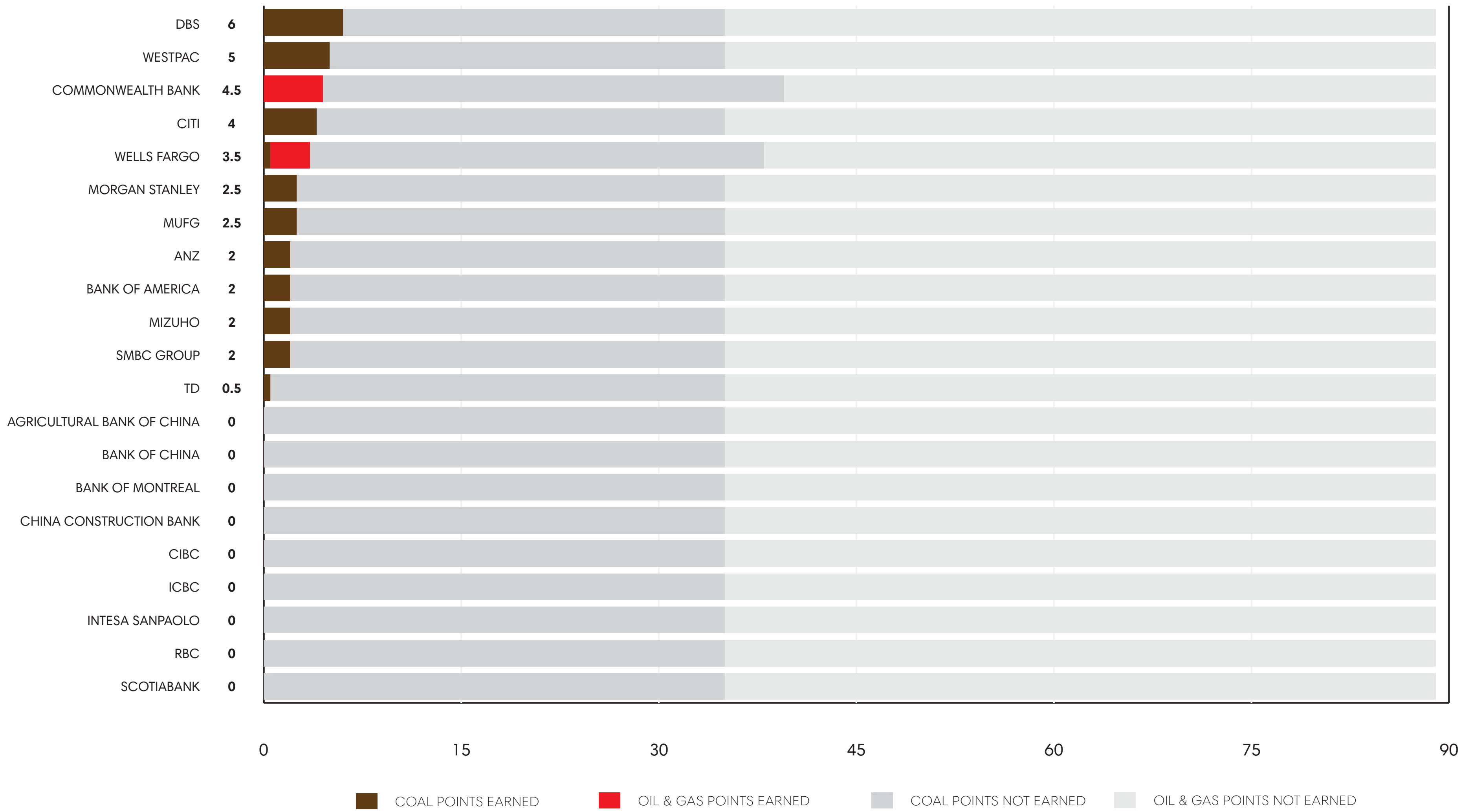
POLICY SCORES - *Fossil Fuel Expansion*

Of the total policy points available (80 for coal and 120 for oil and gas) as shown on page **89-105**, some of these points are awarded based on a bank's policies restricting the expansion of fossil fuels in that area (35 for coal and 54 for oil and gas). This chart ranks banks by those expansion points only, to highlight the banks whose policies best restrict financing for the expansion of fossil fuels.



Full breakdowns of each bank's assessment are available at RAN.org/bankingonclimatechange2020
See the appendix for the scoring criteria (for each of the fossil fuel subsectors) that go into this score.

EXPANSION POLICY SCORE (OUT OF 89)



SPOTLIGHT

Fossil Fuels

PHOTO: PARILOV / SHUTTERSTOCK

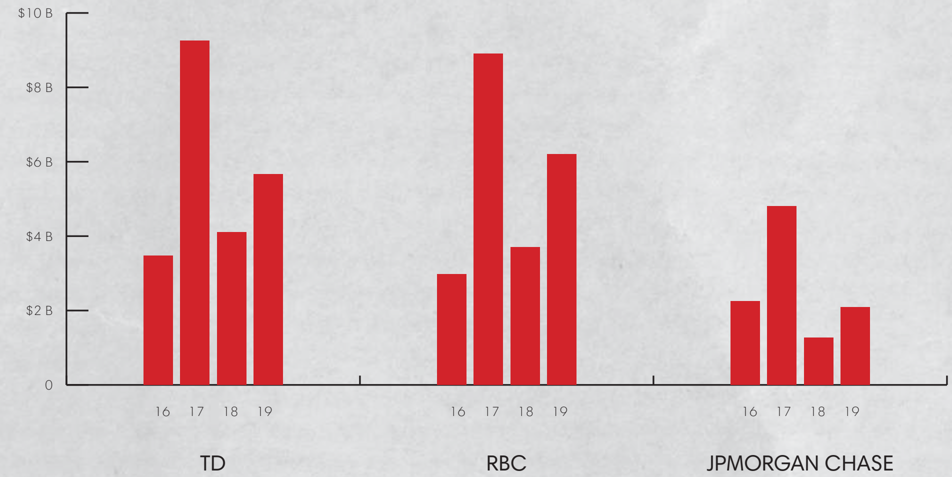
TAR SANDS OIL

PHOTO: JIRI REZAC / GREENPEACE

Who's Banking on **TAR SANDS OIL?**

The tar sands (also known as oil sands) of Alberta, Canada are infamously dirty oil reserves, whose resource-intensive extraction and transportation causes harm to the climate, ecosystems, and local communities including Indigenous peoples.[103] Current production is restricted by a pipeline bottleneck, meaning the fate of increased tar sands extraction effectively lives or dies with three proposed pipelines: Line 3, Keystone XL, and Trans Mountain.[104]

WORST BANKS BY TOTAL TAR SANDS FINANCING (2016-2019)



TAR SANDS POLICY SCORE

0.5 OUT OF **20** | **0.5** OUT OF **20** | **0.5** OUT OF **20**

LEAGUE TABLE - *Banking on Tar Sands Oil*

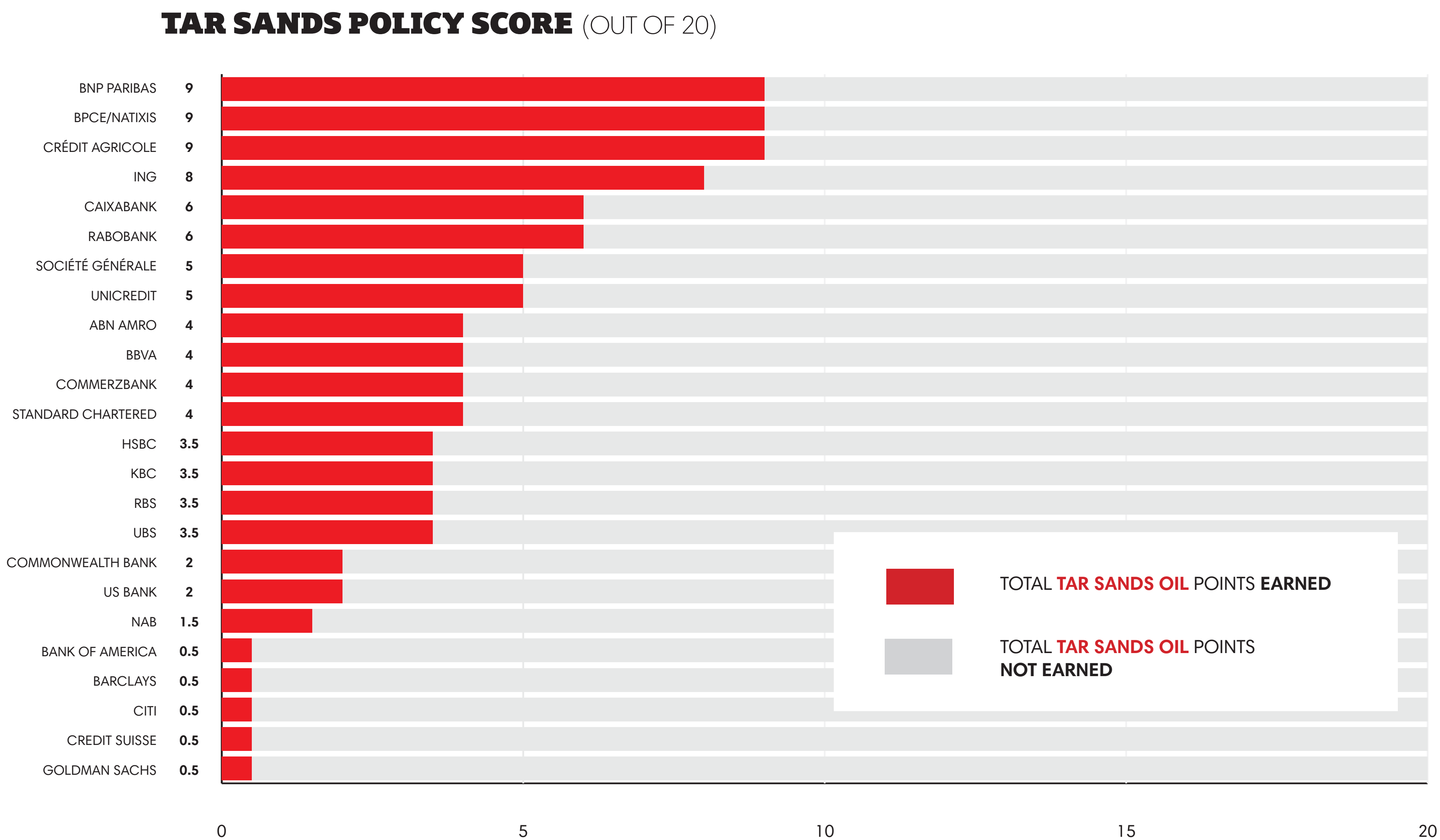
Bank financing for 30 top tar sands production companies and five key tar sands pipeline companies

RANK	BANK	2016	2017	2018	2019	TOTAL
1	TD	$3.476 B	$9.260 B	$4.109 B	$5.665 B	$22.509 B
2	RBC	$2.976 B	$8.903 B	$3.700 B	$6.201 B	$21.780 B
3	JPMORGAN CHASE	$2.246 B	$4.800 B	$1.267 B	$2.086 B	$10.399 B
4	CIBC	$2.151 B	$3.810 B	$589 M	$3.215 B	$9.765 B
5	BANK OF MONTREAL	$2.342 B	$2.855 B	$1.577 B	$1.731 B	$8.505 B
6	SCOTIABANK	$1.268 B	$3.057 B	$1.356 B	$1.562 B	$7.244 B
7	BARCLAYS	$566 M	$2.018 B	$84 M	$576 M	$3.244 B
8	CITI	$810 M	$1.007 B	$348 M	$550 M	$2.716 B
9	HSBC	$857 M	$1.302 B	$197 M	$231 M	$2.587 B
10	BANK OF AMERICA	$743 M	$1.165 B	$262 M	$321 M	$2.491 B
11	DEUTSCHE BANK	$641 M	$378 M	$410 M	$136 M	$1.565 B
12	MUFG	$140 M	$937 M	$199 M	$152 M	$1.428 B
13	WELLS FARGO	$644 M	$222 M	$156 M	$212 M	$1.235 B
14	CREDIT SUISSE	$155 M	$556 M	$148 M	$83 M	$941 M
15	MIZUHO	$235 M	$242 M	$105 M	$160 M	$742 M
16	BNP PARIBAS	$378 M	$161 M	$76 M	$89 M	$705 M
17	MORGAN STANLEY	$365 M	$38 M	$20 M	$214 M	$637 M
18	GOLDMAN SACHS	$309 M	$136 M	$33 M	$100 M	$579 M

RANK	BANK	2016	2017	2018	2019	TOTAL
19	SMBC GROUP	$108 M	$137 M	$205 M	$82 M	$532 M
20	SOCIÉTÉ GÉNÉRALE	$155 M	$66 M	$120 M	$153 M	$493 M
21	CRÉDIT AGRICOLE	$183 M	$68 M	$80 M	$135 M	$466 M
22	UBS	$81 M	$37 M	$89 M	$70 M	$278 M
23	ICBC	$136 M	$24 M	$16 M	$90 M	$265 M
24	BANK OF CHINA	$69 M	$24 M	$28 M	$38 M	$159 M
25	AGRICULTURAL BANK OF CHINA	$47 M	$11 M	$19 M	$16 M	$92 M
26	SANTANDER	$19 M	$30 M	$13 M	$30 M	$91 M
27	CHINA CONSTRUCTION BANK	$9 M	$11 M	$7 M	$31 M	$58 M
28	RBS	$8 M	$14 M	$20 M	$3 M	$45 M
29	BBVA	$7 M	$13 M	-	$24 M	$44 M
30	STANDARD CHARTERED	$9 M	$11 M	$7 M	$13 M	$40 M
31	BPCE/NATIXIS	$3 M	$18 M	$9 M	$2 M	$32 M
32	COMMERZBANK	-	$8 M	$13 M	$10 M	$30 M
33	UNICREDIT	$25 M	-	-	-	$25 M
33	INTESA SANPAOLO	$25 M	-	-	-	$25 M
35	ING	$4 M	$13 M	-	$7 M	$24 M
	GRAND TOTAL	$21.190 B	$41.329 B	$15.261 B	$23.992 B	$101.772 B

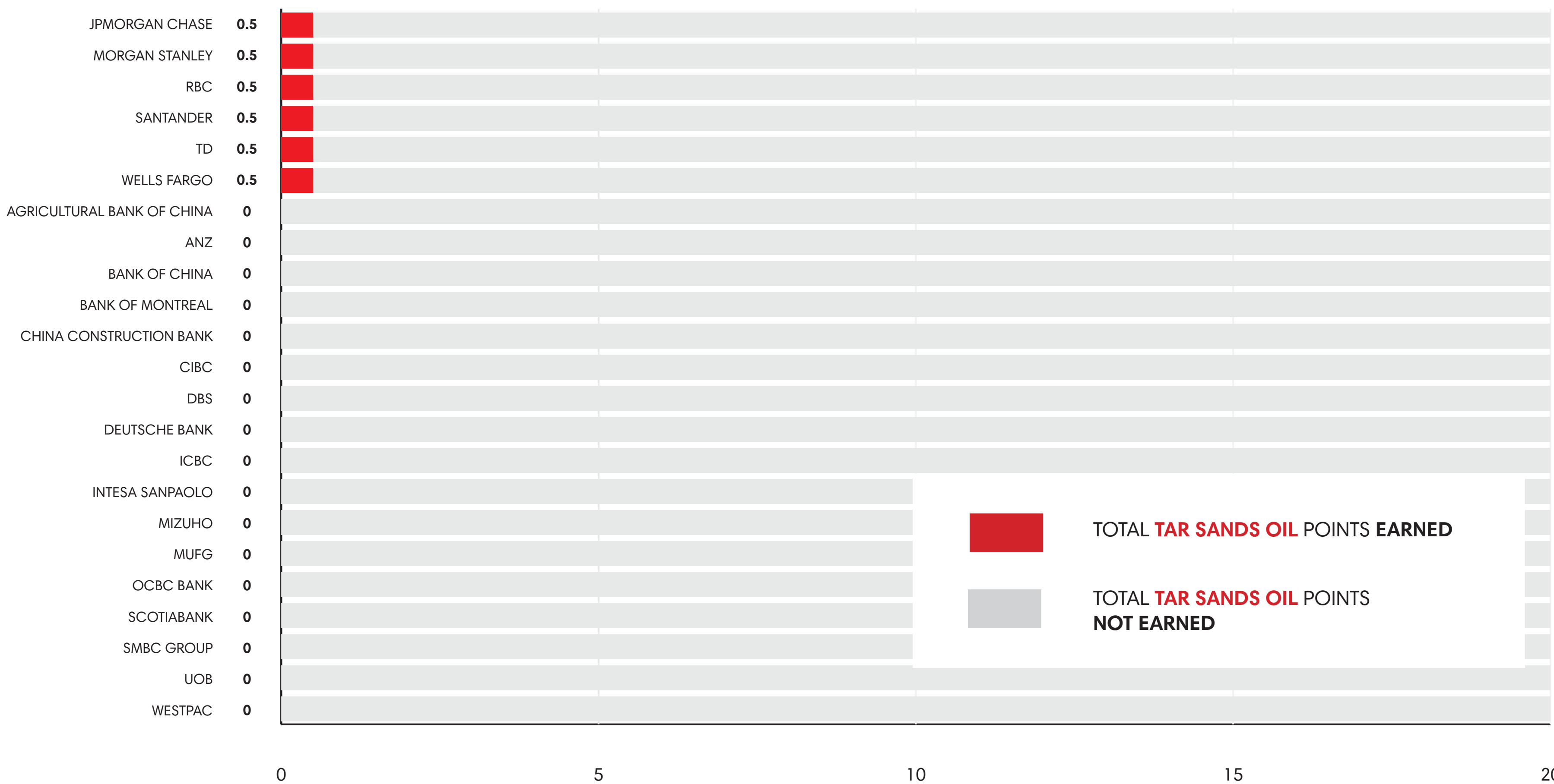
POLICY SCORES - *Tar Sands Oil*

Many European banks have put in place policies to restrict financing for tar sands extraction and/or infrastructure, but the banks that are the biggest funders of the sector (the Canadian banks led by **TD** and **RBC**, as well as **JPMorgan Chase** and **Barclays**) have so far failed to do the same.



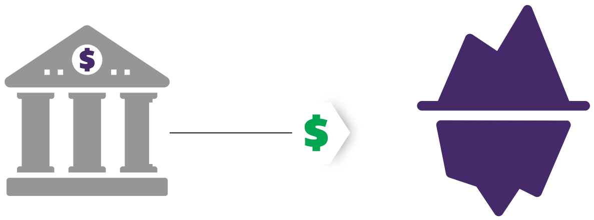
See page **89** for the scoring criteria.

TAR SANDS POLICY SCORE (OUT OF 20)



ARCTIC OIL & GAS

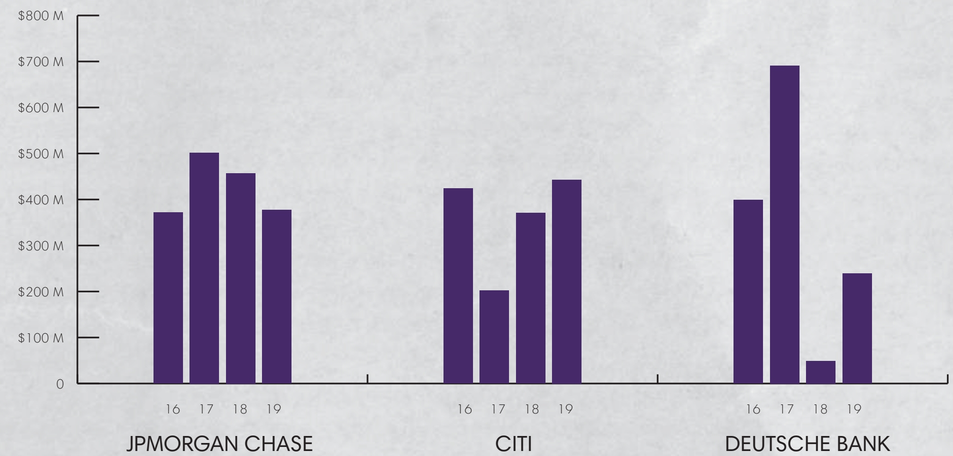
PHOTO: SHUTTERSTOCK



Who's Banking on **ARCTIC OIL & GAS?**

Drilling in the fragile Arctic ecosystem — whether for oil or gas — threatens the livelihoods and culture of numerous Indigenous peoples, including the Gwich'in people in Alaska, as well as the global climate. This is a piece of the oil and gas universe from which more and more banks are distancing themselves. However, big banks continue to finance companies with significant Arctic oil and gas reserves.

