Banking on CLIMATE CHAOS

FOSSIL FUEL FINANCE REPORT **2021**

RAINFOREST ACTION NETWORK · BANKTRACK · INDIGENOUS ENVIRONMENTAL NETWORK · OILCHANGE · RECLAIM Finance · SIERRA CLUB

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TABLE OF CONTENTS

Executive Summary 4

Introduction 6
- **League Table - Banking on Fossil Fuels** 12
- **Key Findings** 16
- **Policy Scores Summary** 24
- **Methodology** 30

Case Study - Fires Around the World 34

Fossil Fuel Expansion 36
- Big Oil Reality Check: Fossil Fuel Expansion Continues Amid Greenwashing 37
- League Table – Banking on Fossil Fuel Expansion 38
- Policy Scores – Fossil Fuel Expansion 42
- **Case Study** - East African Crude Oil Pipeline 44
- **Case Study** - Nigeria LNG 45

Spotlight Fossil Fuels 46

TAR SANDS OIL 48
- League Table - Banking on Tar Sands 50
- Policy Scores - Tar Sands 52
- **Case Study** - Line 3 54

ARCTIC OIL & GAS 56
- League Table - Banking on Arctic Oil and Gas 58
- Policy Scores - Arctic Oil and Gas 60
- **Case Study** - Arctic National Wildlife Refuge 62

OFFSHORE OIL & GAS 64
- League Table - Banking on Offshore Oil and Gas 66
- Policy Scores - Offshore Oil and Gas 68
- **Case Study** - Barents Sea 70
- **Case Study** - Offshore Cape Three Points 71

FRACKED OIL & GAS 72
- League Table - Banking on Fracked Oil and Gas 74
- Policy Scores - Fracked Oil and Gas 76
- **Case Study** - Vaca Muerta 78
- **Case Study** - Mountain Valley Pipeline 79
- **Case Study** - Coastal GasLink Pipeline 80

LIQUEFIED NATURAL GAS (LNG) 82
- League Table - Banking on LNG 84
- Policy Scores - LNG 86
- **Case Study** - Energía Costa Azul LNG 88
- **Case Study** - Mozambique LNG Projects 89

COAL MINING 90
- League Table - Banking on Coal Mining 92
- Policy Scores - Coal Mining 94
- **Case Study** - Carmichael Coal Mine 96
- **Case Study** - Hasdeo Arand 97
- **Case Study** - Adaro 98

COAL POWER 100
- League Table - Banking on Coal Power 102
- Policy Scores - Coal Power 104
- **Case Study** - Jawa 9 and 10 106
- **Case Study** - Matarbari 107
- **Case Study** - EMBA Hunutlu 107

Financed Emissions and the Road to Glasgow 108
- Financed Emissions Policy Assessment 112

Human Rights 118

Conclusion and Demands 122

Appendices 124
- Banks Included 124
- Top Fossil Fuel Expansion Companies 126
- Fossil Fuel Expansion Policy Scoring Criteria 129
- Top Tar Sands Companies 130
- Tar Sands Policy Scoring Criteria 131
- Top Arctic Oil and Gas Companies 132
- Arctic Oil and Gas Policy Scoring Criteria 133
- Top Offshore Oil and Gas Companies 134
- Offshore Oil and Gas Policy Assessment Criteria 135
- Top Fracked Oil and Gas Companies 136
- Fracked Oil and Gas Policy Scoring Criteria 137
- Top LNG Companies 138
- LNG Policy Scoring Criteria 139
- Other Oil and Gas Policy Scoring Criteria 140
- Top Coal Mining Companies 142
- Coal Mining Policy Scoring Criteria 143
- Top Coal Power Companies 144
- Coal Power Policy Scoring Criteria 145
- Other Coal Policy Scoring Criteria 146

Endnotes 148

Endorsements 154

Acknowledgements 157

Disclaimer 157

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EXECUTIVE SUMMARY

This report analyzes fossil fuel financing from the world's 60 largest commercial and investment banks — aggregating their leading roles in lending and underwriting of debt and equity issuances — and finds that these banks poured a total of $3.8 trillion into fossil fuels from 2016–2020.[1] Fossil fuel financing dropped 9% last year, parallel to the global drop in fossil fuel demand and production due to the COVID-19 pandemic.[2] And yet 2020 levels remained higher than in 2016, the year immediately following the adoption of the Paris Agreement. The overall fossil fuel financing trend of the last five years is still heading definitively in the wrong direction, reinforcing the need for banks to establish policies that lock in the fossil fuel financing declines of 2020, lest they snap back to business-as-usual in 2021.

JPMorgan Chase remains the world's worst banker of fossil fuels over this time period, though its funding did drop significantly last year. **Citi** follows as the second-worst fossil bank, followed by **Wells Fargo**, **Bank of America**, **RBC**, and **MUFG**. **Barclays** is the worst in Europe and **Bank of China** is the worst in China.

This report also tracks funding for 100 top fossil fuel expansion companies and finds **JPMorgan Chase**, **Citi**, and **Bank of America** to be their biggest bankers over the last half decade, all with significant increases in funding last year despite voicing their support for the Paris Agreement.

Banking on Climate Chaos 2021 also assesses banks' future-facing policies to restrict financing for fossil fuels, and finds that **UniCredit** has the strongest policy overall, though it only earned about half of the available points — underscoring that the banking sector remains far from committing to a complete exit from fossil fuel financing.

The report also assesses bank financing for and policies regarding top companies in key fossil fuel sectors, and details case studies where this financing has resulted in harmful impacts on communities around the world.

- Tar sands oil: 2016–2020 financing was dominated by the Canadian banks, led by **TD** and **RBC**, as well as **JPMorgan Chase**. The Line 3 pipeline is an example of how bank financing backs tar sands expansion and Indigenous rights violations.

- Arctic oil and gas: Banks have made recent policy progress in this area by restricting direct financing for projects in the region. **JPMorgan Chase**, **ICBC**, **China Minsheng Bank**, and **Sberbank** are the biggest funders since the Paris Agreement of companies with major operations in the Arctic.

- Offshore oil and gas: Though it has strong policies on unconventional oil and gas, **BNP Paribas**'s largely unrestricted financing for the supermajors allowed it to emerge as the world's worst banker of offshore oil and gas over the last five years.