WORST BANKS BY TOTAL ARCTIC OIL & GAS FINANCING (2016-2019)



ARCTIC OIL & GAS POLICY SCORE

4.5 OUT OF **20** | **0.5** OUT OF **20** | **0.5** OUT OF **20**

LEAGUE TABLE - *Banking on Arctic Oil & Gas*

Bank financing for 30 top Arctic oil and gas companies

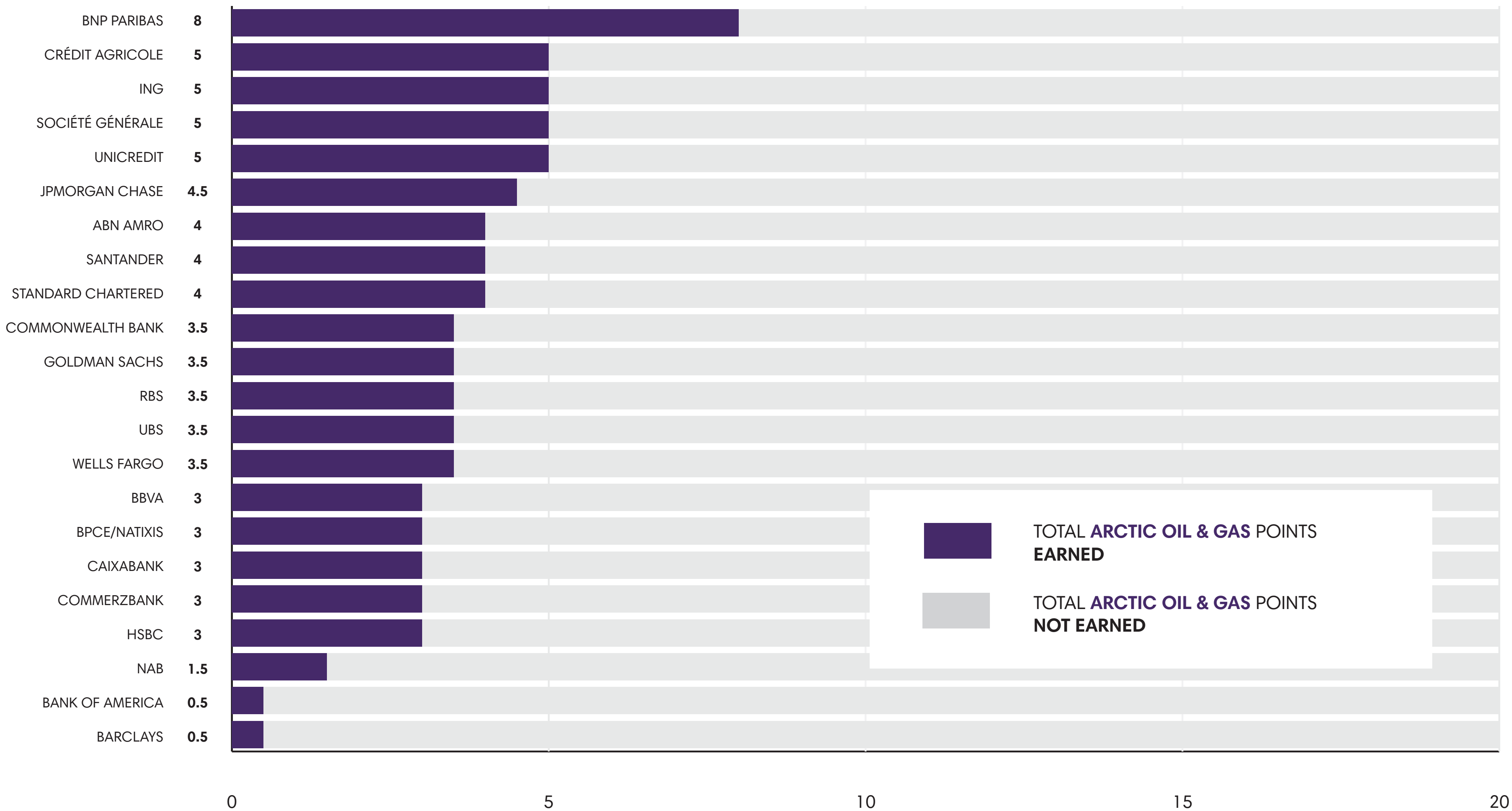
RANK	BANK	2016	2017	2018	2019	TOTAL
1	JPMORGAN CHASE	$372 M	$502 M	$457 M	$377 M	$1.708 B
2	CITI	$424 M	$202 M	$371 M	$443 M	$1.440 B
3	DEUTSCHE BANK	$399 M	$691 M	$49 M	$239 M	$1.378 B
4	MUFG	$146 M	$557 M	$288 M	$282 M	$1.273 B
5	UNICREDIT	$175 M	$438 M	$177 M	$395 M	$1.185 B
6	BARCLAYS	$288 M	$57 M	$297 M	$483 M	$1.125 B
7	BNP PARIBAS	$218 M	$46 M	$341 M	$374 M	$978 M
8	SOCIÉTÉ GÉNÉRALE	$115 M	$402 M	$156 M	$282 M	$955 M
9	SMBC GROUP	$38 M	$363 M	$369 M	$164 M	$934 M
10	HSBC	$253 M	$95 M	$257 M	$297 M	$903 M
11	BANK OF AMERICA	$256 M	$30 M	$246 M	$327 M	$859 M
12	MIZUHO	$125 M	$100 M	$290 M	$330 M	$845 M
13	ICBC	$297 M	$10 M	$159 M	$367 M	$832 M
14	BANK OF CHINA	$224 M	$99 M	$129 M	$355 M	$807 M
15	GOLDMAN SACHS	$118 M	$224 M	$174 M	$273 M	$789 M
16	CRÉDIT AGRICOLE	$138 M	$80 M	$201 M	$329 M	$747 M
17	COMMERZBANK	-	$37 M	$297 M	$347 M	$681 M
18	SANTANDER	$41 M	$412 M	$26 M	$156 M	$635 M

RANK	BANK	2016	2017	2018	2019	TOTAL
19	CREDIT SUISSE	$75 M	$119 M	$180 M	$249 M	$622 M
20	ING	$92 M	$3 M	$308 M	$218 M	$619 M
21	MORGAN STANLEY	$152 M	$29 M	$133 M	$226 M	$540 M
22	TD	$257 M	$89 M	$150 M	-	$496 M
23	AGRICULTURAL BANK OF CHINA	$83 M	$10 M	-	$349 M	$442 M
24	WELLS FARGO	-	$201 M	$180 M	$3 M	$383 M
25	RBS	$75 M	$30 M	$85 M	$120 M	$310 M
26	UBS	$87 M	$126 M	$69 M	$10 M	$292 M
27	STANDARD CHARTERED	-	$136 M	-	$82 M	$218 M
28	CHINA CONSTRUCTION BANK	$83 M	$10 M	-	$117 M	$210 M
29	INTESA SANPAOLO	$29 M	$15 M	$83 M	$40 M	$167 M
30	BBVA	$17 M	-	-	$126 M	$142 M
31	RBC	-	$78 M	$16 M	$29 M	$123 M
32	BANK OF MONTREAL	-	-	$30 M	-	$30 M
33	SCOTIABANK	-	$21 M	-	-	$21 M
34	BPCE/NATIXIS	-	$11 M	-	$5 M	$17 M
35	CIBC	-	-	$7 M	-	$7 M
	GRAND TOTAL	$4.576 B	$5.223 B	$5.524 B	$7.391 B	$22.714 B

POLICY SCORES - *Arctic Oil & Gas*

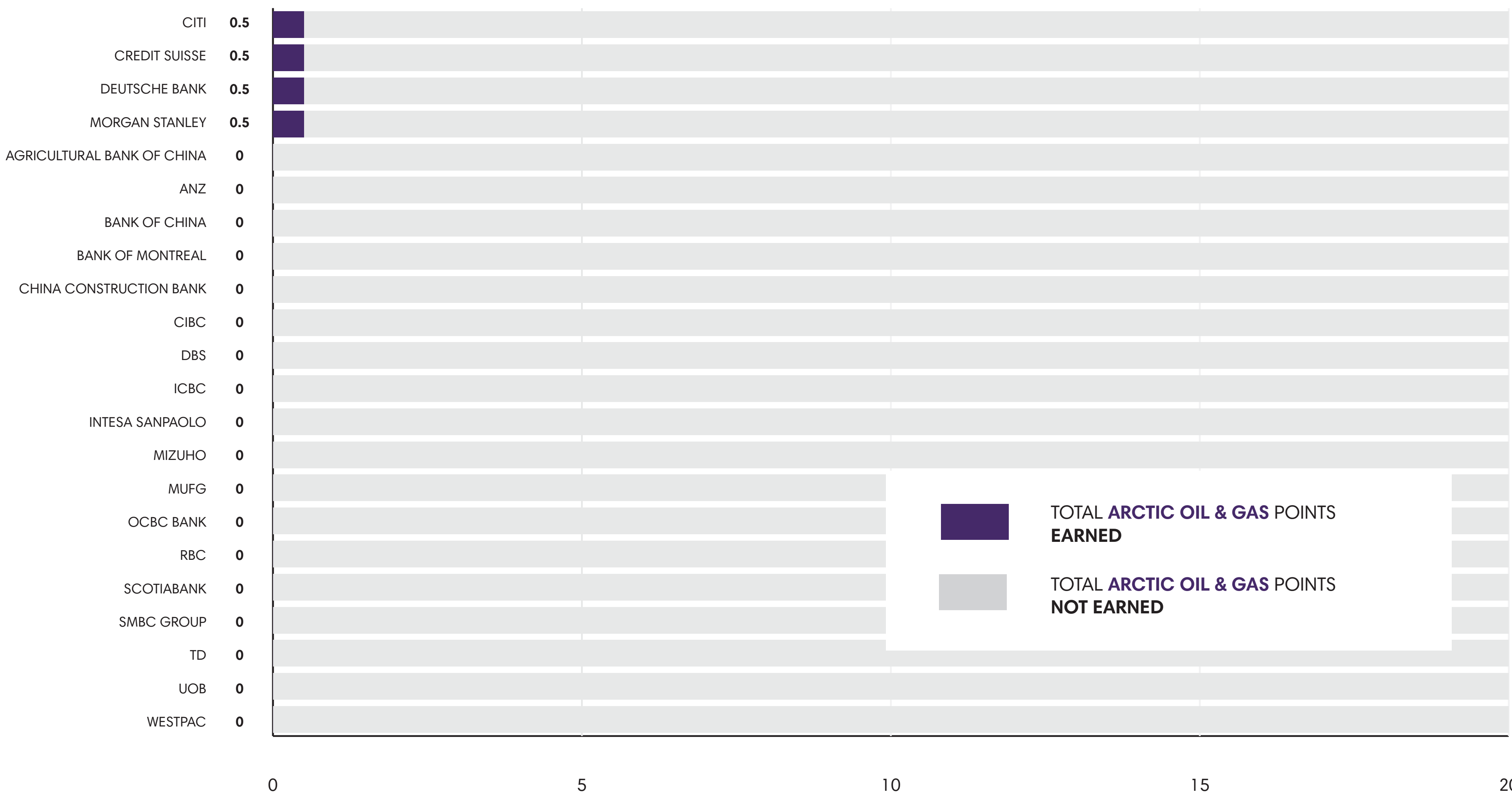
While an increasing number of banks have prohibited financing for Arctic oil and/or gas projects, only **BNP Paribas**, **Crédit Agricole**, **Société Générale**, **UniCredit**, **ING**, **UBS**, and **RBS** have restricted financing for any companies involved in Arctic drilling.[105]

ARCTIC OIL & GAS POLICY SCORE (OUT OF 20)



See page **91** for the scoring criteria.

ARCTIC OIL & GAS POLICY SCORE (OUT OF 20)



OFFSHORE OIL & GAS

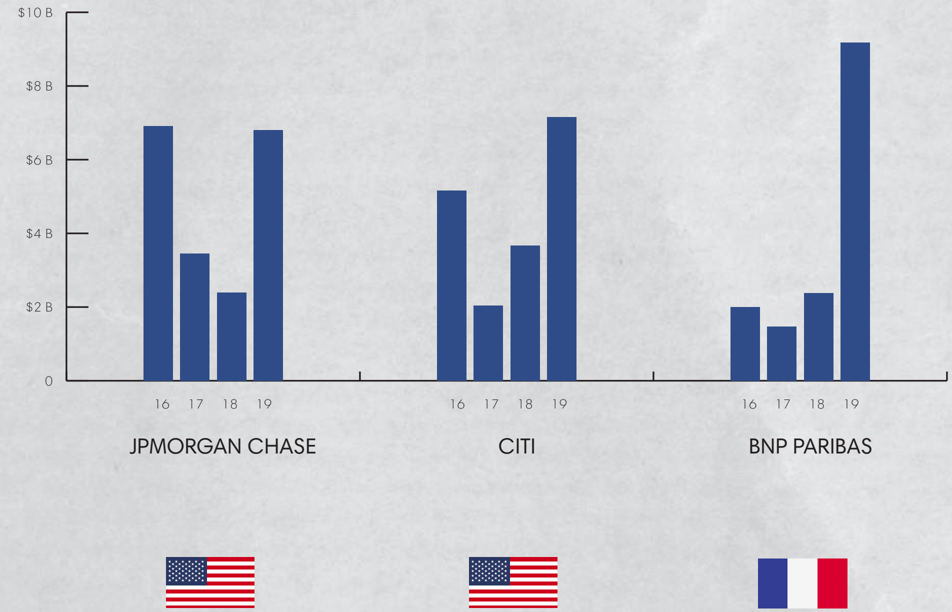
PHOTO: KANOK SULAIMAN / SHUTTERSTOCK

Who's Banking on **OFFSHORE OIL & GAS?**

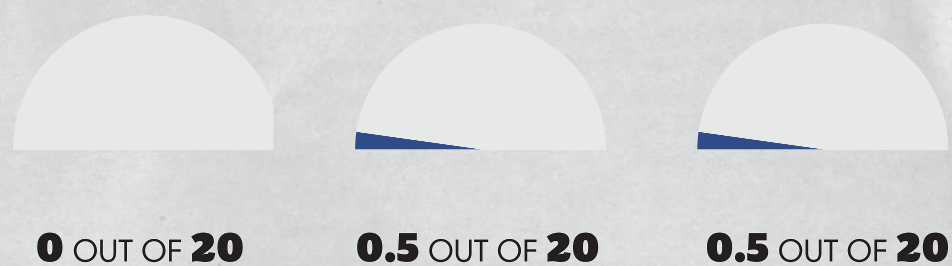
Offshore oil and gas is second only to shale in terms of projected production from currently undeveloped sources.[106] No matter at what depth it is drilled, the expansion into new offshore oil and gas fields puts climate and investor value at risk.

Recent exploration has opened new areas, particularly in South America (Guyana, Suriname), but also off of Africa and in the Mediterranean. 2019 was the biggest year since 2013 for offshore discoveries with exploration adding over **11.5** billion barrels of oil equivalent.[107]

WORST BANKS BY TOTAL OFFSHORE OIL & GAS FINANCING (2016-2019)



OFFSHORE OIL & GAS POLICY SCORE



LEADUE TABLE - *Banking on Offshore Oil & Gas*

Bank financing for 30 top offshore oil and gas companies

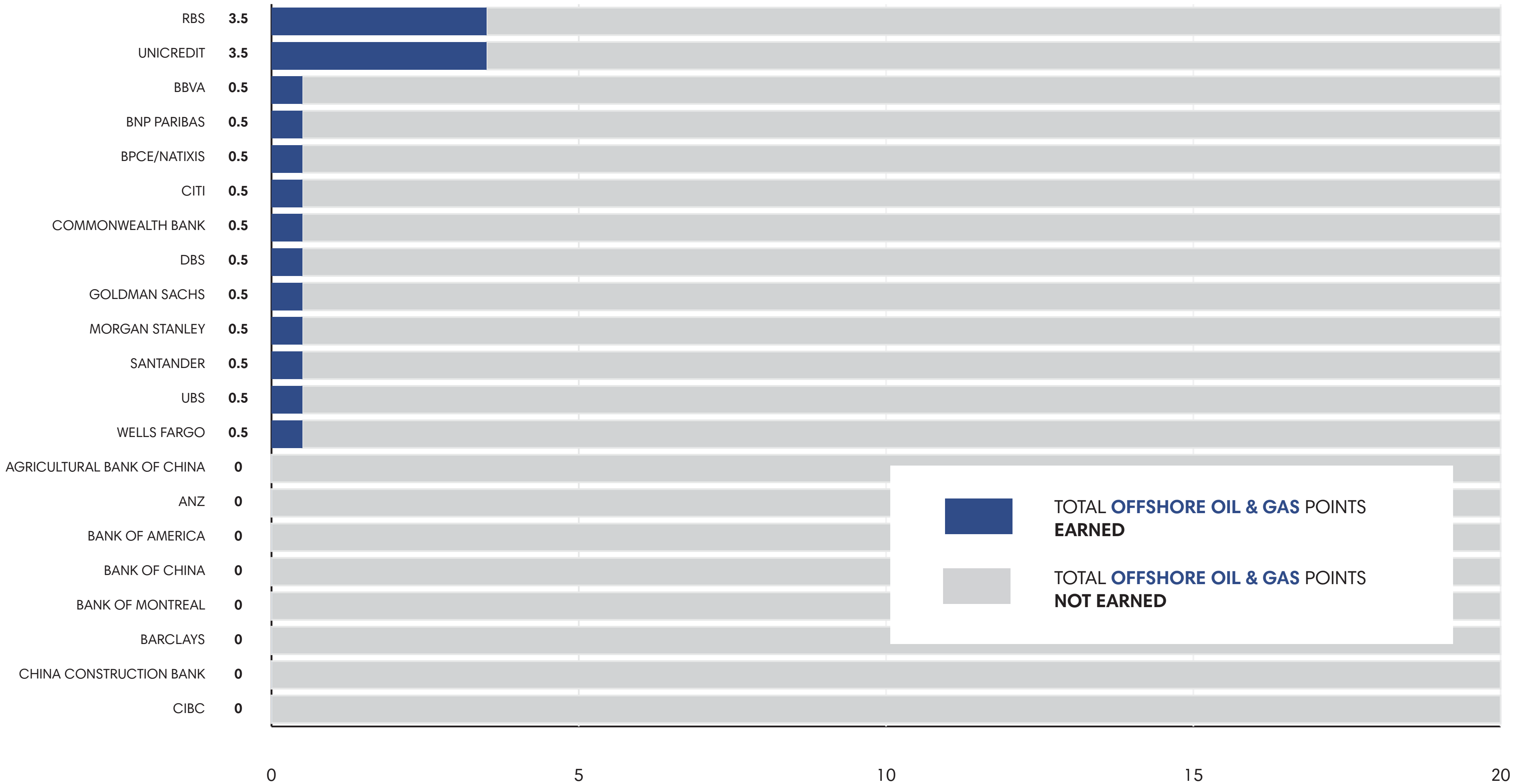
RANK	BANK	2016	2017	2018	2019	TOTAL
1	JPMORGAN CHASE	$6.915 B	$3.453 B	$2.389 B	$6.799 B	$19.556 B
2	CITI	$5.165 B	$2.043 B	$3.676 B	$7.154 B	$18.038 B
3	BNP PARIBAS	$1.998 B	$1.474 B	$2.383 B	$9.185 B	$15.041 B
4	BANK OF AMERICA	$6.953 B	$1.205 B	$2.211 B	$4.597 B	$14.966 B
5	HSBC	$2.658 B	$4.934 B	$1.587 B	$4.531 B	$13.711 B
6	MORGAN STANLEY	$3.779 B	$1.939 B	$778 M	$3.906 B	$10.403 B
7	BARCLAYS	$4.427 B	$909 M	$935 M	$2.898 B	$9.171 B
8	MIZUHO	$2.408 B	$576 M	$2.232 B	$3.453 B	$8.668 B
9	SANTANDER	$3.170 B	$1.737 B	$810 M	$2.740 B	$8.456 B
10	CRÉDIT AGRICOLE	$1.554 B	$1.233 B	$2.024 B	$3.082 B	$7.892 B
11	GOLDMAN SACHS	$1.411 B	$362 M	$1.039 B	$3.842 B	$6.654 B
12	SMBC GROUP	$1.349 B	$1.143 B	$1.494 B	$1.944 B	$5.930 B
13	SOCIÉTÉ GÉNÉRALE	$1.369 B	$393 M	$1.371 B	$2.289 B	$5.422 B
14	MUFG	$1.547 B	$1.424 B	$834 M	$1.556 B	$5.360 B
15	DEUTSCHE BANK	$2.503 B	$1.338 B	$621 M	$806 M	$5.267 B
16	ICBC	$1.254 B	$33 M	$735 M	$1.703 B	$3.725 B
17	UBS	$492 M	$667 M	$1.040 B	$1.260 B	$3.460 B
18	BBVA	$811 M	$724 M	$580 M	$1.212 B	$3.327 B