- Fracked oil and gas: From development of Argentina's Vaca Muerta shale field, to pipelines like Mountain Valley and Coastal GasLink, the fracking sector presents health hazards to local communities on top of rights and climate impacts. U.S. banks like **Wells Fargo** and **JPMorgan Chase** dominate fracking financing, with **Barclays**, **MUFG**, and **Mizuho** as the biggest funders outside of North America.

- Liquefied natural gas (LNG): Reflecting the misguided notion that gas will serve as transition fuel for the coming decades, bank financing for the 30 largest LNG companies was higher in 2020 than in any year since the Paris Agreement's adoption. The sector's biggest bankers over the last half decade, **Morgan Stanley**, **Citi**, and **JPMorgan Chase**, don't have policies restricting financing for LNG.

- Coal mining: Chinese banks **Industrial Bank**, **China Construction Bank**, and **Bank of China** lead financing for coal mining, and lack policies to rein in this financing. **BNP Paribas**, **BPCE/Natixis**, **Crédit Mutuel**, and **UniCredit** have best-in-class coal mining policy restrictions.

- Coal power: Coal power financing post–Paris Agreement is led by **Bank of China**, **ICBC**, and **China CITIC Bank**. Multiple coal power case studies are highlighted in the pages that follow, demonstrating in particular Chinese and Japanese bank support for new coal projects even in our climate-constrained world.

This year's report also assesses the current wave of bank commitments to reduce their financed emissions to "net zero by 2050," as well as related policies like measuring and disclosing financed emissions, and emphasizes that no bank making a climate commitment for 2050 should be taken seriously unless it also acts on fossil fuels in 2021. Moreover, until the banks prove otherwise, the "net" in "net zero" leaves room for emissions targets that fall short of what the science demands, based on copious offsetting or absurd assumptions about future carbon-capture schemes, as well as the rights violations and fraud that often come hand in hand with offsetting and carbon markets.

Additional resources are available at:
BankingonClimateChaos.org

An Eastern grey kangaroo and her joey who survived the forest fires in Mallacoota. PHOTO: Jo-Anne McArthur / We Animals; Students with University of Minnesota (UMN) for Climate Justice call on Chase to defund the Line 3 pipeline. PHOTO: Jessie Fetting

INTRODUCTION

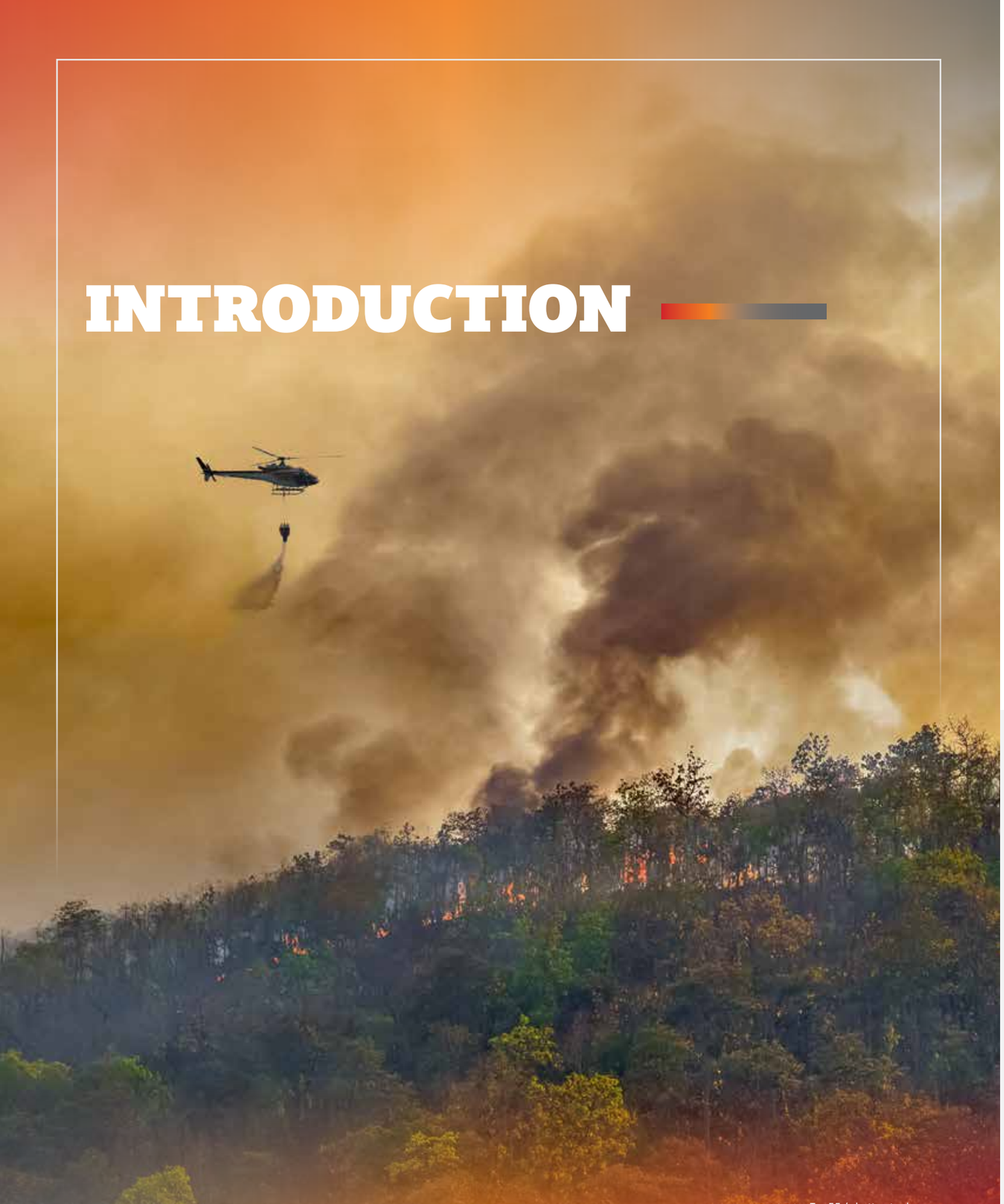


PHOTO: Toa55 / shutterstock

Five years have passed since the Paris Agreement was adopted — when a line in the sand was drawn that should have indicated a real beginning to serious, concerted action on climate. Thus it is shocking that this report finds that fossil fuel financing (lending and underwriting) from the world's 60 largest commercial and investment banks was higher in 2020 than it was in 2016.[3]