RANK	BANK	2016	2017	2018	2019	TOTAL
19	BANK OF CHINA	$581 M	$338 M	$618 M	$1.644 B	$3.181 B
20	CREDIT SUISSE	$968 M	$255 M	$621 M	$1.224 B	$3.067 B
21	RBC	$603 M	$192 M	$256 M	$1.189 B	$2.240 B
22	STANDARD CHARTERED	$128 M	$862 M	$52 M	$1.016 B	$2.058 B
23	BPCE/NATIXIS	$460 M	$229 M	$301 M	$1.022 B	$2.013 B
24	AGRICULTURAL BANK OF CHINA	$283 M	$33 M	-	$1.475 B	$1.791 B
25	WELLS FARGO	$332 M	$224 M	$571 M	$434 M	$1.560 B
26	INTESA SANPAOLO	$623 M	$450 M	$340 M	$115 M	$1.527 B
27	UNICREDIT	$631 M	$190 M	$523 M	$104 M	$1.448 B
28	SCOTIABANK	-	-	$285 M	$859 M	$1.144 B
29	CHINA CONSTRUCTION BANK	$283 M	$33 M	-	$459 M	$775 M
30	RBS	$138 M	$263 M	$269 M	$72 M	$742 M
31	TD	$360 M	-	$214 M	$126 M	$699 M
32	COMMERZBANK	-	$142 M	$230 M	$217 M	$589 M
33	ING	$35 M	$78 M	$52 M	-	$164 M
34	CIBC	-	-	$58 M	-	$58 M
35	BANK OF MONTREAL	-	-	-	$13 M	$13 M
	GRAND TOTAL	$55.186 B	$28.877 B	$31.128 B	$72.927 B	$188.117 B

POLICY SCORES - *Offshore Oil & Gas*

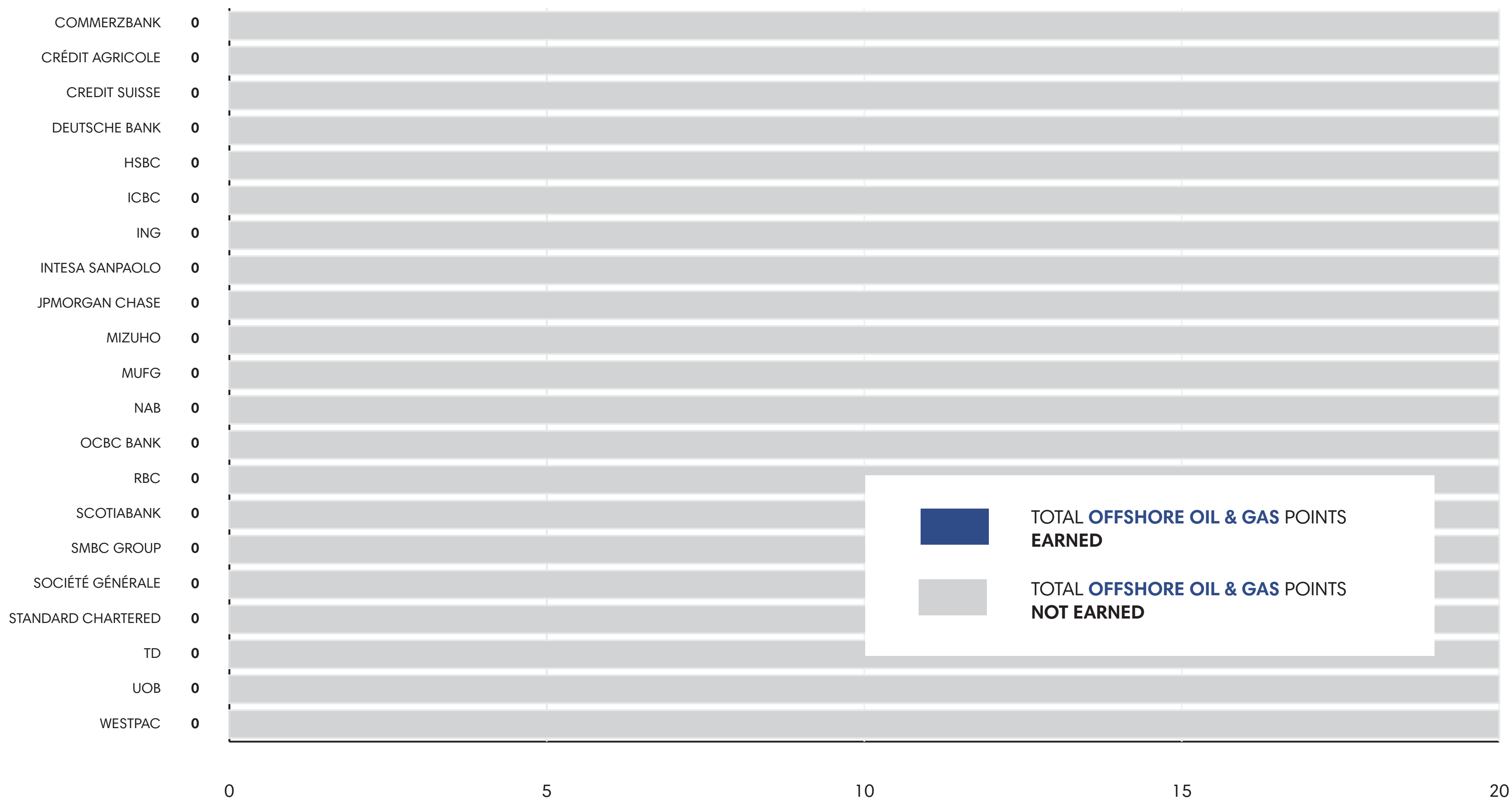
UniCredit and **RBS** are the only banks to restrict financing for some offshore projects and companies. All other banks profiled continue to allow unrestricted financing for companies producing and expanding oil and gas offshore.[108]

OFFSHORE OIL & GAS POLICY SCORE (OUT OF 20)



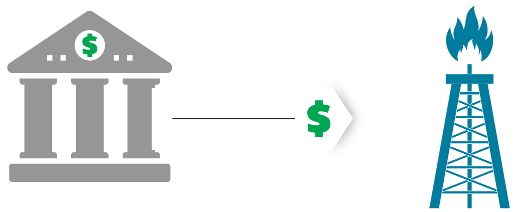
See page **93** for the scoring criteria.

OFFSHORE OIL & GAS POLICY SCORE (OUT OF 20)



FRACKED OIL & GAS

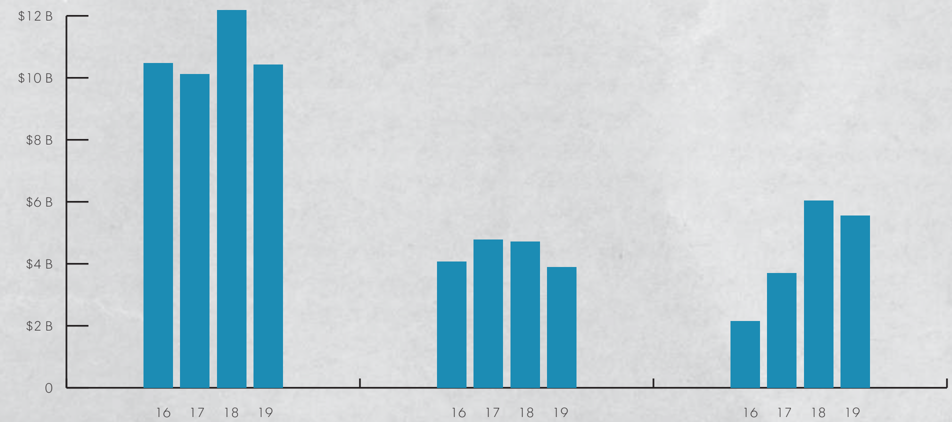
PHOTO: REAL WINDOW CREATIVE / SHUTTERSTOCK



Who's Banking on **FRACKED OIL & GAS?**

Fracking has led to a boom in oil and gas production that threatens both the global climate and the health of surrounding communities. While investors are increasingly disappointed in fracking companies' returns, overall big banks have increased their support for fracking since the Paris Agreement.[109]

WORST REGIONAL BANKS BY TOTAL FRACKED OIL & GAS FINANCING (2016-2019)

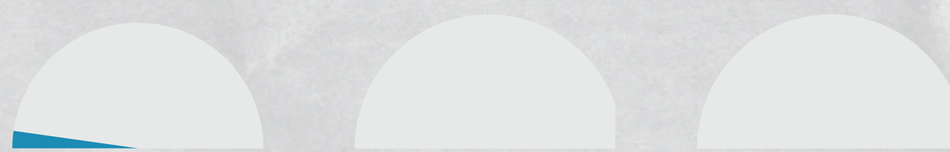


JPMORGAN CHASE
WORLD'S #1 FUNDER

BARCLAYS
EUROPE'S #1 FUNDER

MUFG
ASIA'S #1 FUNDER

FRACKED OIL & GAS POLICY SCORE



0.5 OUT OF **20**

0 OUT OF **20**

0 OUT OF **20**

LEAGUE TABLE - *Fracked Oil & Gas*

Bank financing for 30 top fracking companies and ten key fracked oil and gas pipeline companies

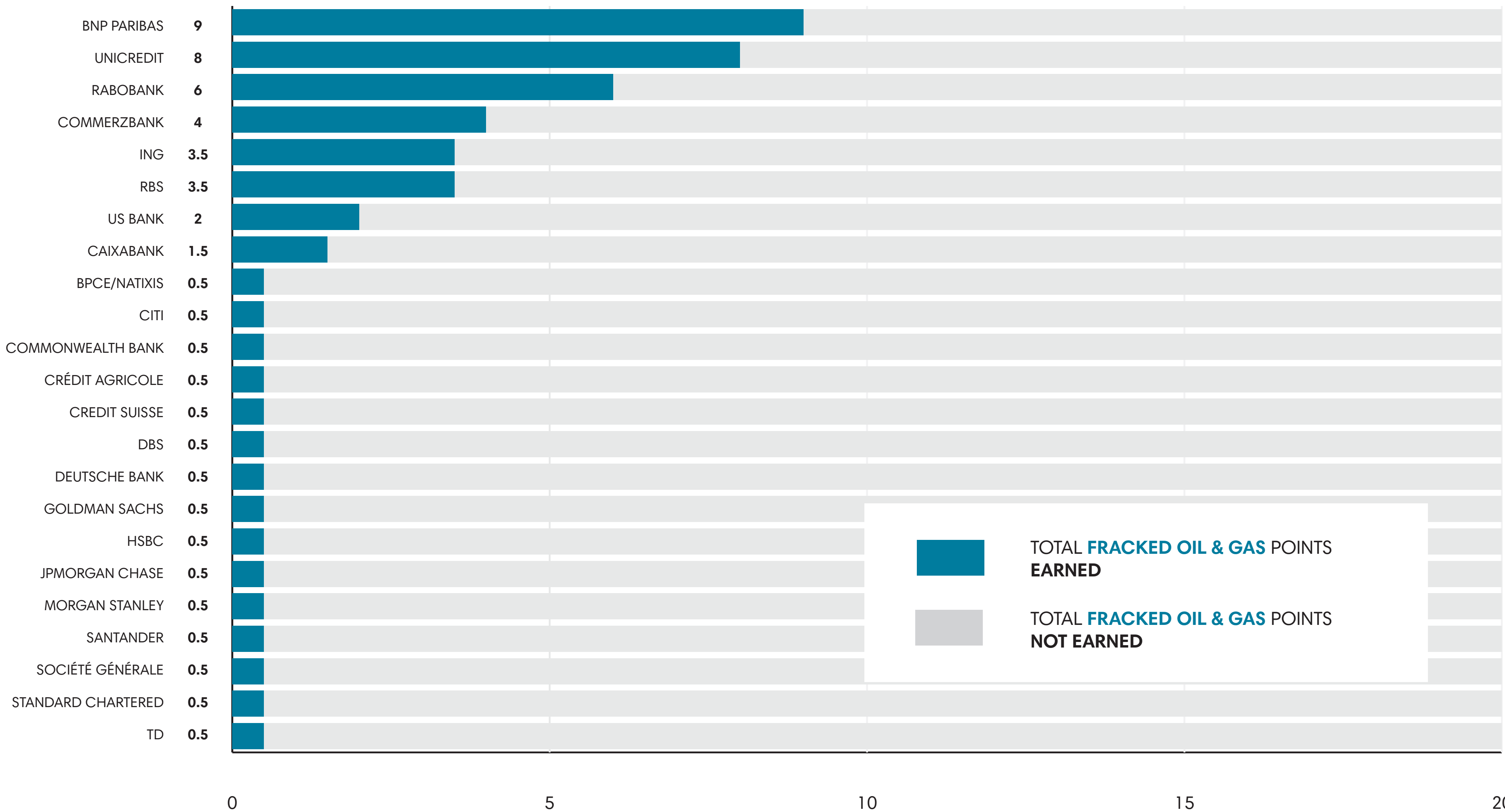
RANK	BANK	2016	2017	2018	2019	TOTAL
1	JPMORGAN CHASE	$10.480 B	$10.124 B	$12.190 B	$10.436 B	$43.231 B
2	WELLS FARGO	$1.910 B	$8.282 B	$10.611 B	$10.085 B	$30.888 B
3	BANK OF AMERICA	$4.679 B	$7.191 B	$7.462 B	$10.935 B	$30.267 B
4	CITI	$6.259 B	$5.572 B	$6.077 B	$10.059 B	$27.967 B
5	BARCLAYS	$4.072 B	$4.775 B	$4.713 B	$3.896 B	$17.456 B
6	MUFG	$2.153 B	$3.697 B	$6.041 B	$5.558 B	$17.449 B
7	SCOTIABANK	$2.596 B	$4.641 B	$5.430 B	$3.978 B	$16.645 B
8	MIZUHO	$2.431 B	$3.468 B	$5.769 B	$3.482 B	$15.150 B
9	CREDIT SUISSE	$4.909 B	$2.609 B	$2.631 B	$1.724 B	$11.873 B
10	GOLDMAN SACHS	$5.394 B	$2.281 B	$1.866 B	$1.925 B	$11.466 B
11	RBC	$1.947 B	$2.180 B	$3.808 B	$3.460 B	$11.395 B
12	TD	$1.667 B	$1.891 B	$3.343 B	$3.909 B	$10.811 B
13	MORGAN STANLEY	$1.800 B	$3.385 B	$1.931 B	$2.244 B	$9.359 B
14	DEUTSCHE BANK	$1.946 B	$2.142 B	$1.945 B	$655 M	$6.688 B
15	BANK OF MONTREAL	$423 M	$1.027 B	$2.304 B	$2.405 B	$6.160 B
16	SMBC GROUP	$538 M	$1.221 B	$1.370 B	$2.697 B	$5.825 B
17	HSBC	$845 M	$236 M	$1.267 B	$2.051 B	$4.399 B
18	SOCIÉTÉ GÉNÉRALE	$858 M	$285 M	$547 M	$2.182 B	$3.871 B

RANK	BANK	2016	2017	2018	2019	TOTAL
19	CRÉDIT AGRICOLE	$166 M	$1.396 B	$1.252 B	$517 M	$3.331 B
20	BNP PARIBAS	$911 M	$165 M	$104 M	$983 M	$2.162 B
21	UBS	$261 M	$1.271 B	$388 M	$109 M	$2.029 B
22	CIBC	$96 M	-	$836 M	$515 M	$1.447 B
23	BBVA	$149 M	$199 M	$630 M	$353 M	$1.330 B
24	BPCE/NATIXIS	$121 M	$310 M	$390 M	$320 M	$1.140 B
25	ICBC	$217 M	-	-	$657 M	$874 M
26	RBS	$410 M	$400 M	$27 M	$28 M	$865 M
27	BANK OF CHINA	$272 M	-	$154 M	$215 M	$641 M
28	SANTANDER	$56 M	$37 M	$162 M	$194 M	$449 M
29	COMMERZBANK	-	$23 M	$37 M	$375 M	$435 M
30	AGRICULTURAL BANK OF CHINA	$217 M	-	$154 M	-	$371 M
31	CHINA CONSTRUCTION BANK	-	-	-	$204 M	$204 M
32	STANDARD CHARTERED	-	-	-	$137 M	$137 M
33	ING	$47 M	-	-	-	$47 M
34	INTESA SANPAOLO	-	-	-	-	-
34	UNICREDIT	-	-	-	-	-
	GRAND TOTAL	$57.830 B	$68.807 B	$83.436 B	$86.288 B	$296.361 B

POLICY SCORES - *Fracked Oil & Gas*

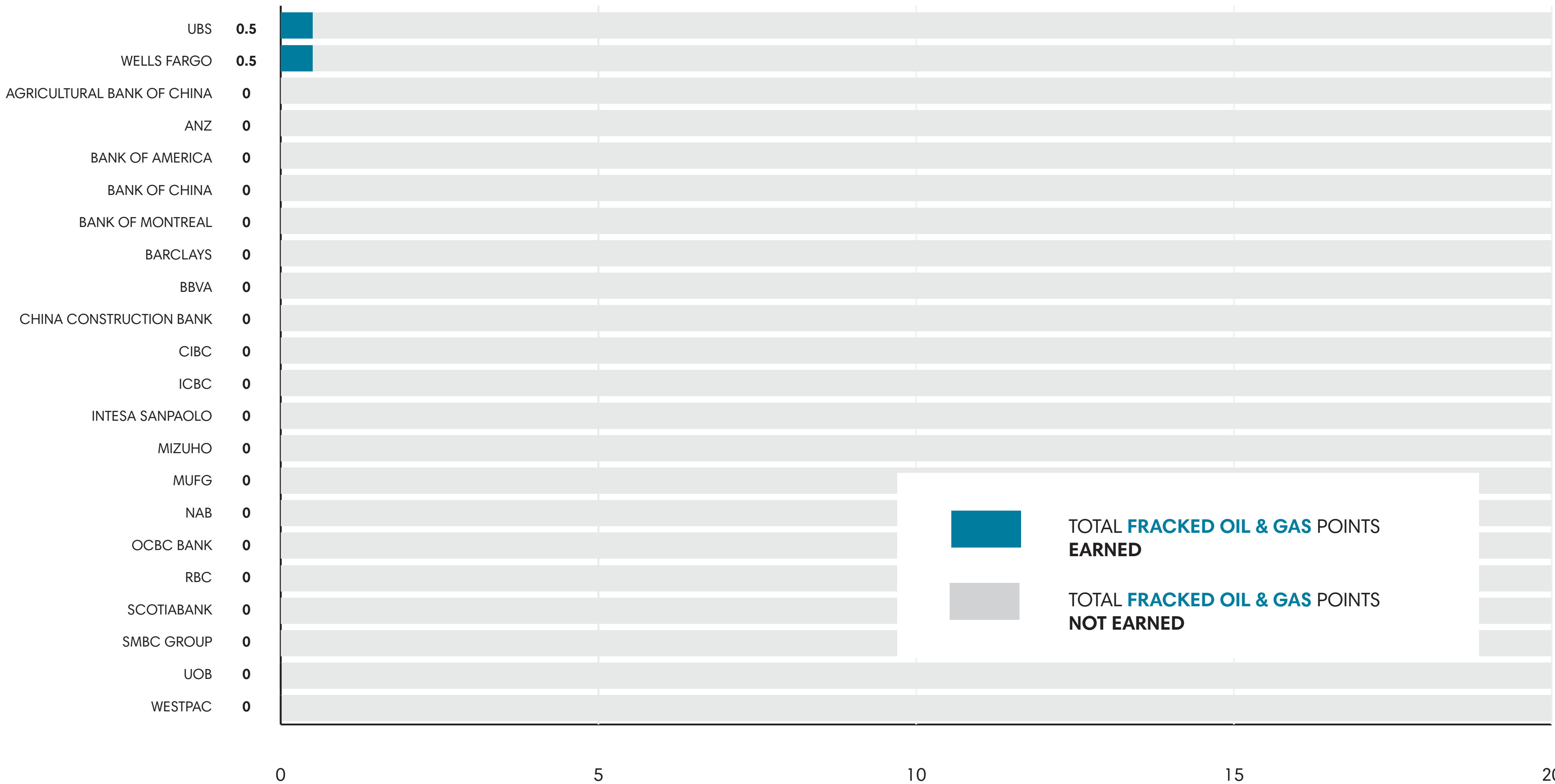
ING, **US Bank**, and **Commerzbank** are among the banks that restrict financing for some fracked oil and/or gas projects, while **BNP Paribas**, **UniCredit, Rabobank**, **ING**, and **RBS** are the only ones that restrict financing for any fracking companies.[110]

FRACKED OIL & GAS POLICY SCORE (OUT OF 20)



See page **95** for the scoring criteria.