It is particularly disturbing that big banks funnelled more money into fossil fuels last year than in the year of the Paris Agreement's infancy, given that 2020 was such a calamitous year for the fossil fuel industry. The need to lock down much of the world economy in response to the COVID-19 pandemic resulted in what was probably the largest year-on-year drop in global fossil fuel consumption since coal was first stoked into the steam engines of the cotton mills of Northern England.[4] According to the International Energy Agency, usage of oil, coal, and gas fell in 2020 by 8%, 7%, and 3%, respectively.[5] As a result of this decline in fossil fuel burning, global carbon dioxide (CO_2) emissions are estimated to have dropped by 7% in 2020.[6]

Fossil fuel financing in 2020 paints an interesting picture of a world reacting to the onset of a pandemic. January through June saw the most fossil fuel financing of any half year since the adoption of the Paris Agreement, as large corporations around the world took advantage of very low interest rates and central bank bond-buying programs to load up on cheap debt in preparation for difficult times ahead.[7] Meanwhile, the second half of the year saw record low levels of financing. The impact of these two wildly divergent half years was that overall, finance from the world's 60 largest private banks to 2,300 fossil fuel companies fell by almost 9% from 2019 to 2020, after three years of increases of between 4.4% and 5.5% per year.

These decreases in fossil fuel use, financing, and emissions should be a cause for both hope and fear. Hope, because as even oil majors BP and Shell are now projecting, the impact of COVID-19 coupled with the accelerating energy transition may mean that the world will never again extract and burn as much oil as it did in 2019 (coal consumption seems to have peaked in 2013; peak gas still lies in the — hopefully near — future).[8] But they should also cause fear, because we have only been able to make a dent in the fossil fuel juggernaut due to the terrible pandemic.

Despite this significant drop from 2019 to 2020, the overall trend of the last five years is one heading definitively in the wrong direction. We must go forward to a world where even without a pandemic, fossil fuel production declines almost as quickly every year for the next decade as it did in 2020 — but this time in a managed way.[9] This means that banks must establish policies that lock in the fossil fuel financing declines of 2020, lest they snap back to business-as-usual in 2021. Banks must ensure that the fossil fuel financing binge of the first half of 2020 turns out to have been a pandemic-induced blip, and not a sign that the opportunity for short-term profit will trump the banking industry's growing professions of concern over the climate crisis.

RACE TO THE BOTTOM

As in every year since the adoption of the Paris Agreement at the end of 2015, **JPMorgan Chase** was again the world's worst fossil bank last year, with $51.3 billion in fossil fuel financing. From 2016 through 2020, **JPMorgan Chase**'s lending and underwriting activities have provided nearly $317 billion to fossil fuels, fully 33% more than **Citi**, the next worst fossil bank during this period.

But the gap is narrowing. **JPMorgan Chase**'s overall fossil fuel financing fell by 20% in 2020. Meanwhile, **Citi**'s total fell by much less, moving the bank into the second-worst slot overall. Moreover, **Citi**'s $48.4 billion in 2020 fossil fuel financing is still higher than 2016 levels, whereas **JPMorgan Chase** saw a decrease over that time period.

By contrast, **Wells Fargo**'s total fossil fuel financing plunged by a surprising 42% in 2020. As a result, **Wells Fargo** dropped from fourth-worst fossil bank in 2019 — behind **Bank of America** in third place — to ninth-worst in 2020.

Another surprising result from the 2020 data is that **BNP Paribas**, a bank that never loses an opportunity to boast of its clean, green credentials (and those of its U.S. subsidiary Bank of the West), came in as the fourth-worst fossil bank in 2020.[10] **BNP Paribas** did $40.8 billion in fossil fuel financing in 2020, a huge 41% increase over its 2019 activity. **BNP Paribas**'s 2020 fossil fuel financing is a shocking 141% higher than it was in 2016.

In 2020, **BNP Paribas** is credited with leading $12.7 billion in financing to BP, $4.2 billion to Shell, $3.7 billion to Total, $1.8 billion to Saudi Aramco, and more than a half-billion each to Eni, Exxon, Pemex, Chevron, Equinor, and Petrobras; while **BNP Paribas** has strong restrictions on unconventional oil and gas financing, its support for the majors continues unabated.[11]

BNP Paribas's French megabank peers also saw disturbingly high jumps in their fossil fuel financing in 2020. **Crédit Agricole** shoveled $7.8 billion more into fossil fuel companies than in 2019 — including $3.7 billion to Total — an increase of 66%. **Société Générale**'s fossil fuel financing, including $1.9 billion to ExxonMobil, soared by $4.4 billion, or 30%.

Both have markedly increased their fossil fuel financing since 2016. This funding for major oil and gas companies means that both also climbed up the fossil fuel expansion table — which measures financing for 100 key oil, gas, and coal companies expanding fossil fuels — rising from 21st- and 19th-worst funders in 2019 to 12th and 11th in 2020.

In contrast with these major French banks, their much smaller competitor **Crédit Mutuel** was the only one of the 60 banks covered in this report that did not lead any financing in 2020 to the thousands of fossil fuel companies we analyze.

While these French megabanks ramped up their fossil fuel financing in 2020, all of the big five Canadian banks cut their fossil fuel financing in 2020. **RBC**, fifth-worst bank in 2019, dropped to 15th place in 2020. **TD**, tenth-worst bank in 2019, dropped to 18th in 2020.

These North American and European banks dominate the global picture of fossil fuel financing, largely due to financing for the oil and gas sector. Japanese megabanks **MUFG** and **Mizuho** both appear in the list of the largest fossil fuel funders over the last five years, in 6th and 8th place, respectively. **Barclays** remains Europe's largest fossil bank, in 7th place globally. **Bank of China** is the biggest Chinese fossil fuel funder among the world's 60 largest banks, in 14th place.