FRACKED OIL & GAS POLICY SCORE (OUT OF 20)



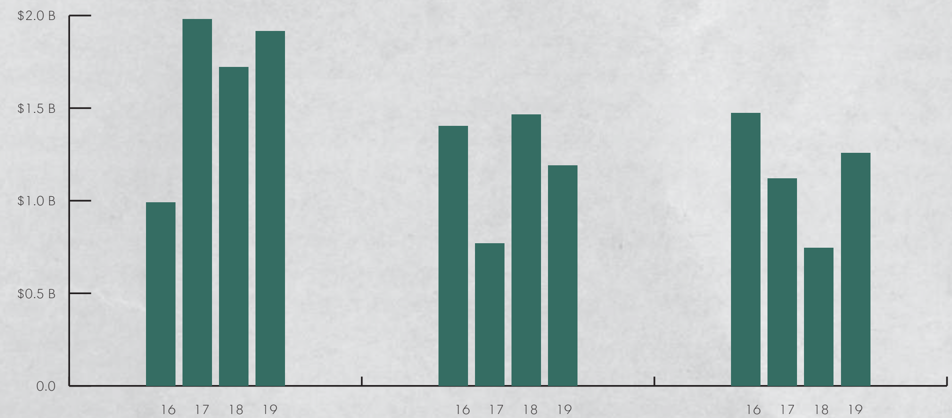
LIQUEFIED NATURAL GAS

PHOTO: LEONARDO DA / SHUTTERSTOCK

Who's Banking on **LIQUEFIED NATURAL GAS (LNG)?**

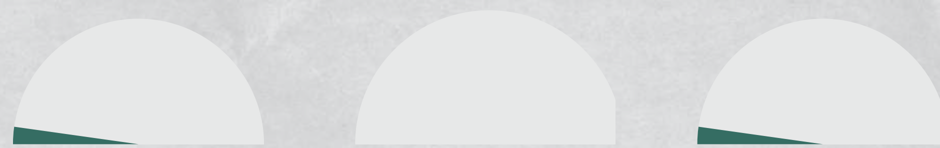
LNG is gas that is cooled into a liquid so that it can be transported by ship overseas and then regasified. This energy-intensive process results in gas with the climate footprint of coal.[111]

WORST REGIONAL BANKS BY TOTAL LNG FINANCING (2016-2019)



MORGAN STANLEY	SMBC GROUP	SOCIÉTÉ GÉNÉRALE
WORLD'S #1 FUNDER	**ASIA'S #1 FUNDER**	**EUROPE'S #1 FUNDER**

LNG POLICY SCORE



0.5 OUT OF **20** | **0** OUT OF **20** | **0.5** OUT OF **20**

LEADUE TABLE - *Banking on Liquefied Natural Gas*

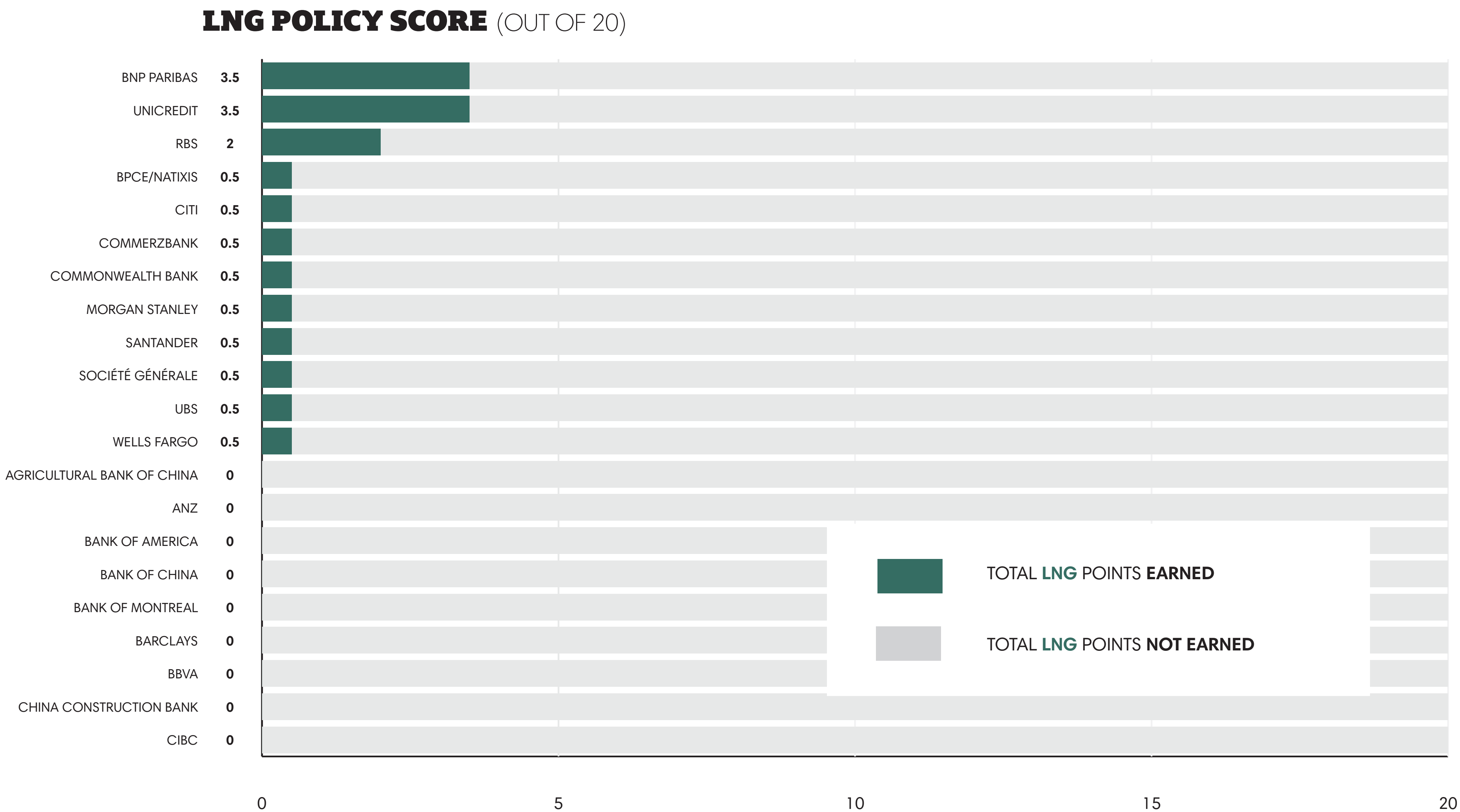
Bank financing for 30 top liquefied natural gas import and export companies

RANK	BANK	2016	2017	2018	2019	TOTAL
1	MORGAN STANLEY	$991 M	$1.981 B	$1.722 B	$1.915 B	$6.609 B
2	JPMORGAN CHASE	$2.039 B	$1.257 B	$1.239 B	$1.653 B	$6.188 B
3	SMBC GROUP	$1.405 B	$771 M	$1.467 B	$1.191 B	$4.835 B
4	MIZUHO	$1.183 B	$764 M	$787 M	$2.032 B	$4.766 B
5	CITI	$1.507 B	$926 M	$591 M	$1.706 B	$4.730 B
6	SOCIÉTÉ GÉNÉRALE	$1.475 B	$1.121 B	$745 M	$1.257 B	$4.597 B
7	BANK OF AMERICA	$841 M	$956 M	$663 M	$1.717 B	$4.177 B
8	UBS	$762 M	$1.219 B	$1.167 B	$795 M	$3.943 B
9	MUFG	$1.189 B	$763 M	$551 M	$885 M	$3.389 B
10	GOLDMAN SACHS	$685 M	$522 M	$318 M	$1.203 B	$2.730 B
11	RBC	$538 M	$418 M	$713 M	$865 M	$2.533 B
12	SCOTIABANK	$511 M	$404 M	$497 M	$1.066 B	$2.478 B
13	HSBC	$614 M	$618 M	$531 M	$505 M	$2.267 B
14	ING	$741 M	$168 M	$565 M	$699 M	$2.173 B
15	CRÉDIT AGRICOLE	$573 M	$601 M	$372 M	$562 M	$2.108 B
16	BNP PARIBAS	$1.007 B	$443 M	$136 M	$502 M	$2.088 B
17	CREDIT SUISSE	$920 M	$422 M	$493 M	$228 M	$2.062 B
18	SANTANDER	$579 M	$7 M	$400 M	$963 M	$1.948 B

RANK	BANK	2016	2017	2018	2019	TOTAL
19	BARCLAYS	$791 M	$57 M	$618 M	$466 M	$1.932 B
20	ICBC	$598 M	$550 M	$250 M	$111 M	$1.509 B
21	BANK OF CHINA	$622 M	$501 M	$250 M	$110 M	$1.483 B
22	DEUTSCHE BANK	$571 M	$400 M	$321 M	$45 M	$1.337 B
23	BBVA	$316 M	$79 M	$492 M	$388 M	$1.276 B
24	INTESA SANPAOLO	$417 M	$238 M	$384 M	$219 M	$1.258 B
25	BPCE/NATIXIS	$149 M	$273 M	$13 M	$762 M	$1.197 B
26	UNICREDIT	$515 M	$272 M	$370 M	-	$1.158 B
27	STANDARD CHARTERED	$172 M	$88 M	$253 M	$219 M	$733 M
28	WELLS FARGO	$43 M	$93 M	$33 M	$154 M	$323 M
29	CHINA CONSTRUCTION BANK	$154 M	-	-	$1 M	$154 M
30	CIBC	-	-	$29 M	$109 M	$139 M
31	COMMERZBANK	-	-	$118 M	-	$118 M
32	TD	-	-	-	$45 M	$45 M
33	BANK OF MONTREAL	-	-	$20 M	-	$20 M
34	AGRICULTURAL BANK OF CHINA	$1 M	-	-	$14 M	$15 M
35	RBS	-	-	$7 M	-	$7 M
	GRAND TOTAL	$21.907 B	$15.913B	$16.116 B	$22.389 B	$76.324 B

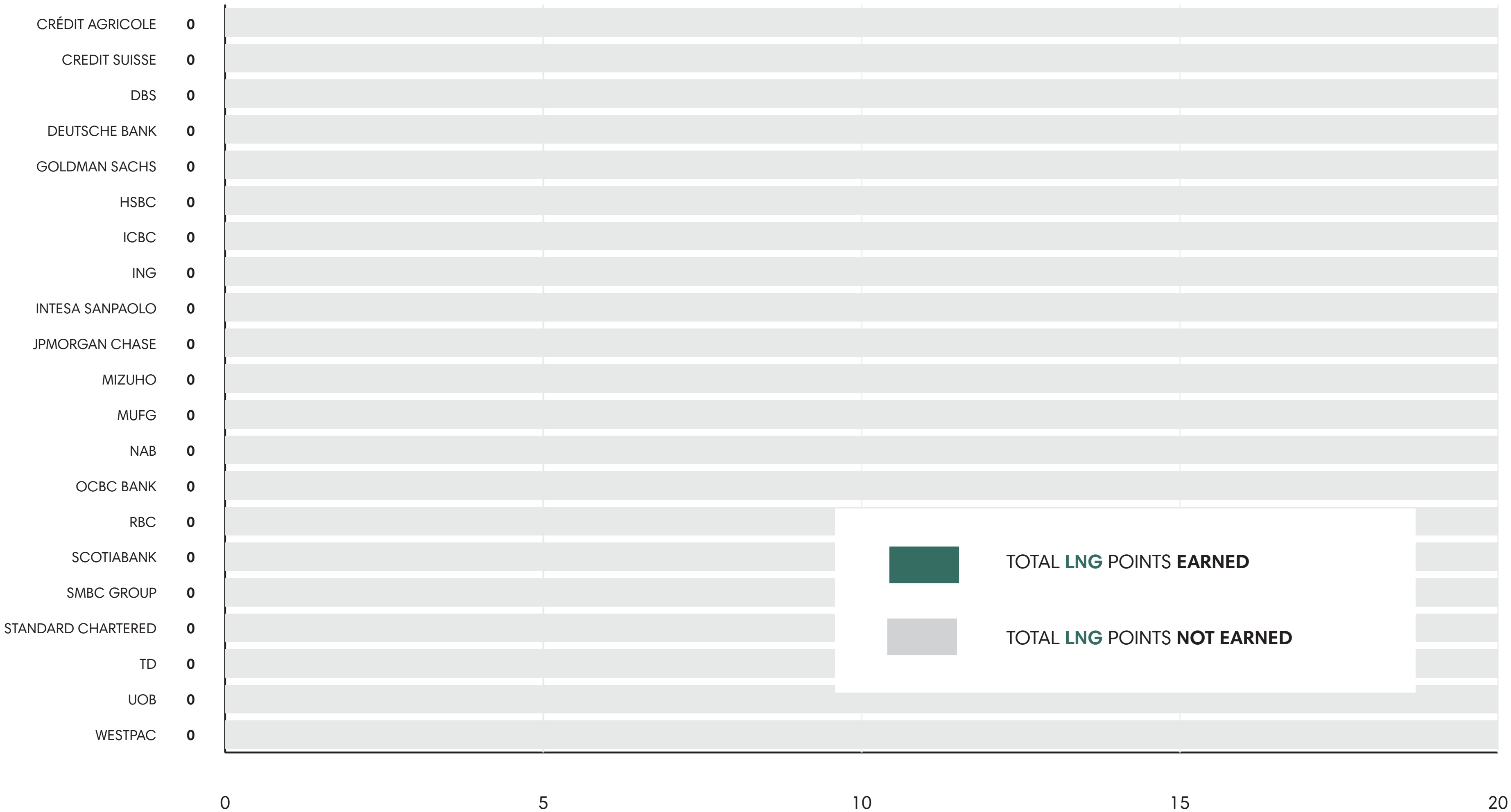
POLICY SCORES - *Liquefied Natural Gas*

Very few banks even mention LNG in their environmental policies, but **BNP Paribas**, **UniCredit**, and **RBS** have policies that restrict financing for some LNG projects and companies.



See page **97** for the scoring criteria.

LNG POLICY SCORE (OUT OF 20)



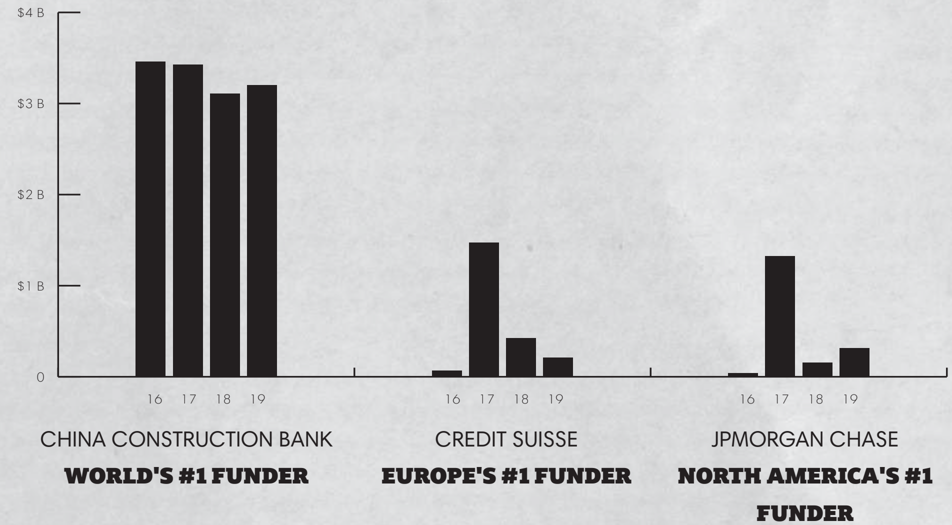
COAL MINING

PHOTO: PARILOV / SHUTTERSTOCK

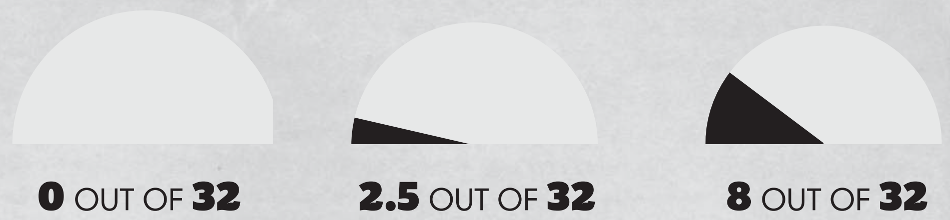
Who's Banking on **COAL MINING?**

Financing for coal mining is still dominated by the Chinese banks, which don't have policies to curb this support. Though many banks from other regions have policies in place restricting financing for coal mining, these policies need to be strengthened in order to quickly phase out financing for this carbon-intensive fuel.[112]

WORST REGIONAL BANKS BY TOTAL COAL MINING FINANCING (2016–2019)



COAL MINING POLICY SCORE



LEAGUE TABLE - *Banking on Coal Mining*

Bank financing for 30 top coal mining companies

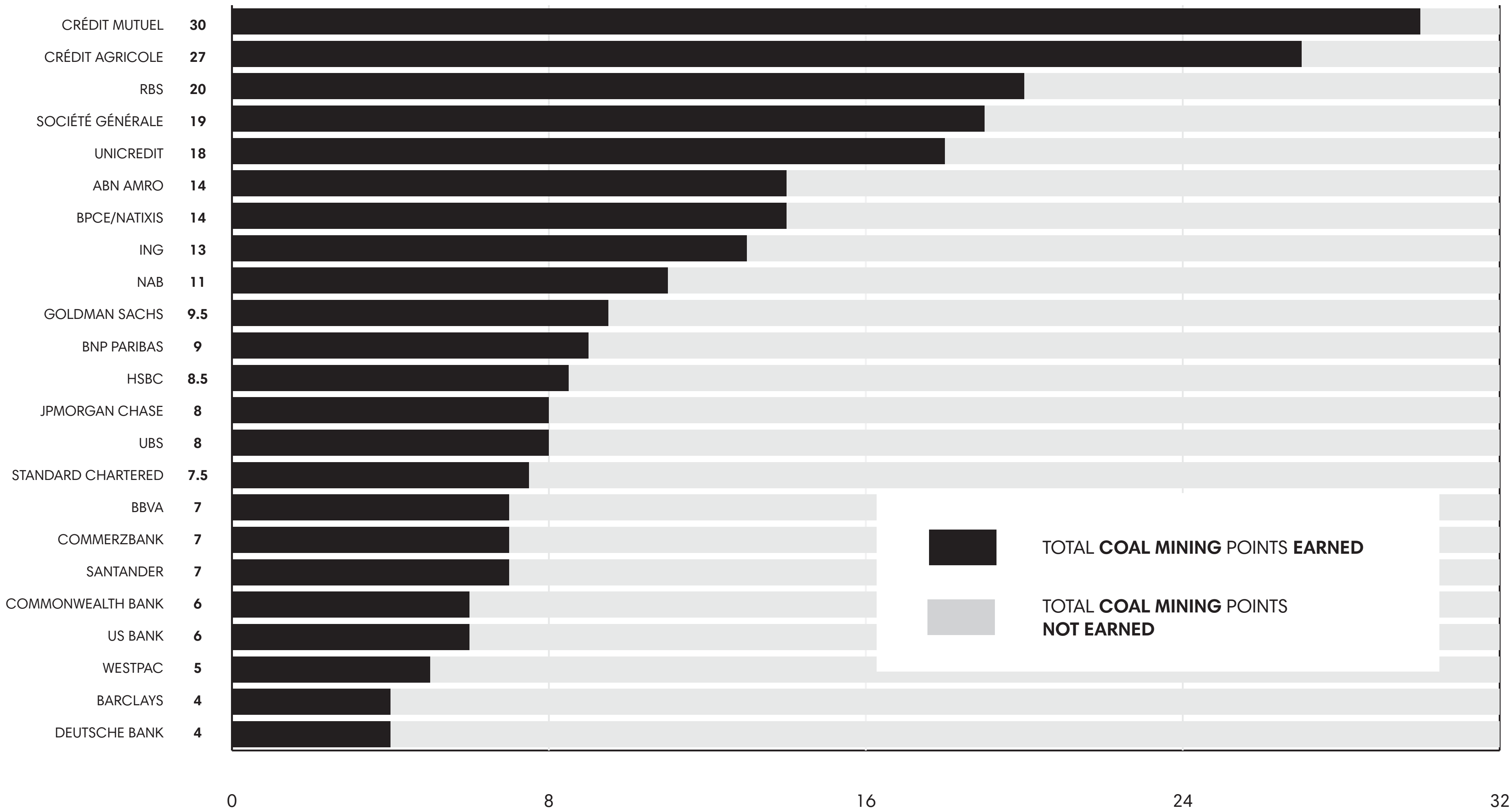
RANK	BANK	2016	2017	2018	2019	TOTAL
1	CHINA CONSTRUCTION BANK	$3.460 B	$3.428 B	$3.109 B	$3.203 B	$13.200 B
2	BANK OF CHINA	$3.834 B	$1.694 B	$3.275 B	$2.733 B	$11.535 B
3	ICBC	$2.675 B	$1.648 B	$1.661 B	$1.296 B	$7.281 B
4	AGRICULTURAL BANK OF CHINA	$1.403 B	$1.072 B	$1.034 B	$670 M	$4.178 B
5	CREDIT SUISSE	$69 M	$1.476 B	$426 M	$210 M	$2.181 B
6	JPMORGAN CHASE	$43 M	$1.325 B	$155 M	$318 M	$1.842 B
7	DEUTSCHE BANK	$35 M	$698 M	$642 M	$289 M	$1.664 B
8	CITI	$838 M	$148 M	$133 M	$340 M	$1.459 B
9	GOLDMAN SACHS	$175 M	$918 M	$215 M	$72 M	$1.380 B
10	MORGAN STANLEY	$35 M	$439 M	$156 M	$154 M	$785 M
11	UBS	$60 M	$46 M	$67 M	$541 M	$714 M
12	COMMERZBANK	$121 M	$152 M	$282 M	$158 M	$713 M
13	UNICREDIT	$219 M	$152 M	$82 M	$151 M	$604 M
14	BANK OF MONTREAL	$35 M	$171 M	$179 M	$204 M	$589 M
15	SOCIÉTÉ GÉNÉRALE	$104 M	$261 M	$60 M	$152 M	$578 M
16	MUFG	$35 M	$41 M	$115 M	$345 M	$536 M
17	INTESA SANPAOLO	$124 M	-	$285 M	$27 M	$436 M
18	BANK OF AMERICA	$45 M	$76 M	$75 M	$231 M	$426 M

RANK	BANK	2016	2017	2018	2019	TOTAL
19	SANTANDER	$35 M	$76 M	$115 M	$157 M	$384 M
20	ING	$154 M	$42 M	$58 M	$123 M	$377 M
21	BNP PARIBAS	$75 M	$41 M	$86 M	$151 M	$354 M
22	HSBC	$83 M	$45 M	$81 M	$139 M	$349 M
23	BARCLAYS	$35 M	$76 M	$75 M	$157 M	$343 M
24	STANDARD CHARTERED	$35 M	$81 M	$89 M	$123 M	$328 M
25	RBS	$40 M	$41 M	$56 M	$182 M	$319 M
26	RBC	$35 M	$41 M	$56 M	$182 M	$314 M
27	CRÉDIT AGRICOLE	$35 M	$41 M	$56 M	$168 M	$301 M
28	MIZUHO	$35 M	$76 M	$56 M	$123 M	$291 M
29	BBVA	$35 M	$41 M	$56 M	$146 M	$278 M
30	SMBC GROUP	-	$42 M	$58 M	$129 M	$229 M
31	TD	$35 M	$41 M	$56 M	$96 M	$228 M
31	SCOTIABANK	$35 M	$41 M	$56 M	$96 M	$228 M
33	CIBC	$35 M	-	-	-	$35 M
34	BPCE/NATIXIS	-	-	-	-	-
34	WELLS FARGO	-	-	-	-	-
	GRAND TOTAL	$14.018 B	$14.469 B	$12.907 B	$13.068 B	$54.462 B

POLICY SCORES - *Coal Mining*

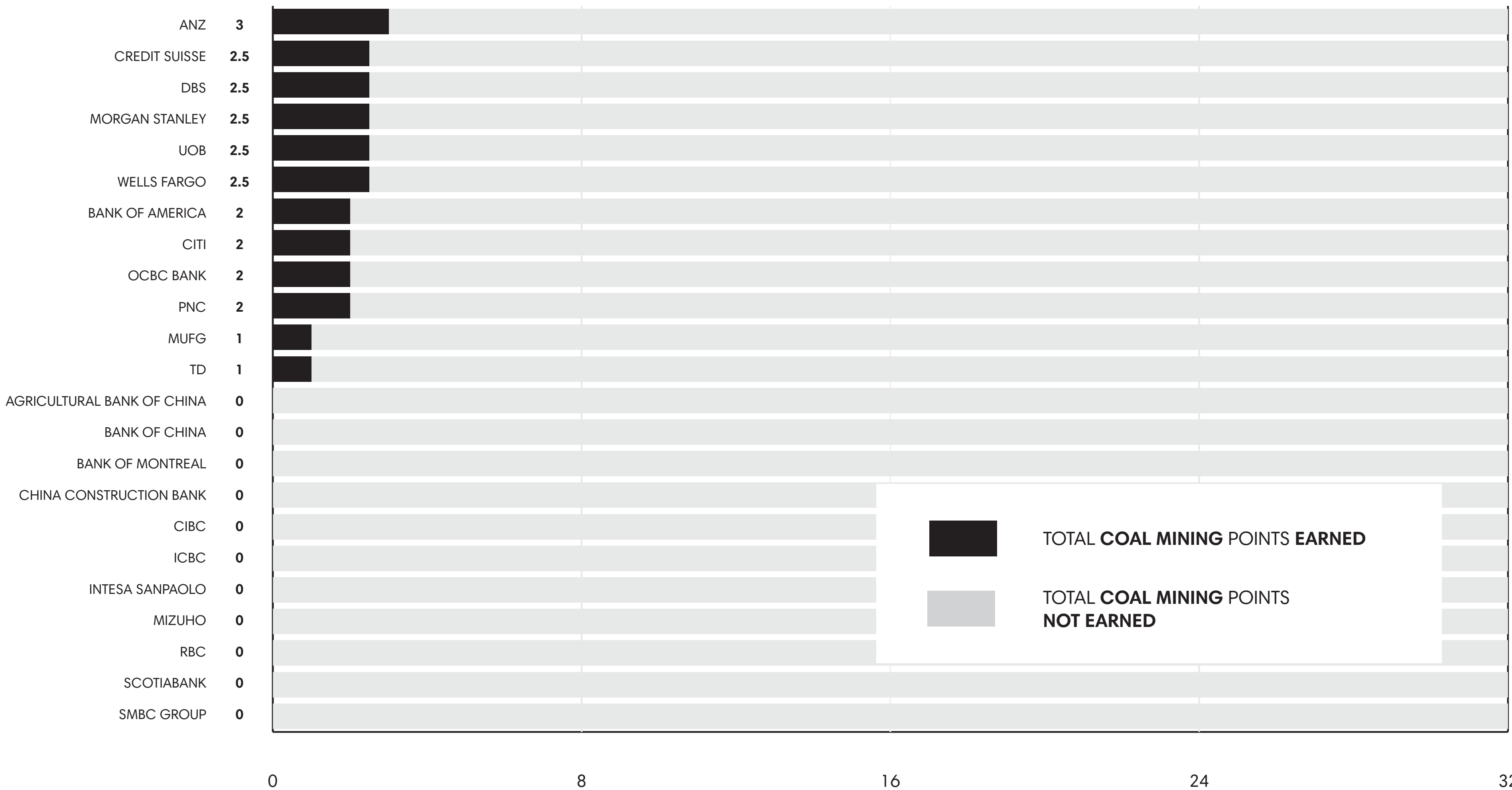
Credit Mutuel's policy from February 2020 prohibits financing for all coal mining projects and coal mining expansion companies, and lays out a plan for getting out of coal by 2030 worldwide. This puts **Crédit Agricole**'s commitment in second best place. The Chinese banks, though the biggest funders of the sector, do not have policies in place restricting financing for coal mining.

COAL MINING POLICY SCORE (OUT OF 32)



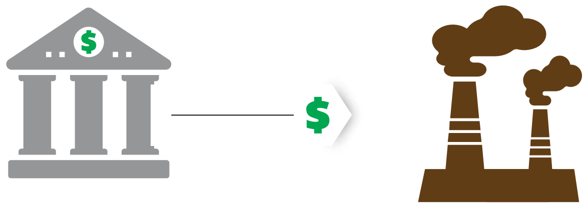
See page **101** for the scoring criteria.

COAL MINING POLICY SCORE (OUT OF 32)



COAL POWER

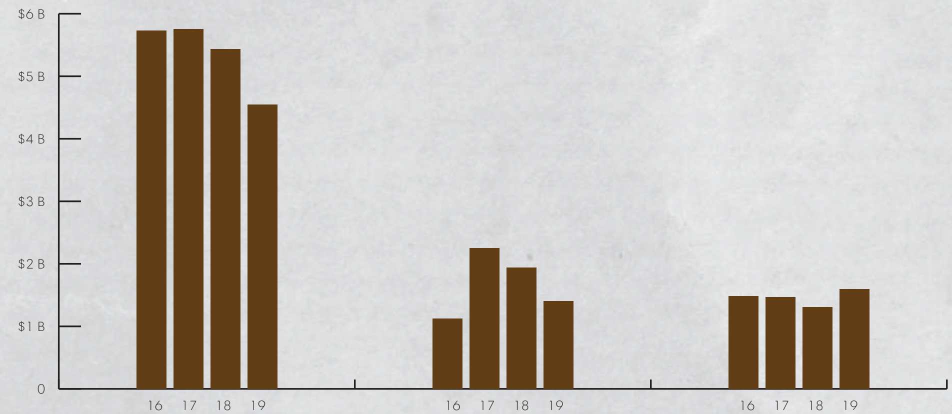
PHOTO: RANGLEN / SHUTTERSTOCK



Who's Banking on **COAL POWER?**

Despite the climate and health implications, companies around the world are still proposing to build **343** new coal power stations — nearly **300** gigawatts of new coal power.[113] Many banks profiled in this report have tightened their restrictions on financing coal plants in the past year, but coal power financing overall is not dropping nearly fast enough.

WORST REGIONAL BANKS BY TOTAL COAL POWER FINANCING (2016-2019)



ICBC	CITI	BARCLAYS
WORLD'S #1 FUNDER	**NORTH AMERICA'S #1 FUNDER**	**EUROPE'S #1 FUNDER**

COAL POWER POLICY SCORE

0 OUT OF **32**	**4.5** OUT OF **32**	**8** OUT OF **32**

LEADUE TABLE - *Banking on Coal Power*

Bank financing for 30 top coal power companies

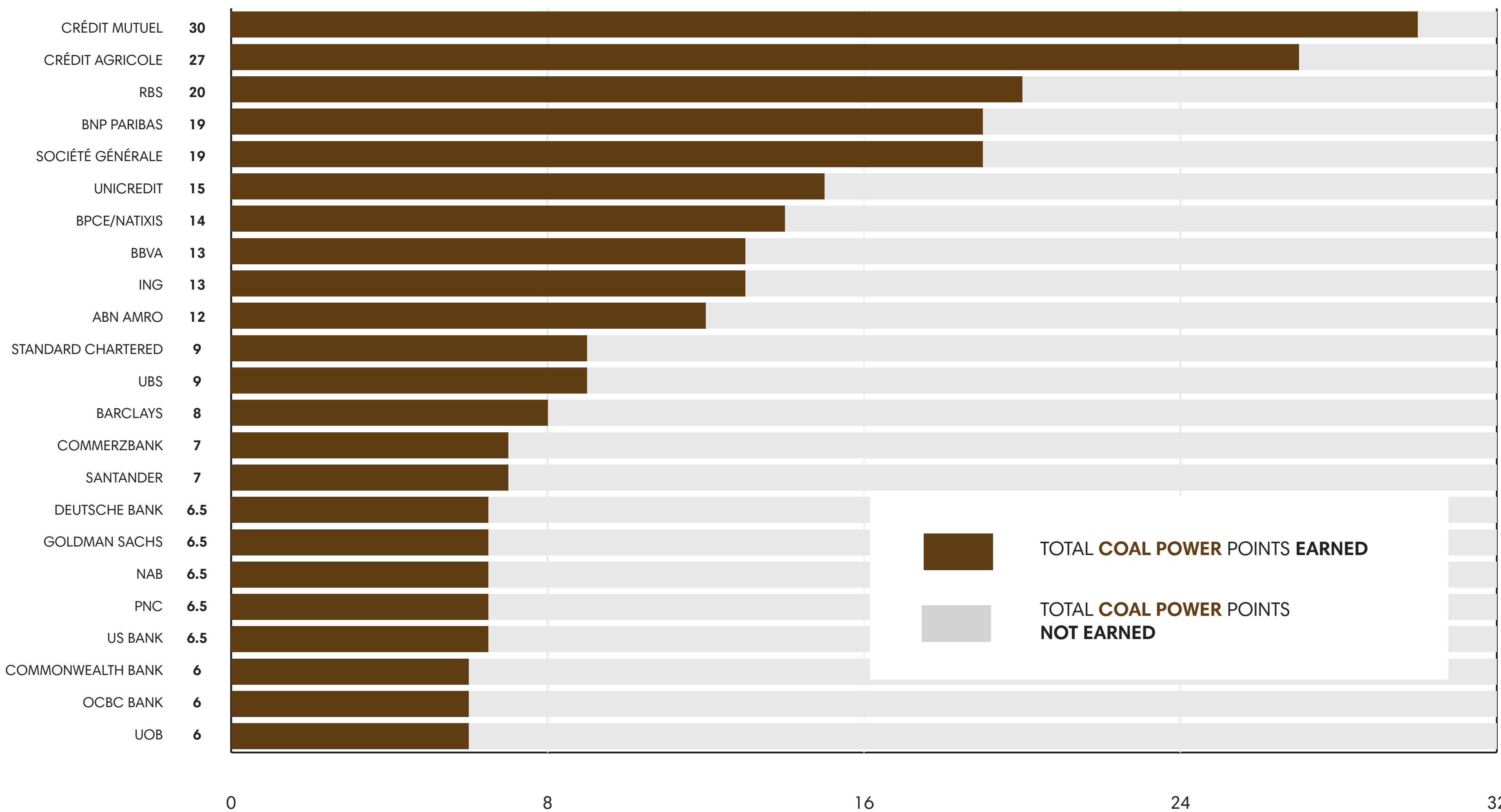
RANK	BANK	2016	2017	2018	2019	TOTAL
1	ICBC	$5.732 B	$5.754 B	$5.435 B	$4.548 B	**$21.469 B**
2	BANK OF CHINA	$4.966 B	$5.015 B	$6.438 B	$4.037 B	**$20.456 B**
3	CHINA CONSTRUCTION BANK	$6.103 B	$3.297 B	$2.739 B	$2.171 B	**$14.310 B**
4	AGRICULTURAL BANK OF CHINA	$4.563 B	$2.864 B	$2.478 B	$3.822 B	**$13.727 B**
5	CITI	$1.125 B	$2.253 B	$1.943 B	$1.405 B	**$6.727 B**
6	BARCLAYS	$1.487 B	$1.470 B	$1.311 B	$1.599 B	**$5.867 B**
7	MUFG	$1.604 B	$1.094 B	$1.057 B	$1.293 B	**$5.048 B**
8	BANK OF AMERICA	$912 M	$880 M	$873 M	$1.668 B	**$4.333 B**
9	JPMORGAN CHASE	$964 M	$1.040 B	$1.119 B	$1.175 B	**$4.298 B**
10	MIZUHO	$1.008 B	$823 M	$1.082 B	$1.330 B	**$4.244 B**
11	CREDIT SUISSE	$1.077 B	$1.135 B	$772 M	$1.105 B	**$4.090 B**
12	WELLS FARGO	$706 M	$1.289 B	$862 M	$842 M	**$3.699 B**
13	UBS	$1.523 B	$877 M	$594 M	$208 M	**$3.201 B**
14	RBC	$1.291 B	$966 M	$329 M	$530 M	**$3.116 B**
15	HSBC	$240 M	$1.086 B	$840 M	$845 M	**$3.011 B**
16	GOLDMAN SACHS	$556 M	$957 M	$736 M	$735 M	**$2.984 B**
17	BNP PARIBAS	$398 M	$649 M	$512 M	$1.053 B	**$2.613 B**
18	MORGAN STANLEY	$815 M	$421 M	$731 M	$619 M	**$2.587 B**

RANK	BANK	2016	2017	2018	2019	TOTAL
19	DEUTSCHE BANK	$731 M	$579 M	$368 M	$297 M	$1.975 B
20	SCOTIABANK	$357 M	$477 M	$596 M	$525 M	$1.956 B
21	CRÉDIT AGRICOLE	$157 M	$422 M	$250 M	$596 M	$1.425 B
22	STANDARD CHARTERED	$64 M	$323 M	$670 M	$279 M	$1.336 B
23	BPCE/NATIXIS	$337 M	$312 M	$307 M	$194 M	$1.150 B
24	SMBC GROUP	-	$236 M	$359 M	$519 M	$1.114 B
25	TD	$251 M	$170 M	$67 M	$236 M	$725 M
26	SANTANDER	$207 M	$185 M	$228 M	$101 M	$721 M
27	SOCIÉTÉ GÉNÉRALE	$30 M	$217 M	$107 M	$133 M	$487 M
28	INTESA SANPAOLO	-	$146 M	$210 M	$100 M	$456 M
29	BBVA	$27 M	$170 M	$21 M	$210 M	$428 M
30	UNICREDIT	$30 M	$146 M	$45 M	$100 M	$321 M
31	ING	$30 M	$123 M	$45 M	$24 M	$222 M
32	RBS	$30 M	$47 M	$84 M	$37 M	$198 M
33	BANK OF MONTREAL	-	-	-	$132 M	$132 M
34	COMMERZBANK	-	-	$22 M	$79 M	$101 M
35	CIBC	-	-	-	-	-
	GRAND TOTAL	$37.325 B	$35.423 B	$33.230 B	$32.546 B	$138.524 B