SECTOR TRENDS[12]

TAR SANDS

The sharp drops in the Canadian banks' fossil fuel financing in 2020 are in part linked to plummeting tar sands financing. The tar sands "patch" in Alberta has been one of the fossil fuel sectors most seriously impacted by COVID-19, and the tar sands majors slashed their capital expenditure budgets in 2020 in an effort to placate their investors and cut debt.[13] Overall bank financing to the 35 top tar sands companies sank by 27% in 2020 to $16 billion. This is lower than 2016 financing for the sector, hopefully indicating that the tar sands' heyday is long past (the peak year for tar sands financing over the past half decade was 2017, which saw $43 billion in financing).

Since 2016 tar sands lending and underwriting has been dominated by the big five Canadian banks — in particular **TD** and **RBC** — plus **JPMorgan Chase**. These six banks dominated the tar sands sector again in 2020, although all but one were at lower levels than in 2016. Among the second tier of tar sands bankers, **Barclays**, **Bank of America**, **Citi**, **MUFG**, **Morgan Stanley**, and **BNP Paribas** all saw increases in their tar sands financing in 2020 as compared to 2016.

ARCTIC OIL AND GAS

Banking of the oil and gas industry in the Arctic repeatedly made the U.S. news in late 2019 and through 2020 because of commitments from the six U.S. megabanks to stop financing oil and gas projects in the region — and backlash from right-wing politicians to this supposed "discrimination."[14] However, banks have provided little if any financing earmarked for specific projects in the Arctic. Banks instead have financed fossil fuel development in the region through corporate finance to oil and gas giants with major Arctic reserves — like China National Petroleum Corporation, OMV, Gazprom, ConocoPhillips, and Total.

Despite their new-found concern for the region, the three biggest U.S.-based Arctic fossil fuel funders, **JPMorgan Chase**, **Citi**, and **Bank of America** all increased their Arctic financing for the top 30 companies active in the region in 2020 as compared to the previous year and to 2016. However, compared to their European and Asian peers, all but one of these banks play a relatively small role in financing Arctic oil and gas. **JPMorgan Chase**, **ICBC**, **China Minsheng Bank**, and **Sberbank** dominated Arctic oil and gas financing in the five years after the adoption of the Paris Agreement.

OFFSHORE OIL AND GAS

Financing for this sector is driven by banks' financing to the oil and gas majors with the capacity to take on the cost and risk of drilling for oil and gas offshore — companies like ExxonMobil, BP, Petrobras, and Total. **BNP Paribas** emerged as the worst funder of offshore oil and gas over the last five years, followed by a cluster of U.S. banks: **JPMorgan Chase**, **Citi**, and **Bank of America**. The top 14 offshore oil and gas funders all showed higher levels of financing for the sector last year than in 2016.

FRACKED OIL AND GAS

Given the well-publicized financial blows that hit the fracking sector in 2020,[15] it is not surprising that bank finance for the industry fell by 8% in 2020. U.S. banks dominated: **Wells Fargo**, **JPMorgan Chase**, **Citi**, and **Bank of America** were the biggest bankers of 40 top fracking companies, and alone provided 44% of fracking financing from all 60 banks in the last five years.

Fracking financing from all four of these banks fell last year. **Barclays**, however, the largest non-U.S. banker of fracking, actually increased its fracking financing by 24% from 2019. **BNP Paribas** stands out with the biggest absolute increase in its fracking financing, from $1.1 billion in 2019 to $3 billion in 2020, thanks especially to the bank's recent large deals with BP and Chevron.

PHOTO: 1968 / shutterstock

LIQUEFIED NATURAL GAS

Reflecting the misguided notion that gas will serve as transition fuel for the coming decades, bank finance for the 30 largest LNG companies was higher in 2020 than in any other year since the Paris Agreement, at $28.8 billion. **Morgan Stanley** is the worst funder of LNG overall since the Paris Agreement's adoption. In 2020, however, it was overtaken by **Bank of America**, **JPMorgan Chase**, **BNP Paribas**, **Citi**, **HSBC**, **Mizuho**, and **SMBC Group**.

COAL MINING

Chinese companies and banks overwhelmingly dominate the coal sector. The worst 11 coal mining banks over the last five years were all Chinese, with **Industrial Bank**, **China Construction Bank**, and **Bank of China** ranking worst. Shockingly, coal mining finance from the 60 banks covered in this report actually increased slightly in 2020 to $25.4 billion. This is 25% higher than in 2016.

Outside China, the worst bankers of coal mining were **Credit Suisse**, **Deutsche Bank**, and **JPMorgan Chase**, all of whom did more coal mining financing in 2020 than in 2016.

COAL POWER

The worst 10 coal power bankers since the Paris Agreement's adoption were Chinese, led by **Bank of China**, **ICBC**, and **China CITIC Bank**. Overall funding from the banks in this report to the 30 biggest coal power companies in 2020 fell by 9% from 2019, to $39 billion.

Citi stands out as the worst non-Chinese bank from 2016–2020. **Citi** increased its coal power financing last year, and its 2020 financing was more than double that of 2016. The next biggest non-Chinese funders of coal power over the last five years were **MUFG**, **Mizuho**, and **Barclays**.

Morgan Stanley and **BNP Paribas** both showed notably sharp falls in their coal power financing in 2020. For both banks, 2020 financing for coal power was below that of any of the past five years.

POLICY TRENDS

COAL

Major banks and other financial institutions across the world are rapidly adopting new coal exclusion policies.[16] But the data in this report show that bank policies on the whole are still far too weak to squeeze lending and underwriting out of the coal industry.

In this report we score bank coal mining and power policies according to whether and to what extent they exclude financing for new projects or for companies expanding coal extraction or use, as well as their overall restrictions or phase-out commitments around financing companies with coal operations.

Based on these criteria, the strongest overall coal policies have been adopted by **UniCredit** and **Crédit Mutuel**. Each of these banks scored 75 out of a possible 80 points.[17] These two banks are among those evaluated in this report with the lowest volume of financing for coal last year.

The link between strong policies and low coal financing is reassuring, but a look through past years' data for these banks highlights a key challenge — the banks most likely to adopt strong policies in any sector will be those for whom these sectors have historically been relatively unimportant. If future policies are to seriously bring down financing numbers, they need to be adopted by the big players in the relevant sectors. In the coal sector the obvious challenge lies in coal goliath China. No Chinese bank earned more than a single coal policy point out of 80.