POLICY SCORES - *Coal Power*

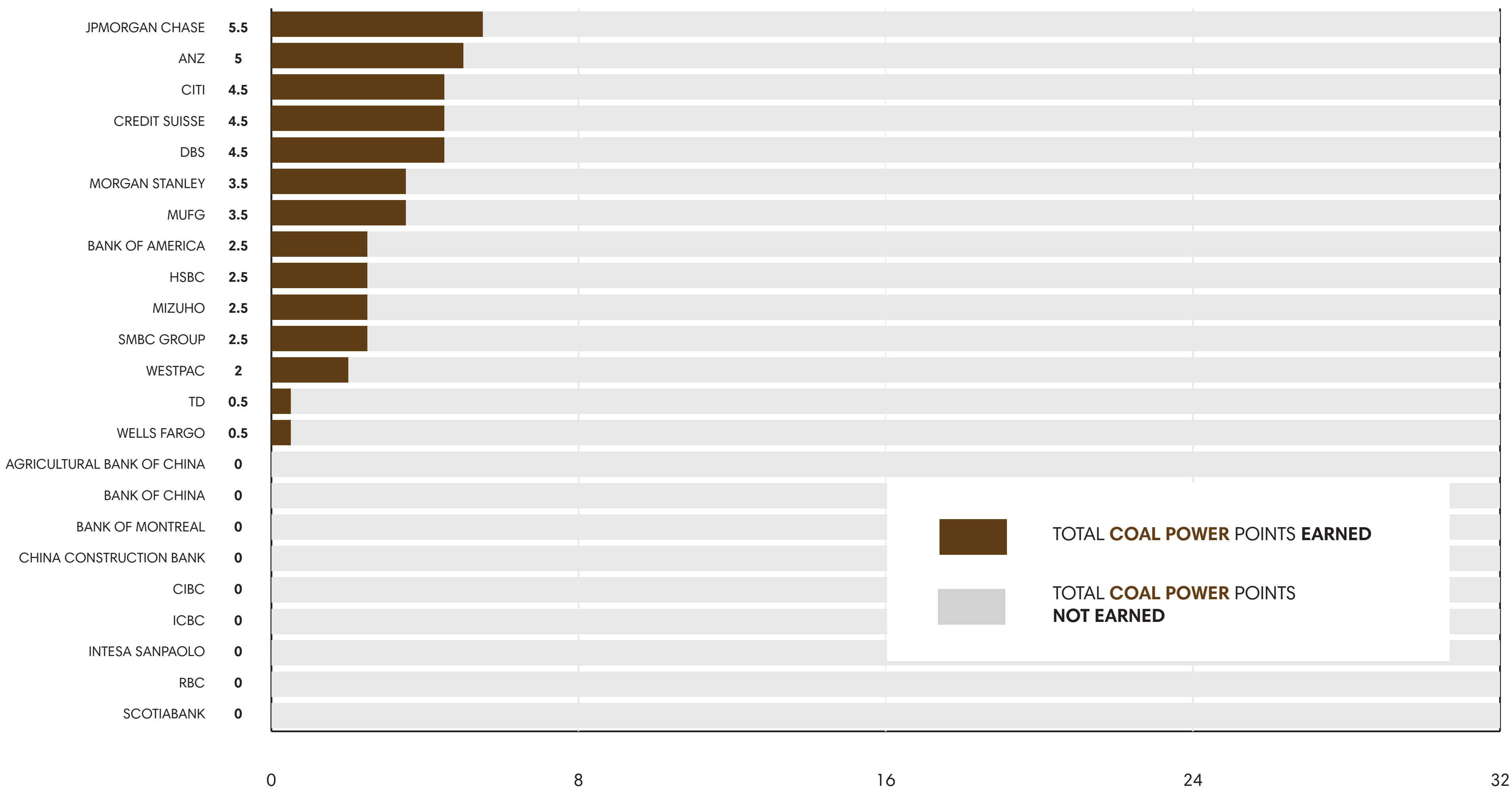
Many of the banks with mid-range scores in this chart still have loopholes in their coal power policies that allow them to finance new coal plants — even though the climate crisis means we cannot afford to build any new coal plants.[114]

COAL POWER POLICY SCORE (OUT OF 32)



See page **104** for the scoring criteria.

COAL POWER POLICY SCORE (OUT OF 32)



The Financial Sector's Climate Challenge

In October 2019, a few months before leaving office as the governor of the Bank of England to become the U.N. Special Envoy for Climate Action and Finance, Mark Carney crystallized the climate challenge facing the global finance sector.[115] In testimony to the U.K. parliament's treasury committee, Carney warned that financial institutions the world over are funding enough carbon-intensive projects and companies to guarantee a 4°C rise in global temperatures above pre-industrial levels.[116] Carney's warning goes beyond calling on banks to account for climate risk — the risk of climate change to the banks — and spotlights their climate impact — the systemic climate risk they are driving via their financing.

Indeed, banks are increasingly hearing questions about their climate impact from a range of stakeholders, including investors and clients as well as regulators — not to mention grassroots activists around the world.[117] These stakeholders are no longer simply asking banks to assess their own vulnerability to climate change. They are also asking banks to assess their own contribution to climate change and to mitigate that contribution going forward.

In this space, banks must take three steps:

1. Measure and disclose climate risk to their assets
2. Measure and disclose their climate impact on the planet
3. Set targets to phase out this climate impact

More broadly, the direction of travel for banks in the transition to a zero-carbon economy is now clear. They must both (a) draw red lines on what they will not finance and (b) proactively measure, disclose, and reduce their overall climate impact. These two approaches are mutually reinforcing. (See also "What Does it Mean to be Paris-Aligned?", on page **78**.)

Measuring climate risk and impact has seen important developments in the past year, which the rest of this section highlights.

Climate Risk Disclosure

An increasingly broad coalition of central banks are sounding the alarm: climate change could very well cause the world's next financial crisis.[118] Mark Carney's historic 2015 speech invoked the specter of a "climate 'Minsky moment'" — a sudden climate-driven asset price collapse — and his own initiative, the Task Force on Climate-related Financial Disclosures (TCFD), mainstreamed the idea that global businesses, including banks, should disclose the risks that climate change poses to their balance sheets and business models.[119] Many banks have published climate risk disclosures following some of the TCFD's guidelines, often using scenario analysis or stress testing to see how segments of the bank's assets hold up under different climate scenarios.

Citi is the most advanced among U.S. banks on its TCFD reporting, having published a scenario analysis testing how climate change will affect its credit exposure to certain groupings of high-carbon clients.[120] The TCFD has also catalyzed movement among the Japanese banks on climate-related disclosure, with **MUFG** starting scenario analysis and reporting that 6.6% of its assets are carbon-related.[121] European banks vary widely in the strength of their TCFD reporting; **Société Générale** is one of the stronger ones, because the bank uses its detailed climate risk analysis as a bridge to set targets around mitigating both risk and impact.[122]

And yet, banks' TCFD reporting overall leaves significant gaps. To make a meaningful impact, TCFD reporting must be comparable across companies, include impact metrics as described below, and be made mandatory by regulators.

Climate Impact Disclosure

If *Banking on Climate Change 2020* shows anything, it's that private-sector banks are still fueling climate chaos through their fossil lending and underwriting. The first step to mitigating this is for banks to get a handle on the problem by measuring and reporting their levels of fossil finance. Some banks have started to follow the minimal TCFD guidelines by reporting on their support for fossil fuels: **ING**, for example, discloses its exposure to thermal coal, as well as oil- and gas-related lending as a whole.[123]

Of course, there are many other ways banks fuel climate breakdown: through their financing of deforestation, their investing in and management of high-carbon assets, and more. To address these impacts as well, banks must begin to measure and disclose their climate impact overall.

One advanced financial-industry approach for measuring climate impact is the Partnership for Carbon Accounting Financials (PCAF).[124] While 58 banks and asset managers around the world have committed to the effort, among those mentioned in this report, only **ABN AMRO**, **KBC**, and **Rabobank**


PHOTO: MISHELLA / SHUTTERSTOCK

have signed on thus far.[125] And though PCAF provides a well-developed methodology for measuring banks' financed emissions from lending and investing, it lets them off the hook for the role they play in driving emissions as underwriters of bond and share issuances, a gap for the initiative to address going forward.

ING has developed a different approach, called Terra, which looks at the impact of lending to different high-carbon sectors and whether various clients within these sectors are on track to shift in a climate-positive direction.[126]

While most banks do not disclose the impact of their high-carbon financing, many are enthusiastically measuring and promoting the positive climate impact of their sustainable financing. **Citi,** for instance, provides detailed reporting on positive impacts from its environmental finance goal, including avoided greenhouse gas emissions.[127] Clearly, the primary barrier to disclosure is not the difficulty of measuring impacts, but rather the banks' hesitance to disclose those impacts. But in March 2020, **Wells Fargo**, **Goldman Sachs**, **Morgan Stanley**, and **Bank of America** took a step forward by publicly committing to assess how to measure their full carbon footprints.[128]

Climate Impact Target Setting

Disclosure of climate impact carries little weight unless banks work to mitigate it, starting by setting targets to proactively reduce that impact and reporting on their progress toward meeting those goals.

A subset of the signatories to the Principles for Responsible Banking, including **BBVA**, **Crédit Agricole**, and **Standard Chartered**, have signed a Collective Commitment to Climate Action in which they commit to align their lending with the objectives of the Paris Agreement, via the Terra approach or otherwise.[129] But instances of major banks setting specific, measurable, and transparent goals to reduce their climate impact are still few and far between. In January 2020, **Lloyds Banking Group** committed to halve the emissions financed through its personal and business lending by 2030.[130] The following month, **RBS** announced it will "at least halve the climate impact of [its] financing activity by 2030."[131] It will be crucial to see what metrics are used to meet these goals, but the goals themselves are ambitious and significant.

In another proof of concept, many banks have set positive impact targets through their sustainable finance goals. **JPMorgan Chase**, for example, committed in 2017 to facilitate $200 billion in clean financing.[132] Alongside this, **JPMorgan Chase** and its peers should commit to cut their fossil financing.

WHAT DOES IT MEAN TO BE PARIS-ALIGNED?

It is crucial to reach clarity on what it means for a bank to be Paris-aligned. Signatories to the UN's Principles for Responsible Banking, for example — including 21 of the 35 banks in the primary scope of this report — commit to "align [their] business strategy to be consistent with … the Paris Climate Agreement."[133] Moreover, the revised Equator Principles (coming into effect in July 2020), which 26 of the 35 banks have signed, also commit adopting banks to "support the objectives of the 2015 Paris Agreement" — without specifying how this should be accomplished.[134] The Paris Agreement itself commits countries to limit global warming to 2°C over pre-industrial levels and make their best effort to stop warming at 1.5°C.[135]

There are two clear, concrete facts that the industry should be guided by, in transforming symbolic commitments into actionable plans:

1. **Potential emissions from coal, oil, and gas already in production exhaust the carbon budget for 2°C, let alone 1.5°C**, so any expansion of fossil extraction, or expansion of infrastructure that drives expanded extraction, is incompatible with the Paris Agreement.[136]

2. **Global emissions must be reduced by roughly half of 2010 levels by 2030** and further reduced to effectively zero by 2050 to have even a 50% chance of limiting global warming to 1.5°C, according to the Intergovernmental Panel on Climate Change (IPCC) Special Report on 1.5°C, in the pathway it sets out that does not rely on wishful thinking about carbon-capture technology (P1).[137]

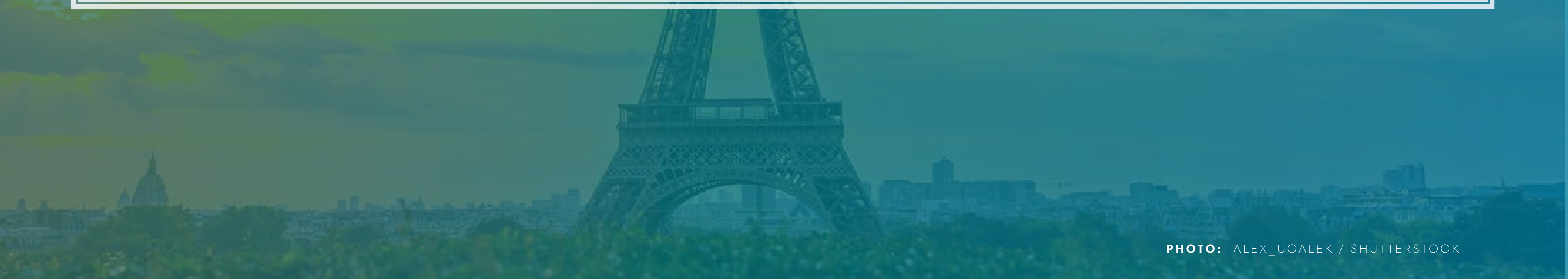


PHOTO: ALEX_UGALEK / SHUTTERSTOCK

Regarding fossil fuels, it follows that two criteria are necessary for banks to align with 1.5°C:

1.

The bank must align its own overall climate impact with, at minimum, the IPCC P1 1.5°C pathway.[138] This should encompass lending, underwriting, asset management, and other services. To do so requires measuring and disclosing climate impact and then setting targets based on that assessment.

2.

The bank must ensure that the projects and companies it supports are themselves aligned with 1.5°C.

» No project that expands extraction of fossil fuels, or expands infrastructure that drives expanded extraction, is compatible with 1.5°C. Exploration for new reserves is also obviously incompatible with 1.5°C. Any existing fossil project must plan to wind down operations on a timeline aligned with, at minimum, the IPCC P1 1.5°C pathway.

» No company that expands fossil extraction or infrastructure, or conducts exploration for new reserves, is compatible with 1.5°C. Any fossil company must plan to wind down fossil fuel operations on a timeline aligned with, at minimum, the IPCC P1 1.5°C pathway.

» Banks routinely defend continued support for fossil clients by claiming that such support accelerates client transition towards climate alignment. Banks must be transparent about the basis for these claims, so that they and their clients can be held accountable: they must make explicit what they are requiring of fossil clients and what consequences follow from failing to meet those requirements on a timeline aligned with, at minimum, the IPCC P1 1.5°C pathway.

Climate Chaos

Increasingly frequent and destructive climate events demonstrate the international failure to curb greenhouse gas emissions. Gross and massive violations of human rights, caused by extreme climate events, are reported daily: the loss of life and property, forced migration, food insecurity and famine, as well as the loss of biodiversity on a massive scale and the almost total loss of coral reefs.[139] These climate events can themselves contribute to even greater global warming.[140]

There is a growing public awareness of the failure of governments to reduce emissions in any meaningful way. Increasingly, the role banks, insurers, asset managers, and pension funds play in supporting and profiting from fossil fuel development and maintenance is drawing public attention.[141]

Catastrophic climate events cause ever-increasing economic disruption and dislocation. In 2018 alone, extreme climate events cost $160 billion.[142] It is no wonder that the world's central banks are concerned, as stated in a paper by the Bank for International Settlements:

> *Traditional backward-looking risk assessments and existing climate-economic models cannot anticipate accurately enough the form that climate-related risks will take. These include what we call "green swan" risks: potentially extremely financially disruptive events that could be behind the next systemic financial crisis.*[143]

As the IPCC 1.5°C report underscores, every fraction of a degree of extra warming represents countless lives and untold destruction.[144] And yet, governments around the world deny the science or drag their feet on real solutions. They offer carbon credits and offsets, and carbon taxes, as standalone solutions to the climate crisis, leaving global warming to the same profit-maximizing corporate players that created the crisis in the first place.[145] Too often, carbon credits, offsets, and taxes allow business as usual, permitting polluters to continue to emit greenhouse gases and pass the cost to consumers.[146]

A Different Paradigm for a Warming World

The Paris Agreement recognizes the importance of traditional knowledge in the struggle against climate change. One decision taken at the Paris Climate Conference in 2015 "recognizes the need to strengthen knowledge, technologies, practices, and efforts of local communities and indigenous peoples" with reference to climate change, and "establishes a platform for the sharing of this knowledge in a holistic and integrated manner."[147]

This Local Communities and Indigenous Peoples Platform is in the process of being implemented by a working group composed of seven Indigenous representatives and seven state representatives.[148] But there is doubt by some that states will be willing or able to understand, much less implement, traditional knowledge.

Indigenous peoples' traditional knowledge is a product of a continuing millennial relationship to the Earth. It comes from the original instructions of Mother Earth and Father Sky and is carried and transmitted over generations through observation, practice, and ceremony.[149] This approach recognizes that traditional Indigenous peoples and all humanity are part of the web of life, in community alongside all living things. Mother Earth is not objectified or commodified as a "resource" but is sacred, the source and giver of life.

According to traditional Indigenous knowledge, many things are sacred. Sacred water is life. Food and means of subsistence are sacred. Lands, waters, and ecosystems that contribute to life are sacred. Ceremony, song, and prayers are acts of gratitude to the giver of sustenance and life. Indigenous hunters the world over thank the spirit of their prey before their communities eat, taking nothing that is not needed.[150] A balance is maintained between the needs of nature and the needs of the community; if need be, human necessities are foregone in order to restore equity and balance.[151]

In spite of historical and continuing colonialism, many Indigenous peoples throughout the world have managed to maintain their traditional practices and world views. Traditional Indigenous communities — and youth in particular — are restoring their role as defenders of the sacred in opposition to extractive destruction and exploitation.[152]

In contrast, in the dominant economic paradigm, nothing is sacred. Environmental destruction happens for the sake of economic growth and the accumulation of wealth by the few. In this dominant paradigm, all is exploitable and subject to "development" until it runs out. And it will. As a *Foreign Policy* article about a study on growth and resource use noted:

But there's no escaping the obvious conclusion. Ultimately, bringing our civilization back within planetary boundaries is going to require that we liberate ourselves from our dependence on economic growth—starting with rich nations. This might sound scarier than it really is. Ending growth doesn't mean shutting down economic activity—it simply means that next year we can't produce and consume more than we are doing this year. It might also mean shrinking certain sectors that are particularly damaging to our ecology and that are unnecessary for human flourishing…[153]

Every bank that makes a policy commitment to restrict some fossil fuel financing — whether it be coal, Arctic oil, or otherwise — makes it easier for other major fossil banks to do the same. The reality is that climate change will increasingly mean fossil fuels are dead-end investments.[154] The challenge for banks and other financial institutions is to move away from dominant fossil fuel-based, growth-driven economies by planning now for a just transition that includes the full phase-out of fossil fuels, without new nuclear power, mega-dams, or the further destruction of forests.

The IPCC's landmark report on 1.5°C, as well as its more recent reports on oceans and land, clearly show how little time or carbon budget remain.[155] Catastrophic climate change is real. No amount of spin or "baby steps" can change this reality. With the clock ticking, half-hearted commitments that only facilitate business as usual cannot do. Regrets and apologies to suffering future generations will not suffice. There will be little solace in the last dollar squeezed out of the last drop of oil in a burning world.

PHOTO: TOBEN DILWORTH / RAN; MARCH ON ENBRIDGE

WHAT BANKS MUST DO

In this new decade, the climate emergency is clearer than ever, with emissions cuts of almost 50% necessary by 2030 if we are to have a coin-flip chance of limiting global warming to 1.5°C. Also becoming increasingly clear and accepted is the financial industry's role in driving the crisis, and thus its responsibility to phase out its climate impact. November of 2020 will bring the next UN climate talks to Glasgow, Scotland, where, five years after the Paris Agreement was adopted, countries are expected to assess their ongoing efforts to reduce emissions and then strengthen their climate pledges.

Banks must similarly commit to align with the goals of the Paris Agreement by ending their financing for fossil fuel expansion, and committing to phase out fossil fuel financing overall. Banks must also fully respect human rights, and Indigenous rights in particular.

To align their policies and practices with a world that **limits global warming to 1.5°C** and fully **respects human rights**, and **Indigenous rights** in particular, banks must:

- Explicitly acknowledge the central role of the fossil fuel industry as the major driver of climate breakdown, as well as the banks' own role in financing this sector.
- Prohibit all financing for all fossil fuel expansion projects and companies expanding fossil fuel extraction and infrastructure (such as plants and pipelines).
- Commit to phase out all financing for fossil fuel extraction and infrastructure, on an explicit timeline that is aligned with limiting global warming to 1.5°C.
- Phase out financing for existing projects and companies active in tar sands oil, Arctic oil and gas, offshore oil and gas, fracked oil and gas, liquefied natural gas, coal mining, and coal power, with ending financing for expansion of these subsectors as an urgent first step.
- Fully respect all human rights, particularly the rights of Indigenous peoples, including their rights to their water and lands and the right to free, prior, and informed consent, as articulated in the UN Declaration on the Rights of Indigenous Peoples.[156] Prohibit all financing for projects and companies that abuse human rights, including Indigenous rights.

PHOTO: ERIK MCGREGOR

TOP FOSSIL FUEL EXPANSION COMPANIES

UPSTREAM OIL & GAS COMPANIES	MMT OF CO_2 PROJECTED TO BE PRODUCED BY 2050 FROM SHALE WELLS, AND FROM NON-SHALE PROJECTS REACHING FID FROM 2016-2030	UPSTREAM OIL & GAS COMPANIES	MMT OF CO_2 PROJECTED TO BE PRODUCED BY 2050 FROM SHALE WELLS, AND FROM NON-SHALE PROJECTS REACHING FID FROM 2016-2030
GAZPROM	18,487	PETROBRAS	4,157
ROYAL DUTCH SHELL	11,933	EQUINOR (FORMERLY STATOIL)	3,983
EXXONMOBIL	11,622	PEMEX	3,691
NATIONAL IRANIAN OIL COMPANY	9,431	EQT CORPORATION	3,305
CHEVRON	8,910	KUWAIT PETROLEUM CORPORATION	3,285
SAUDI ARAMCO	8,517	CONOCOPHILLIPS	2,962
OCCIDENTAL	7,605	CONCHO RESOURCES	2,908
BP	6,877	CIMAREX ENERGY	2,851
QATAR PETROLEUM	5,908	PIONEER NATURAL RESOURCES	2,767
EOG RESOURCES	5,434	ENCANA	2,755
PETROCHINA	5,143	PETROLIAM NASIONAL BERHAD (PETRONAS)	2,748
ROSNEFT	4,676	DEVON ENERGY	2,729
TOTAL	4,659	ABU DHABI NATIONAL OIL COMPANY	2,631
ENI	4,470	BASRA OIL COMPANY	2,576
CHINA NATIONAL OFFSHORE OIL CORPORATION (CNOOC)	4,295	SINOPEC (CHINA PETROLEUM & CHEMICAL CORPORATION)	2,383

Data from Rystad Energy AS provided by Oil Change International, company reporting, and urgewald's Global Coal Exit List.[157]

UPSTREAM OIL & GAS COMPANIES	MMT OF CO_2 PROJECTED TO BE PRODUCED BY 2050 FROM SHALE WELLS, AND FROM NON-SHALE PROJECTS REACHING FID FROM 2016-2030	UPSTREAM OIL & GAS COMPANIES	MMT OF CO_2 PROJECTED TO BE PRODUCED BY 2050 FROM SHALE WELLS, AND FROM NON-SHALE PROJECTS REACHING FID FROM 2016-2030
NOBLE ENERGY	2,343	WPX ENERGY	1,354
CHESAPEAKE ENERGY	2,164	MURPHY OIL	1,331
NOVATEK	2,027	CHINA NATIONAL PETROLEUM CORPORATION (CNPC)	1,327
CONTINENTAL RESOURCES	1,960	DIAMONDBACK ENERGY	1,325
CANADIAN NATURAL RESOURCES (CNRL)	1,953	PARSLEY ENERGY	1,305
SOUTHWESTERN ENERGY	1,808	INDIGO MINERALS	1,290
APACHE CORPORATION	1,807	WOODSIDE PETROLEUM	1,288
ANTERO RESOURCES	1,799	INPEX	1,273
TOURMALINE OIL	1,758	AETHON ENERGY	1,273
REPSOL	1,748	SONATRACH	1,269
PDVSA	1,602	COMSTOCK RESOURCES	1,254
RANGE RESOURCES	1,599	HESS CORPORATION	1,242
LUKOIL	1,563	NORTH OIL COMPANY	1,241
OIL AND NATURAL GAS CORPORATION (ONGC)	1,532	STATE OIL COMPANY OF AZERBAIJAN REPUBLIC (SOCAR)	1,225
TURKMENGAS	1,529	SONANGOL	1,220

KEY OIL AND GAS MIDSTREAM EXPANSION COMPANIES

ATLANTIC COAST PIPELINE LLC	NEXTDECADE
CHENIERE ENERGY	PEMBINA PIPELINE
ENBRIDGE	PHILLIPS 66
ENERGY TRANSFER	PLAINS ALL AMERICAN PIPELINE
ENTERPRISE PRODUCTS	TC ENERGY (FORMERLY TRANSCANADA)
EQM MIDSTREAM PARTNERS	TRANS ADRIATIC PIPELINE (TAP)
KINDER MORGAN	TRANSPORTADORA DE GAS DEL SUR (TGS)
MAGELLAN MIDSTREAM PARTNERS	

KEY COAL MINING EXPANSION COMPANIES

COAL INDIA	BUMI RESOURCES
CHINA ENERGY INVESTMENT CORPORATION (CHN ENERGY)	CLOUD PEAK ENERGY
SHANDONG ENERGY GROUP	POLSKA GRUPA ENERGETYCZNA (PGE)
SHAANXI COAL AND CHEMICAL INDUSTRY	EXXARO RESOURCES
GLENCORE	BANPU
SIBERIAN COAL ENERGY COMPANY (SUEK)	

KEY COAL POWER EXPANSION COMPANIES	COAL POWER EXPANSION PLANS (ATTRIBUTABLE MEGAWATTS)
NTPC	30,541
CHINA ENERGY INVESTMENT CORPORATION (CHN ENERGY)	25,153
CHINA DATANG	21,485
CHINA HUANENG GROUP	13,573
STATE POWER INVESTMENT CORPORATION	12,975
RELIANCE POWER	11,880
ELEKTRIK ÜRETIM A.Ş. GENEL MÜDÜRLÜŞÜ (EÜAŞ)	11,350
ESKOM	9,600
PERUSAHAAN LISTRIK NEGARA (PLN)	9,573
ELECTRICITY GENERATING AUTHORITY OF THAILAND (EGAT)	7,310
KOREA ELECTRIC POWER CORPORATION (KEPCO)	6,621
GCM RESOURCES	6,000
BANGLADESH POWER DEVELOPMENT BOARD	4,700
POLSKA GRUPA ENERGETYCZNA (PGE)	4,360
VIETNAM ELECTRICITY CORPORATION (EVN)	4,259
SUMITOMO CORPORATION	3,260

FOSSIL FUEL EXPANSION POLICY SCORING CRITERIA

Scores in this section are calculated by adding up the expansion-related scores from the individual oil, gas, and coal sections that follow.

TOP TAR SANDS COMPANIES

RANK	COMPANY	TAR SANDS RESERVES CURRENTLY UNDER PRODUCTION (MILLIONS OF BARRELS)	PROJECTED EXPANSION* (MILLIONS OF BARRELS)
1	CANADIAN NATURAL RESOURCES (CNRL)	7,719.21	2,542.04
2	SUNCOR ENERGY	7,669.85	867.02
3	CENOVUS ENERGY	5,841.30	1,043.06
4	EXXONMOBIL	4,005.85	1,344.17
5	MEG ENERGY	1,371.18	1,220.45
6	IMPERIAL OIL	1,389.89	523.03
7	CHINA NATIONAL OFFSHORE OIL CORPORATION (CNOOC)	1,377.88	323.49
8	TOTAL	1,330.31	287.70
9	CONOCOPHILLIPS	726.76	287.70
10	PETROCHINA	365.72	464.45
11	BP	293.16	522.05
12	HUSKY ENERGY	524.41	179.21
13	CHEVRON	586.33	107.23
14	ATHABASCA OIL CORPORATION	323.87	302.04
15	SUNSHINE OILSANDS	141.80	396.56
16	TECK RESOURCES	523.26	-
17	CONNACHER OIL AND GAS	417.41	90.14
18	ROYAL DUTCH SHELL	293.17	53.61
19	SINOPEC (CHINA PETROLEUM & CHEMICAL CORPORATION)	345.24	-
20	PTT EXPLORATION AND PRODUCTION (PTTEP)	-	224.22
21	PENGROWTH ENERGY	117.91	99.41
22	OSUM	169.32	-
23	INTERNATIONAL PETROLEUM CORPORATION (IPC)	4.20	135.41
24	KOREA NATIONAL OIL CORPORATION (KNOC)	135.49	-
25	JAPAN PETROLEUM EXPLORATION COMPANY (JAPEX)	134.04	-
26	PARAMOUNT RESOURCES	-	99.70
27	VALUE CREATION	-	75.09
28	GREENFIRE OIL AND GAS	70.44	-
29	SOUTHERN PACIFIC RESOURCE	-	52.14
30	GRIZZLY OIL SANDS	-	37.85
	ENBRIDGE	KEY PIPELINE COMPANY	
	KINDER MORGAN	KEY PIPELINE COMPANY	
	PLAINS ALL AMERICAN PIPELINE	KEY PIPELINE COMPANY	
	TC ENERGY (FORMERLY TRANSCANADA)	KEY PIPELINE COMPANY	
	TRANS MOUNTAIN CORPORATION	KEY PIPELINE COMPANY	

Data from Rystad Energy AS, with reserves data as of October 2019. Provided by Oil Change International.

* Projected expansion refers to reserves expected to be produced by 2050 from projects reaching final investment decision from 2016-2030.

TAR SANDS POLICY SCORING CRITERIA

POINT VALUE	
	EXPANSION
	Tar sands projects
4	» Strong exclusion - Prohibits all financing for all new and expanded tar sands projects, including transportation infrastructure.
3	» Moderate exclusion - Prohibits some financing for some tar sands projects, including some extraction projects and some transportation infrastructure.
1.5	» Weak exclusion - Prohibits some financing for some tar sands projects.
0	» None
	Companies expanding tar sands
5	» Strong exclusion - Prohibits all financing for all companies with tar sands expansion plans.
3	» Weak exclusion - Prohibits some financing for some companies with tar sands expansion plans.
0	» None
	PHASE-OUT/EXCLUSION
	Tar sands companies: phase-out
5	» Strong phase-out - Commits to phase out all financing for companies with tar sands operations on a 1.5°C-aligned timeline.
3	» Weak phase-out - Commits to phase out some financing for companies with tar sands operations.
1.5	» Reduction - Commits to reduce financing for or credit exposure to companies with tar sands operations.
0	» None
	Tar sands companies: exclusion
6	» Full exclusion - Prohibits all financing for all companies with tar sands operations.
5	» Strong exclusion threshold - Prohibits financing for companies with significant tar sands operations.
2	» Weak exclusion threshold - Prohibits financing for companies with majority tar sands operations.
0.5	» Enhanced due diligence - Has an enhanced due diligence process for transactions related to tar sands.
0	» None

TOP ARCTIC OIL & GAS COMPANIES

RANK	COMPANY	ARCTIC RESERVES CURRENTLY UNDER PRODUCTION (MILLIONS OF BARRELS)	PROJECTED EXPANSION* (MILLIONS OF BARRELS)
1	GAZPROM	58,754.07	38,124.76
2	NOVATEK	12,281.69	4,739.09
3	ROSNEFT	6,571.52	1,349.68
4	LUKOIL	3,510.85	1,581.03
5	CONOCOPHILLIPS	3,067.69	1,014.25
6	WINTERSHALL DEA	2,149.54	687.99
7	TOTAL	1,925.38	433.12
8	CHINA NATIONAL PETROLEUM CORPORATION (CNPC)	1,661.19	397.97
9	OMV	1,204.55	667.36
10	EQUINOR (FORMERLY STATOIL)	1,091.20	704.70
11	EXXONMOBIL	1,686.99	-
12	BP	1,296.24	195.08
13	CHINA NATIONAL OFFSHORE OIL CORPORATION (CNOOC)	526.12	397.97
14	PETORO	516.87	336.63
15	OIL AND NATURAL GAS CORPORATION (ONGC)	837.03	-
16	SILK ROAD FUND	561.86	-
17	VAAR ENERGI	292.59	187.42
18	ZARUBEZHNEFT	431.84	22.59
19	PETROVIETNAM	334.28	46.60
20	REPSOL	0.02	352.47
21	OIL SEARCH	-	343.94
22	ALLTECH GROUP	-	310.59
23	HILCORP ENERGY	211.85	73.67
24	INDIAN OIL	259.16	-
25	OIL INDIA	259.16	-
26	BHARAT PETROLEUM CORP (BPCL)	251.11	-
27	ARCTICSHELFNEFTEGAZ	-	248.27
28	YARGEO	225.54	-
29	ENI	212.66	-
30	BASHNEFT	203.14	-

Data from Rystad Energy AS, with reserves data as of October 2019. Provided by Oil Change International.

* Projected expansion refers to reserves expected to be produced by 2050 from projects reaching final investment decision from 2016-2030.

ARCTIC OIL & GAS POLICY SCORING CRITERIA

POINT VALUE	EXPANSION
	Arctic oil and gas projects
4	» Strong exclusion - Prohibits all financing for all new and expanded onshore and offshore Arctic oil and gas projects, including transportation infrastructure.
3	» Moderate exclusion - Prohibits all financing for some Arctic oil and gas projects.
1.5	» Weak exclusion - Prohibits some financing for Arctic oil and gas projects, with significant loopholes.
0	» None
	Companies expanding Arctic oil and gas
5	» Strong exclusion - Prohibits all financing for all companies with Arctic oil and gas expansion plans.
3	» Weak exclusion - Prohibits some financing for some companies with Arctic oil and gas expansion plans.
0	» None
	PHASE-OUT/EXCLUSION
	Arctic oil and gas companies: phase-out
5	» Strong phase-out - Commits to phase out all financing for companies with Arctic oil and gas operations on a 1.5°C-aligned timeline.
3	» Weak phase-out - Commits to phase out some financing for companies with Arctic oil and gas operations.
1.5	» Reduction - Commits to reduce financing for or credit exposure to companies with Arctic oil and gas operations.
0	» None
	Arctic oil and gas companies: exclusion
6	» Full exclusion - Prohibits all financing for all companies with Arctic oil and gas operations.
5	» Strong exclusion threshold - Prohibits financing for companies with significant Arctic oil and gas operations.
2	» Weak exclusion threshold - Prohibits financing for companies with significant Arctic oil and gas operations, where thresholds are defined with notable loopholes.
0.5	» Enhanced due diligence - Has an enhanced due diligence process for transactions related to Arctic oil and gas.
0	» None

TOP OFFSHORE OIL & GAS COMPANIES

RANK	COMPANY	OFFSHORE RESERVES CURRENTLY UNDER PRODUCTION (MILLIONS OF BARRELS)	PROJECTED EXPANSION* (MILLIONS OF BARRELS)
1	SAUDI ARAMCO	91,085.78	14,154.04
2	NATIONAL IRANIAN OIL COMPANY	51,517.44	17,044.27
3	QATAR PETROLEUM	26,482.21	14,682.37
4	EXXONMOBIL	20,370.16	9,520.86
5	ROYAL DUTCH SHELL	14,731.56	10,243.31
6	PETROBRAS	14,854.47	8,830.69
7	ABU DHABI NATIONAL OIL COMPANY	17,471.92	4,567.45
8	TOTAL	11,846.23	7,330.36
9	BP	10,947.73	5,880.38
10	EQUINOR (FORMERLY STATOIL)	10,359.07	5,754.66
11	ENI	8,382.71	6,779.10
12	CHEVRON	8,828.94	3,812.18
13	PEMEX	5,047.85	6,661.55
14	CHINA NATIONAL OFFSHORE OIL CORPORATION (CNOOC)	5,171.64	5,139.56
15	PETROLIAM NASIONAL BERHAD (PETRONAS)	5,142.53	4,265.59
16	OIL AND NATURAL GAS CORPORATION (ONGC)	5,060.08	2,913.93
17	PETORO	6,733.68	1,156.23
18	GAZPROM	2,469.64	5,379.73
19	INPEX	3,998.22	2,995.60
20	STATE OIL COMPANY OF AZERBAIJAN REPUBLIC (SOCAR)	3,084.29	2,257.34
21	OCCIDENTAL	3,266.21	1,776.82
22	WOODSIDE PETROLEUM	1,197.44	3,091.57
23	SONANGOL	1,079.83	2,393.26
24	NOBLE ENERGY	1,581.29	1,869.16
25	DELEK GROUP	1,502.44	1,877.55
26	CONOCOPHILLIPS	2,583.52	744.14
27	MITSUI	1,933.90	1,345.18
28	MUBADALA DEVELOPMENT COMPANY	3,048.42	146.69
29	ROSNEFT	1,754.54	1,433.27
30	CHINA NATIONAL PETROLEUM CORPORATION (CNPC)	1,094.45	2,003.77

Data from Rystad Energy AS, with reserves data as of October 2019. Provided by Oil Change International.

* Projected expansion refers to reserves expected to be produced by 2050 from projects reaching final investment decision from 2016-2030.

OFFSHORE OIL & GAS POLICY SCORING CRITERIA

POINT VALUE	
	EXPANSION
	Offshore oil and gas projects
4	» Strong exclusion - Prohibits all financing for all offshore oil and gas projects.
1.5	» Weak exclusion - Prohibits some financing for some offshore oil and gas projects.
0	» None
	Companies expanding offshore oil and gas
5	» Strong exclusion - Prohibits all financing for all companies with offshore oil and gas expansion plans.
3	» Weak exclusion - Prohibits some financing for some companies with offshore oil and gas expansion plans.
0	» None
	PHASE-OUT/EXCLUSION
	Offshore oil and gas companies: phase-out
5	» Strong phase-out - Commits to phase out all financing for companies with offshore oil and gas operations on a 1.5°C-aligned timeline.
3	» Weak phase-out - Commits to phase out some financing for companies with offshore oil and gas operations.
1.5	» Reduction - Commits to reduce financing for or credit exposure to companies with offshore oil and gas operations.
0	» None
	Offshore oil and gas companies: exclusion
6	» Full exclusion - Prohibits all financing for all companies with offshore oil and gas operations.
5	» Strong exclusion threshold - Prohibits financing for companies with significant offshore oil and gas operations.
2	» Weak exclusion threshold - Prohibits financing for companies with significant offshore oil and gas operations, where thresholds are defined with notable loopholes.
0.5	» Enhanced due diligence - Has an enhanced due diligence process for transactions related to offshore oil and gas.
0	» None

TOP FRACKED OIL & GAS COMPANIES

* Projected expansion refers to projected production between 2019 and 2050 from currently undrilled wells.