The most common coal restriction policy is to prohibit financing earmarked for a specific mine or power plant. Unfortunately this is also a very rarely used means of financing such coal projects. Our analysis shows that 2.7% of bank financing for the top coal mining and power companies is project related.[18] This means that a project financing restriction is only a baby step for a bank on the journey toward a robust coal policy.

OIL AND GAS

While banks still have a long way to go to adopt coal policies ambitious enough to match the challenge of the climate crisis, the situation is far worse in the oil and gas sector, where policy setting is only just starting to gain momentum.

Arctic oil and gas is the area with the most bank policies, largely due to the advocacy of the Gwich'in and other Indigenous inhabitants of the Arctic who have brought their stories directly to the banks. Yet even here only two banks, **BNP Paribas** and **Santander**, earned over a third of the available points, because Arctic oil and gas policies are largely limited to project finance prohibitions.

Tar sands is another area with nascent policy development. The best score here was 7 out of 18, from **BNP Paribas** and **BPCE/Natixis** (both of which actually increased their overall tar sands financing in 2020). Only 24 banks have a score of 1 point or more. And again the policies mainly exclude only project finance, which is rarely used to fund tar sands extraction, though it is occasionally used for tar sands pipelines.

In fracking, **BNP Paribas** earned the highest policy score, 7 out of 18. Only 16 banks earned 1 point or above in fracking. All of these banks are European except one, **U.S. Bank**.

The policy picture is even worse for LNG and offshore oil and gas, where the highest scoring banks earned only 3 points out of 18: **UniCredit** (in both areas) and **BNP Paribas** (in LNG).

FINANCED EMISSIONS

The most striking development in the bank policy arena during 2020 was the emergence of various types of long-term commitments from banks to reduce their overall carbon footprint, in the majority of cases to "net zero" by 2050. These commitments cover to varying degrees the "financed emissions" from major bank business lines: lending, investments, and — more rarely — underwriting. They also, in theory at least, cover all emissions from all the sectors that the banks support, not just fossil fuels but also industrial sectors such as steel and cement, as well as manufacturing, retail, real estate, and more.

Cutting overall financed emissions has the potential to be a powerful tool as it addresses both supply and demand sides of the fossil fuel industry — cutting with both blades of the scissors, to paraphrase economist Arthur Marshall.[19]

The trend began in the UK in early 2020 with commitments from **NatWest** and then **Barclays**.[20] **HSBC**, **Morgan Stanley**, **Nordea**, and **TD** are among the 17 of the 60 banks covered in this report that have "net zero by 2050" commitments.

This report for the first time assesses these financed emissions commitments, using as a yardstick the "Principles for Paris-Aligned Financial Institutions" that were endorsed by 60 climate and rights organizations from around the world in September 2020.[21] These principles emphasize that just committing to net zero in 30 years' time is largely meaningless without immediate actions to put banks on trajectories that avoid an increase in global temperature in excess of 1.5° Celsius, including an end to financing new fossil fuel infrastructure, and an interim target of at least halving financed emissions by 2030.

The world now has just under 10 years to cut global climate pollution in half in order to accomplish what the UN's Intergovernmental Panel on Climate Change says is necessary to avoid the catastrophic consequences of exceeding 1.5°C of warming.[22] That means fewer than 10 years to transform almost every aspect of our industrial economies. The global community has never before set out to achieve such a transformation. It most certainly will not be possible if the world's banks do not put their financial muscle to the wheel and push with, rather than against, all those who aspire to a stable climate and a more just, sustainable world.

PHOTO: APFootage / Alamy Stock Photo

LEAGUE TABLE - *Banking on Fossil Fuels*

Bank financing for 2,300 companies active across the fossil fuel life cycle

B = BILLIONS **M** = MILLIONS

RANK	BANK	2016	2017	2018	2019	2020	TOTAL 2016-2020	TREND
1	JPMORGAN CHASE	$63.729 B	$70.271 B	$67.396 B	$64.039 B	$51.300 B	$316.735 B	
2	CITI	$42.637 B	$47.102 B	$46.853 B	$52.496 B	$48.389 B	$237.477 B	
3	WELLS FARGO	$34.631 B	$54.812 B	$61.821 B	$45.684 B	$26.400 B	$223.349 B	
4	BANK OF AMERICA	$37.670 B	$36.744 B	$33.808 B	$48.081 B	$42.149 B	$198.452 B	
5	RBC	$29.322 B	$38.440 B	$37.656 B	$35.717 B	$18.994 B	$160.129 B	
6	MUFG	$25.304 B	$26.177 B	$35.404 B	$31.782 B	$29.070 B	$147.737 B	
7	BARCLAYS	$30.202 B	$30.730 B	$25.911 B	$30.353 B	$27.702 B	$144.897 B	
8	MIZUHO	$21.268 B	$19.200 B	$28.730 B	$31.484 B	$22.791 B	$123.472 B	
9	TD	$20.705 B	$29.605 B	$25.941 B	$27.944 B	$16.868 B	$121.063 B	
10	BNP PARIBAS	$16.892 B	$17.716 B	$16.567 B	$28.900 B	$40.751 B	$120.825 B	
11	SCOTIABANK	$18.765 B	$24.509 B	$28.033 B	$26.087 B	$16.452 B	$113.846 B	
12	MORGAN STANLEY	$24.141 B	$24.617 B	$19.484 B	$22.072 B	$20.465 B	$110.778 B	
13	HSBC	$17.914 B	$22.172 B	$20.489 B	$26.627 B	$23.542 B	$110.745 B	
14	BANK OF CHINA	$25.944 B	$13.832 B	$22.302 B	$20.268 B	$18.850 B	$101.195 B	
15	GOLDMAN SACHS	$22.894 B	$19.924 B	$17.167 B	$21.580 B	$18.941 B	$100.506 B	
16	BANK OF MONTREAL	$17.369 B	$21.216 B	$21.559 B	$21.869 B	$15.194 B	$97.207 B	
17	ICBC	$18.788 B	$13.285 B	$14.794 B	$19.617 B	$29.521 B	$96.005 B	
18	SMBC GROUP	$10.505 B	$12.117 B	$15.845 B	$19.595 B	$28.199 B	$86.261 B	
19	CREDIT SUISSE	$19.293 B	$21.932 B	$17.108 B	$14.384 B	$9.484 B	$82.201 B	
20	DEUTSCHE BANK	$19.637 B	$19.424 B	$15.257 B	$11.180 B	$9.126 B	$74.624 B	
21	SOCIÉTÉ GÉNÉRALE	$13.671 B	$10.193 B	$15.453 B	$14.674 B	$19.034 B	$73.026 B	
22	CIBC	$12.272 B	$14.048 B	$11.610 B	$19.068 B	$9.742 B	$66.739 B	
23	CRÉDIT AGRICOLE	$8.886 B	$11.220 B	$13.069 B	$11.819 B	$19.594 B	$64.587 B	
24	CHINA CONSTRUCTION BANK	$15.828 B	$9.925 B	$9.013 B	$13.727 B	$12.043 B	$60.536 B	
25	INDUSTRIAL BANK	$8.216 B	$8.806 B	$12.529 B	$11.467 B	$14.043 B	$55.061 B	
26	AGRICULTURAL BANK OF CHINA	$11.839 B	$5.678 B	$7.445 B	$11.021 B	$13.769 B	$49.752 B	
27	CHINA CITIC BANK	$8.050 B	$6.043 B	$9.262 B	$10.731 B	$10.398 B	$44.484 B	
28	ING	$9.266 B	$8.276 B	$11.338 B	$8.841 B	$6.488 B	$44.209 B	
29	SHANGHAI PUDONG DEVELOPMENT BANK	$6.007 B	$4.955 B	$6.989 B	$7.759 B	$12.165 B	$37.875 B	
30	BPCE/NATIXIS	$5.130 B	$5.730 B	$12.028 B	$7.739 B	$6.350 B	$36.978 B	

LEAGUE TABLE - *Banking on Fossil Fuels* (cont'd)

RANK	BANK	2016	2017	2018	2019	2020	TOTAL 2016-2020	TREND
31	UBS	$7.671 B	$9.171 B	$11.034 B	$6.170 B	$2.083 B	$36.128 B	
32	SANTANDER	$6.256 B	$5.004 B	$4.813 B	$8.285 B	$9.678 B	$34.036 B	
33	CHINA MERCHANTS BANK	$8.839 B	$3.620 B	$7.269 B	$5.580 B	$7.084 B	$32.392 B	
34	STANDARD CHARTERED	$2.561 B	$4.920 B	$8.813 B	$8.030 B	$7.098 B	$31.422 B	
35	UNICREDIT	$6.052 B	$6.639 B	$4.684 B	$5.401 B	$8.641 B	$31.418 B	
36	PING AN	$3.489 B	$4.834 B	$7.839 B	$5.307 B	$8.231 B	$29.700 B	
37	TRUIST	$4.317 B	$6.710 B	$5.470 B	$7.552 B	$5.409 B	$29.459 B	
38	CHINA EVERBRIGHT BANK	$5.020 B	$4.149 B	$4.091 B	$4.330 B	$10.701 B	$28.291 B	
39	U.S. BANK	$3.683 B	$5.786 B	$5.602 B	$4.331 B	$7.156 B	$26.558 B	
40	CHINA MINSHENG BANK	$1.672 B	$723 M	$2.637 B	$10.215 B	$10.873 B	$26.120 B	
41	BANK OF COMMUNICATIONS	$4.278 B	$3.270 B	$4.763 B	$4.878 B	$6.561 B	$23.750 B	
42	BBVA	$4.676 B	$3.426 B	$4.559 B	$4.818 B	$4.871 B	$22.351 B	
43	STATE BANK OF INDIA	$6.287 B	$6.348 B	$704 M	$6.210 B	$1.929 B	$21.478 B	
44	ANZ	$2.621 B	$2.662 B	$3.913 B	$3.091 B	$2.940 B	$15.227 B	
45	INTESA SANPAOLO	$4.158 B	$1.981 B	$4.224 B	$1.528 B	$1.818 B	$13.708 B	
46	NATWEST	$3.677 B	$2.804 B	$3.365 B	$1.462 B	$2.086 B	$13.393 B	
47	SBERBANK	$4.040 B	$6.094 B	$841 M	$670 M	$1.148 B	$12.793 B	
48	LLOYDS	$2.955 B	$2.669 B	$2.526 B	$1.457 B	$2.372 B	$11.979 B	
49	COMMERZBANK	$1.005 B	$2.729 B	$2.363 B	$3.368 B	$2.392 B	$11.856 B	
50	NORDEA	$2.802 B	$1.910 B	$1.184 B	$2.013 B	$1.574 B	$9.484 B	
51	RABOBANK	$1.960 B	$1.424 B	$1.911 B	$1.929 B	$983 M	$8.207 B	
52	POSTAL SAVINGS BANK OF CHINA	$168 M	$1.034 B	$1.478 B	$3.063 B	$2.186 B	$7.929 B	
53	WESTPAC	$611 M	$1.241 B	$974 M	$2.969 B	$720 M	$6.514 B	
54	COMMONWEALTH BANK	$1.145 B	$648 M	$1.889 B	$886 M	$1.675 B	$6.243 B	
55	DANSKE BANK	$1.099 B	$799 M	$1.324 B	$1.675 B	$915 M	$5.813 B	
56	NAB	$833 M	$502 M	$1.158 B	$1.298 B	$641 M	$4.432 B	
57	DZ BANK	$243 M	$298 M	$416 M	$248 M	$356 M	$1.561 B	
58	SHINHAN	$155 M	$276 M	$93 M	$199 M	$373 M	$1.096 B	
59	SUMI TRUST	$169 M	-	-	-	$426 M	$596 M	
60	CRÉDIT MUTUEL	$19 M	$35 M	$123 M	$108 M	-	$284 M	
	GRAND TOTAL	**$709.234 B**	**$740.403 B**	**$780.919 B**	**$823.676 B**	**$750.735 B**	**$3.805 T**	