RANK	COMPANY	SHALE RESERVES CURRENTLY UNDER PRODUCTION (MILLIONS OF BARRELS)	PROJECTED SHALE EXPANSION* (MILLIONS OF BARRELS)	RANK	COMPANY	SHALE RESERVES CURRENTLY UNDER PRODUCTION (MILLIONS OF BARRELS)	PROJECTED SHALE EXPANSION* (MILLIONS OF BARRELS)
1	OCCIDENTAL	2,195.31	14,841.00	22	NOBLE ENERGY	772.75	4,023.72
2	CHEVRON	1,794.42	14,702.94	23	CABOT OIL AND GAS	1,181.02	3,233.56
3	ROYAL DUTCH SHELL	1,244.24	15,074.09	24	COMSTOCK RESOURCES	610.15	3,600.85
4	EXXONMOBIL	2,898.60	13,357.54	25	INDIGO MINERALS	338.48	3,599.33
5	EOG RESOURCES	2,085.22	12,640.01	26	DIAMONDBACK ENERGY	825.01	3,088.27
6	EQT CORPORATION	2,765.30	8,938.97	27	AETHON ENERGY	313.84	3,551.36
7	ENCANA	1,858.61	6,501.35	28	CNX RESOURCES	885.80	2,917.10
8	CONCHO RESOURCES	966.00	7,239.95	29	MARATHON OIL	871.49	2,806.10
9	DEVON ENERGY	1,303.67	6,383.62	30	WPX ENERGY	444.58	3,212.39
10	CIMAREX ENERGY	837.49	6,637.74		ATLANTIC COAST PIPELINE LLC	KEY PIPELINE COMPANY	
11	CHESAPEAKE ENERGY	1,711.73	5,741.97		ENERGY TRANSFER	KEY PIPELINE COMPANY	
12	BP	1,199.20	6,000.08		ENTERPRISE PRODUCTS	KEY PIPELINE COMPANY	
13	PIONEER NATURAL RESOURCES	822.82	6,374.48		EQM MIDSTREAM PARTNERS	KEY PIPELINE COMPANY	
14	ANTERO RESOURCES	1,775.54	4,387.68		KINDER MORGAN	KEY PIPELINE COMPANY	
15	CONOCOPHILLIPS	1,044.30	4,608.32		MAGELLAN MIDSTREAM PARTNERS	KEY PIPELINE COMPANY	
16	CONTINENTAL RESOURCES	1,115.35	4,528.28		PHILLIPS 66	KEY PIPELINE COMPANY	
17	SOUTHWESTERN ENERGY	1,034.28	4,443.06		PLAINS ALL AMERICAN PIPELINE	KEY PIPELINE COMPANY	
18	TOURMALINE OIL	810.72	4,553.88		TRANSPORTADORA DE GAS DEL SUR (TGS)	KEY PIPELINE COMPANY	
19	RANGE RESOURCES	1,433.94	3,822.98		WILLIAMS COMPANIES	KEY PIPELINE COMPANY	
20	PETROCHINA	523.24	4,456.78				
21	APACHE CORPORATION	980.34	3,991.94				

Data from Rystad Energy AS, with reserves data as of October 2019. Provided by Oil Change International.

FRACKED OIL & GAS POLICY SCORING CRITERIA

POINT VALUE	
	EXPANSION
	Fracked oil and gas projects
4	» Strong exclusion - Prohibits all financing for all fracked oil and gas projects, including transportation and infrastructure.
3	» Moderate exclusion - Prohibits some financing for some fracked oil and gas projects, including some extraction projects and some transportation infrastructure.
1.5	» Weak exclusion - Prohibits some financing for some fracked oil and gas projects.
0	» None
	Companies expanding fracked oil and gas
5	» Strong exclusion - Prohibits all financing for all companies with fracked oil and gas expansion plans.
3	» Weak exclusion - Prohibits some financing for some companies with fracked oil and gas expansion plans.
0	» None
	PHASE-OUT/EXCLUSION
	Fracked oil and gas companies: phase-out
5	» Strong phase-out - Commits to phase out all financing for companies with fracked oil and gas operations on a 1.5°C-aligned timeline.
3	» Weak phase-out - Commits to phase out some financing for companies with fracked oil and gas operations.
1.5	» Reduction - Commits to reduce financing for or credit exposure to companies with fracked oil and gas operations.
0	» None
	Fracked oil and gas companies: exclusion
6	» Full exclusion - Prohibits all financing for all companies with fracked oil and gas operations.
5	» Strong exclusion threshold - Prohibits financing for companies with significant fracked oil and gas operations.
2	» Weak exclusion threshold - Prohibits financing for companies with significant fracked oil and gas operations, where thresholds are defined with notable loopholes.
0.5	» Enhanced due diligence - Has an enhanced due diligence process for transactions related to fracked oil and gas.
0	» None

TOP LNG COMPANIES

RANK	COMPANY	OPERATING LNG IMPORT AND EXPORT CAPACITY (ATTRIBUTABLE MILLION METRIC TONS PER ANNUM)	PROPOSED* LNG IMPORT AND EXPORT CAPACITY (ATTRIBUTABLE MILLION METRIC TONS PER ANNUM)
1	KOREA GAS CORPORATION (KOGAS)	118.02	7.07
2	QATAR PETROLEUM	64.57	43.92
3	ROYAL DUTCH SHELL	40.00	42.24
4	TOKYO ELECTRIC POWER COMPANY (TEPCO)	53.55	-
5	CHENIERE ENERGY	27.00	24.95
6	ENAGAS	45.66	5.51
7	CHINA NATIONAL OFFSHORE OIL CORPORATION (CNOOC)	33.88	16.63
8	NIGERIAN NATIONAL PETROLEUM CORPORATION	10.92	38.11
9	PETROLIAM NASIONAL BERHAD (PETRONAS)	39.40	8.25
10	EXXONMOBIL	31.00	15.71
11	NEXTDECADE LLC	-	46.21
12	SEMPRA ENERGY	7.50	38.68
13	EXCELERATE ENERGY	35.99	8.30
14	GOLAR LNG	31.53	9.60
15	CNPC	22.30	16.95
16	TOTAL	21.99	16.49
17	TOKYO GAS	34.78	2.80
18	NOVATEK	8.60	23.61
19	NATIONAL IRANIAN OIL COMPANY	18.50	12.92
20	GAZPROM	8.12	22.70
21	VENTURE GLOBAL LNG	-	30.80
22	STEWART ENERGY GROUP LTD	-	30.00
23	CHEVRON	17.70	11.46
24	TELLURIAN	-	27.60
25	SONATRACH	25.56	-
26	ORCA LNG LTD	-	24.00
27	KUWAIT PETROLEUM CORPORATION	1.19	22.00
28	OSAKA GAS	20.53	2.47
29	WOODSIDE PETROLEUM	7.74	14.84
30	PETRONET LNG	22.50	-

Data as of May 2019, based on Bloomberg New Energy Finance data.

* Proposed capacity inculdes projects in planning or pre-filing stages, under construction or regulatory review, or where an FID has been taken but the project is not yet operating.

LNG POLICY SCORING CRITERIA

POINT VALUE	
	EXPANSION
	LNG projects
4	» Strong exclusion - Prohibits all financing for all LNG projects.
1.5	» Weak exclusion - Prohibits some financing for some LNG projects.
0	» None
	Companies expanding LNG
5	» Strong exclusion - Prohibits all financing for all companies with LNG expansion plans.
3	» Weak exclusion - Prohibits some financing for some companies with LNG expansion plans.
0	» None
	PHASE-OUT/EXCLUSION
	LNG companies: phase-out
5	» Strong phase-out - Commits to phase out all financing for companies with LNG operations on a 1.5°C-aligned timeline.
3	» Weak phase-out - Commits to phase out some financing for companies with LNG operations.
1.5	» Reduction - Commits to reduce financing for or credit exposure to companies with LNG operations.
0	» None
	LNG companies: exclusion
6	» Full exclusion - Prohibits all financing for all companies with LNG operations.
5	» Strong exclusion threshold - Prohibits financing for companies with significant LNG operations, with public reporting on implementation.
2	» Weak exclusion threshold - Prohibits financing for companies with significant LNG operations, where thresholds are defined with notable loopholes.
0.5	» Enhanced due diligence - Has an enhanced due diligence process for transactions related to LNG.
0	» None

OTHER OIL & GAS POLICY SCORING CRITERIA

This category covers oil and gas beyond the spotlight subsectors above. There is no standalone league table, though other oil and gas companies feature in the overall fossil fuels league table.

POINT VALUE	
	EXPANSION
	Other oil and gas projects
4	» Strong exclusion - Prohibits all financing for all other oil and gas projects.
1.5	» Weak exclusion - Prohibits some financing for some other oil and gas projects.
0	» None
	Companies expanding other oil and gas
5	» Strong exclusion - Prohibits all financing for all companies with other oil and gas expansion plans.
3	» Weak exclusion - Prohibits some financing for some companies with other oil and gas expansion plans.
0	» None
	PHASE-OUT/EXCLUSION
	Other oil and gas companies: phase-out
5	» Strong phase-out - Commits to phase out all financing for companies with other oil and gas operations on a 1.5°C-aligned timeline.
3	» Weak phase-out - Commits to phase out some financing for companies with other oil and gas operations.
1.5	» Reduction - Commits to reduce financing for or credit exposure to companies with other oil and gas operations.
0	» None
	Other oil and gas companies: exclusion
6	» Full exclusion - Prohibits all financing for all companies with other oil and gas operations.
5	» Strong exclusion threshold - Prohibits financing for companies with significant other oil and gas operations.
2	» Weak exclusion threshold - Prohibits financing for companies with majority other oil and gas operations.
0.5	» Enhanced due diligence or Equator Principles signatory - Has an enhanced due diligence process for transactions related to oil and gas overall, or is a signatory to the Equator Principles.
0	» None


PHOTO: KODDA / SHUTTERSTOCK

TOP COAL MINING COMPANIES

RANK	COMPANY	ANNUAL COAL PRODUCTION (MILLION METRIC TONS)	EXPANSION PLANS?
1	COAL INDIA	534	YES
2	CHINA ENERGY INVESTMENT CORPORATION (CHN ENERGY)	510	YES
3	PEABODY ENERGY	157	
4	SHANDONG ENERGY GROUP	141	YES
5	SHAANXI COAL AND CHEMICAL INDUSTRY	140	YES
6	YANKUANG GROUP	135	YES
7	DATONG COAL MINE GROUP	127	YES
8	GLENCORE	118	YES
9	SIBERIAN COAL ENERGY COMPANY (SUEK)	110	YES
10	CHINA NATIONAL COAL GROUP	105	YES
11	SHANXI COKING COAL GROUP	92	YES
12	RWE	86	
13	BUMI RESOURCES	83	YES
14	ARCH COAL INC	80	
15	STATE POWER INVESTMENT CORPORATION	75	YES
16	JINNENG GROUP	74	YES
17	SHANXI LU'AN MINING INDUSTRY GROUP	73	YES
18	CHINA HUANENG GROUP	71	YES
19	HENAN ENERGY AND CHEMICAL INDUSTRY GROUP	66	YES
20	YANGQUAN COAL INDUSTRY GROUP	66	YES
21	SINGARENI COLLIERIES COMPANY LIMITED (SCCL)	64	
22	INNER MONGOLIA YITAI GROUP	64	YES
23	MURRAY ENERGY	61	
24	SHANXI JINCHENG ANTHRACITE MINING GROUP	59	YES
25	HUAINAN MINING INDUSTRY GROUP	57	YES
26	ADARO ENERGY	53	YES
27	JIZHONG ENERGY GROUP	53	YES
28	CLOUD PEAK ENERGY	52	YES
29	PGE SA (POLSKA GRUPA ENERGETYCZNA SA)	51	YES
30	ENERGETICKÝ A PRUMYSLOVÝ HOLDING (EPH)	50	

Data from the September 2019 update of urgewald's Global Coal Exit List.

COAL MINING POLICY SCORING CRITERIA

POINT VALUE	
	EXPANSION
	Coal mining projects
6	» Strong exclusion - Prohibits all financing for all coal mining projects.
4	» Moderate exclusion - Prohibits all financing for all new coal mining projects.
2	» Weak exclusion - Prohibits some financing for some coal mining projects, beyond mountaintop removal (MTR) mines (restrictions limited to greenfield mines score in this category).
0.5	» MTR mine exclusion - Prohibits financing for MTR mines.
0	» None
	Companies expanding coal mining
8	» Strong exclusion - Prohibits all financing for all companies with coal mining expansion plans.
4	» Weak exclusion - Prohibits some financing for companies with coal mining expansion plans.
0	» None
	PHASE-OUT/EXCLUSION
	Coal mining companies: phase-out
8	» Strong phase-out - Commits to phase out all financing for companies with coal mining operations on a 1.5°C-aligned timeline.
6	» Moderate phase-out - Commits to phase out some financing for companies with coal mining operations, with some loopholes.
4	» Weak phase-out - Commits to phase out some financing for companies with coal mining operations, with significant loopholes. (Even a weak phase-out commitment must apply to nearly all coal companies, with 5% coal activity as a maximum threshold).
3	» Financing reduction - Commits to reduce financing for companies with coal mining operations.
1.5	» Exposure reduction - Commits to reduce credit exposure to companies with coal mining operations.
0	» None
	Coal mining companies: exclusion
10	» Full exclusion - Prohibits all financing for all companies with coal mining operations.
8	» Strong exclusion threshold - Prohibits financing for companies with up to 30% coal mining operations.
5	» Moderate exclusion threshold - Prohibits financing for companies with 31-49% coal mining operations.
3	» Weak exclusion threshold - Prohibits financing for companies with majority coal mining operations, or companies with any MTR operations, or limits coal mining exclusion to new clients.
0.5	» Enhanced due diligence - Has an enhanced due diligence process for transactions related to coal mining, or excludes companies with majority MTR operations.
0	» None

TOP COAL POWER COMPANIES

RANK	COMPANY	INSTALLED COAL POWER CAPACITY (ATTRIBUTABLE MEGAWATTS)	COAL POWER EXPANSION PLANS (ATTRIBUTABLE MEGAWATTS)
1	CHINA ENERGY INVESTMENT CORPORATION (CHN ENERGY)	175,000	25,153
2	CHINA HUANENG GROUP	104,717	13,573
3	CHINA DATANG	94,705	21,485
4	CHINA HUADIAN	104,054	9,138
5	STATE POWER INVESTMENT CORPORATION	69,191	12,975
6	NTPC	48,074	30,541
7	SHAANXI COAL AND CHEMICAL INDUSTRY	45,941	6,275
8	ESKOM	36,479	9,600
9	KOREA ELECTRIC POWER CORPORATION (KEPCO)	34,218	6,621
10	CHINA RESOURCES POWER HOLDINGS	29,815	7,607
11	ZHEJIANG PROVINCIAL ENERGY GROUP	28,211	3,913
12	PERUSAHAAN LISTRIK NEGARA (PLN)	20,192	9,573
13	GUANGDONG ENERGY GROUP	24,494	2,986
14	HEBEI CONSTRUCTION & INVESTMENT GROUP	19,116	2,512
15	DATONG COAL MINE GROUP	15,460	5,050
16	STATE DEVELOPMENT AND INVESTMENT CORPORATION (SDIC)	13,756	4,194
17	RELIANCE POWER	5,760	11,880
18	RWE	17,475	-
19	DUKE ENERGY	17,032	-
20	PGE SA (POLSKA GRUPA ENERGETYCZNA SA)	12,656	4,360
21	DTEK BV GROUP	16,314	-
22	ENEL	15,828	-
23	BEIJING ENERGY HOLDING	11,808	3,911

Data from the September 2019 update of urgewald's Global Coal Exit List.

RANK	COMPANY	INSTALLED COAL POWER CAPACITY (ATTRIBUTABLE MEGAWATTS)	COAL POWER EXPANSION PLANS (ATTRIBUTABLE MEGAWATTS)
24	AMERICAN ELECTRIC POWER (AEP)	14,056	-
25	CHINA NATIONAL COAL GROUP	10,440	3,400
26	SOUTHERN COMPANY	13,457	-
27	VIETNAM ELECTRICITY CORPORATION (EVN)	9,088	4,259
28	VISTRA ENERGY	13,183	-
29	ELEKTRIK ÜRETIM A.S. GENEL MÜDÜRLÜSÜ (EÜAS)	1,804	11,350
30	CLP HOLDINGS	12,090	985

COAL POWER POLICY SCORING CRITERIA

POINT VALUE	
	EXPANSION
	Coal power projects
6	» Strong exclusion - Prohibits all financing for all coal power projects, including both new plants and expansions of existing plants.
4	» Moderate exclusion - Prohibits all financing for new coal power projects.
2	» Weak exclusion - Prohibits some financing for some coal power projects.
0	» None
	Companies expanding coal power
8	» Strong exclusion - Prohibits all financing for all companies with coal power expansion plans.
4	» Weak exclusion - Prohibits some financing for companies with coal power expansion plans.
0	» None
	PHASE-OUT/EXCLUSION
	Coal power companies: phase-out
8	» Strong phase-out - Commits to phase out all financing for companies with coal power operations on a 1.5°C-aligned timeline.
6	» Moderate phase-out - Commits to phase out some financing for companies with coal power operations, with some loopholes.
4	» Weak phase-out - Commits to phase out some financing for companies with coal power operations, with significant loopholes. (Even a weak phase-out commitment must apply to nearly all coal companies, with 5% coal activity as a maximum threshold).
3	» Financing reduction - Commits to reduce financing for companies with coal power operations.
1.5	» Exposure reduction - Commits to reduce credit exposure to companies with coal power operations.
1	» Proportional reduction - Commits to reduce the proportion of coal in, or emissions intensity of, power generation or energy financing.
0	» None
	Coal power companies: exclusion
10	» Full exclusion - Prohibits all financing for all companies with coal power operations.
8	» Strong exclusion threshold - Prohibits financing for companies with up to 30% coal power operations.
5	» Moderate exclusion threshold - Prohibits financing for companies with 31-49% coal power operations.
3	» Weak exclusion threshold - Prohibits financing for companies with majority coal power operations, or limits coal power exclusion to new clients.
0.5	» Enhanced due diligence - Has an enhanced due diligence process for transactions related to coal power.
0	» None

OTHER COAL POLICY SCORING CRITERIA

This category covers coal beyond mining and power — mainly coal transportation and service projects and companies. A bank with a policy that covered all coal would receive additional credit here.

POINT VALUE	
	EXPANSION
	Other coal projects
3	» Strong exclusion - Prohibits all financing for all coal projects.
1	» Weak exclusion - Prohibits some financing for some other coal projects.
0	» None
	Companies expanding other coal
4	» Strong exclusion - Prohibits all financing for all companies with other coal expansion plans.
2	» Weak exclusion - Prohibits some financing for companies with other coal expansion plans.
0	» None
	PHASE-OUT/EXCLUSION
	Other coal companies: phase-out
4	» Strong phase-out - Commits to phase out all financing for companies with coal operations on a 1.5°C-aligned timeline.
2	» Weak phase-out - Commits to phase out some financing for companies with other coal operations.
1	» Reduction - Commits to reduce financing for or credit exposure to companies with other coal operations.
0	» None
	Other coal companies: exclusion
5	» Full exclusion - Prohibits all financing for all companies with coal operations.
4	» Strong exclusion threshold - Prohibits financing for companies with significant other coal operations.
2	» Weak exclusion threshold - Prohibits financing for companies with majority other coal operations.
0.5	» Enhanced due diligence - Has an enhanced due diligence process for transactions related to other coal.
0	» No policy

ENDNOTES

1 See the following Banking on Fossil Fuels League Table.

2 See the policy score charts throughout this report, and www.ran.org/bankingonclimatechange2020 for a detailed comparison of bank policies.

3 See the following Banking on Fossil Fuels League Table. Even after adjusting for inflation, the amount of overall fossil fuel finance has grown each year at a rate of between 1.4 and 3.2%.

4 See the Banking on Fossil Fuel Expansion League Table.

5 See the following Banking on Fossil Fuels League Table.

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13 See the Banking on Offshore Oil and Gas League Table.

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ENDORSEMENTS

This report is endorsed by 252 organizations from 45 countries around the world:

198 methods
350 Brooklyn
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350 Corvallis
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Association Workshop for All Beings
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Center for Citizens Conserving
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Centre for Environmental Justice
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