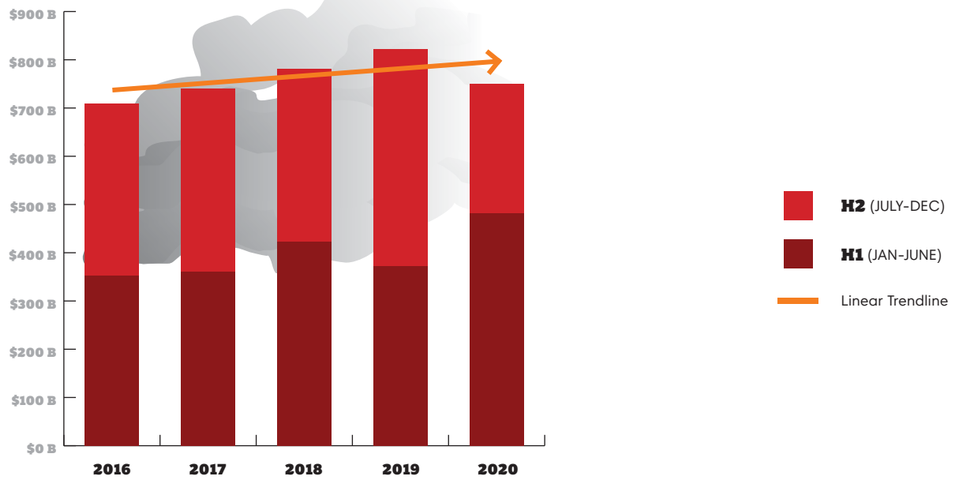
KEY FINDINGS

In the **5 years** since the **Paris Agreement** was adopted, the world's **60 largest private sector banks** financed fossil fuels with **$3.8 trillion**.

Despite a massive global drop in fossil fuel demand and production in 2020, banks' fossil fuel financing still remained above 2016 and 2017 levels.

Although overall fossil fuel financing dropped in 2020, bank financing from January to June was the highest of any half year since the adoption of the Paris Agreement, as large energy companies loaded up on cheap debt at the start of the global pandemic, in preparation for expected difficult times. [23]

GLOBAL FOSSIL FUEL FINANCING 2016-2020 (BILLIONS $USD)



FOSSIL FUEL FINANCING 2016-2020 (TRILLIONS $USD)

Much of this **$3.8 trillion** in financing facilitates the expansion of fossil fuel extraction and infrastructure. **39%** of total financing went to just **100** key companies with the worst fossil fuel expansion plans.

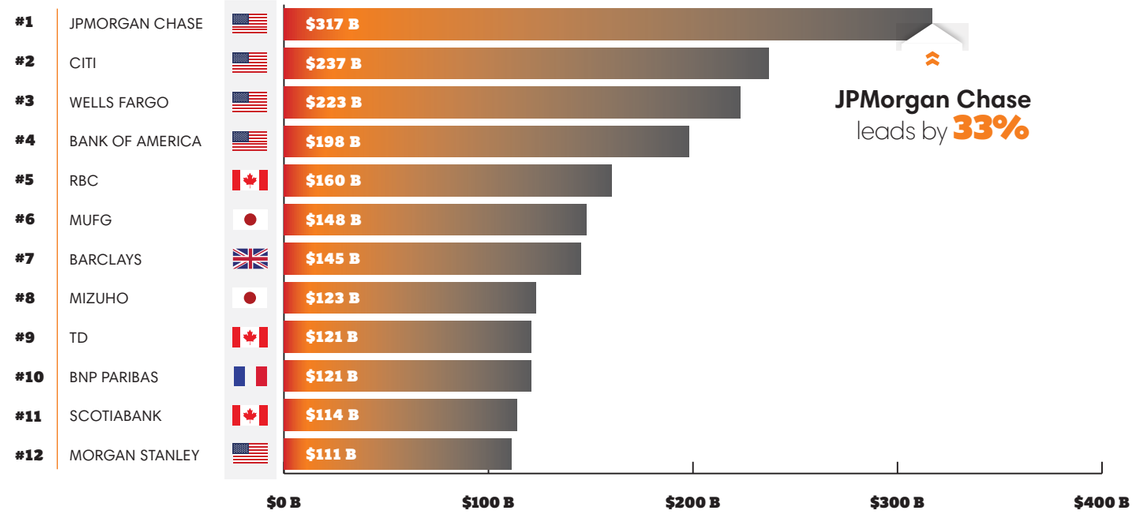
Included in these 100 companies are:

- **Enbridge**, whose planned Line 3 pipeline violates Indigenous rights, threatens the Great Lakes of North America, and jeopardizes our shared climate by expanding access to dirty tar sands oil. (See page **54**)
- **BP**, **Shell**, **ConocoPhillips**, and **Equinor**, four of the companies fracking in the virtually untapped "carbon bomb" of Vaca Muerta, on the land of Indigenous Mapuche communities in Argentina's Patagonia region. (See page **78**)
- France's **Total** and China's **CNOOC**, which are hoping to build the East African Crude Oil Pipeline (EACOP) across Uganda and Tanzania. The project is expected to enable massive expansion of the oil sector, threaten critical ecosystems, cause displacement, and pose other human rights violations. (See page **44**)

THE DIRTY DOZEN

This report shows that **JPMorgan Chase** has been and continues to be the world's worst banker of fossil fuels every year since the Paris Agreement.

FOSSIL FUEL FINANCING 2016-2020 (BILLIONS $USD)

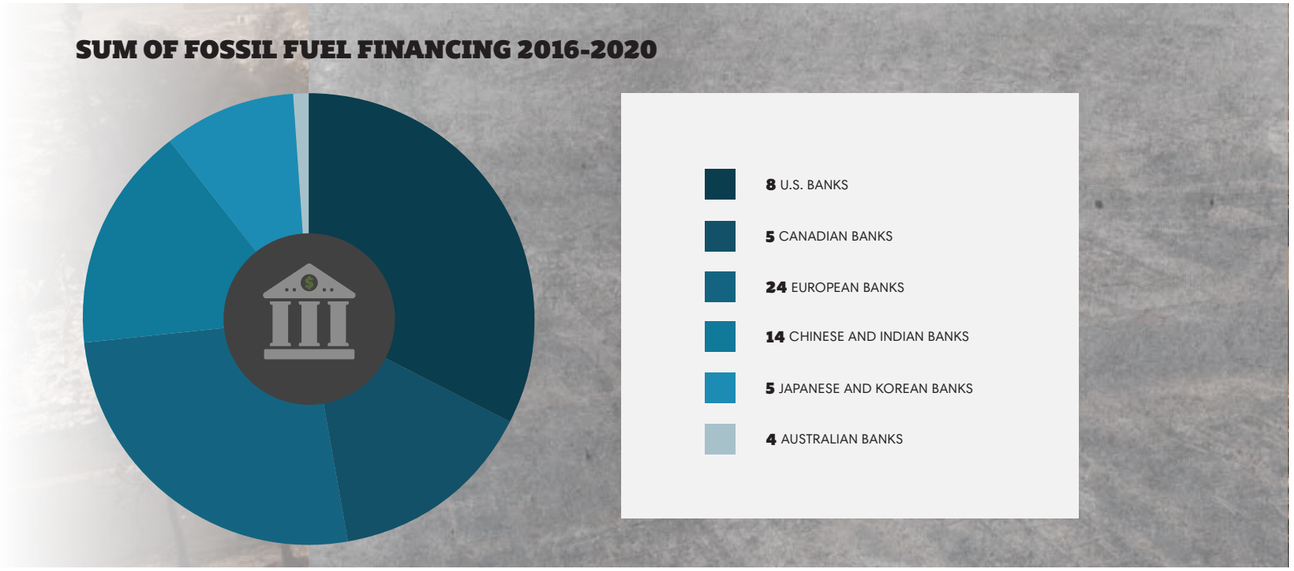


These **"Dirty Dozen"** banks have very different policies regarding restriction and phase-out of coal, oil, and gas, but none are sufficient. Among the world's largest banks, strong coal policies are rare, and even the strongest oil and gas policies are sorely lacking.

BANK	COAL POLICY SCORE (OUT OF **80**)	OIL & GAS POLICY SCORE (OUT OF **120**)
JPMORGAN CHASE	12.5	5
CITI	28.5	5
WELLS FARGO	14.5	4
BANK OF AMERICA	18.5	3.5
RBC	15	2.5
MUFG	4.5	1.5
BARCLAYS	24	8
MIZUHO	4.5	0.5
TD	1.5	3.5
BNP PARIBAS	66	26.5
SCOTIABANK	0	2.5
MORGAN STANLEY	15	5

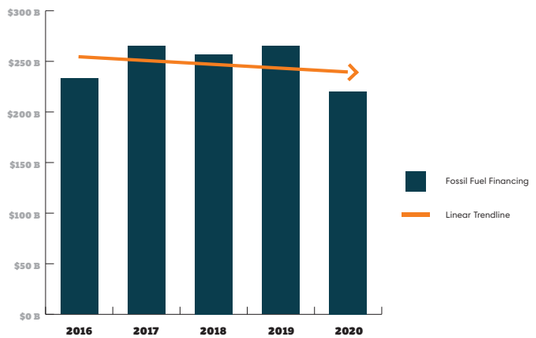
REGIONAL TRENDS

U.S. and Canadian banks make up only 13 of the 60 banks analyzed, but account for almost half of global fossil fuel financing.



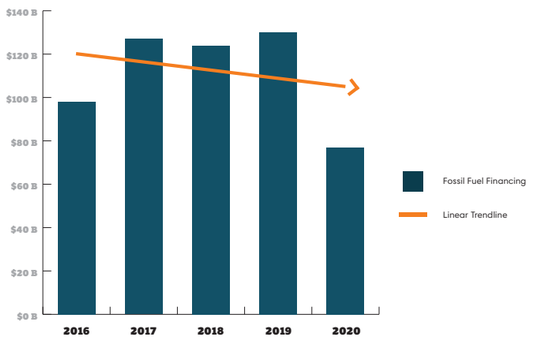
North American banks saw a sizable dip in overall fossil fuel financing last year, making their 5-year trendline (the trend since the Paris Agreement) tilt slightly downward. These banks still lack substantive policies to restrict and phase out support for coal, oil, and gas, and therefore have much work to do to lock in the steep downward trend necessary for Paris-alignment.

Fossil Fuel Financing of the **8** Largest **U.S. Banks**



Average **oil and gas** policy score:	**5** out of **120**
Average **coal** policy score:	**15** out of **80**

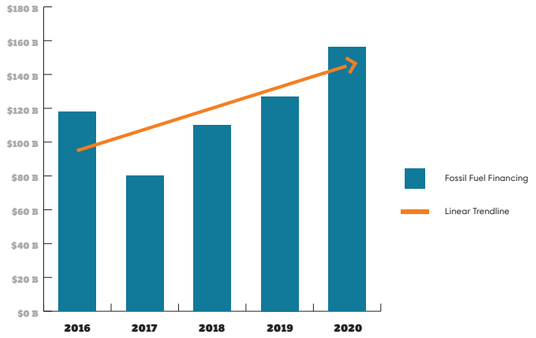
Fossil Fuel Financing of the **5** Largest **Canadian Banks**



Average **oil and gas** policy score:	**3** out of **120**
Average **coal** policy score:	**5** out of **80**

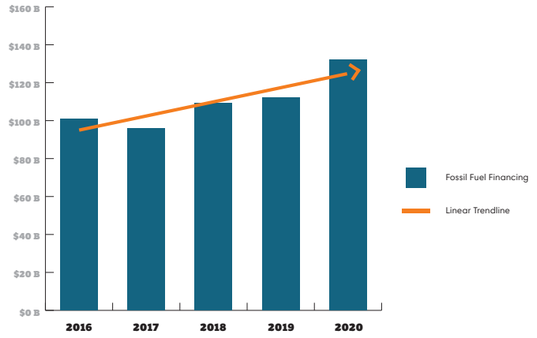
Meanwhile, in China and in the European Union, the largest banks notably increased their financing for fossil fuels last year, despite a dramatic dip in global fossil fuel demand.[24] Though European banks have some of the best policies restricting financing for coal and unconventional oil and gas, the European Union's banks are still trending in the wrong direction in overall financing for fossil fuels.

Fossil Fuel Financing of the **13** Largest **Chinese Banks**



Average **oil and gas** policy score:	**< 1** out of **120**
Average **coal** policy score:	**< 1** out of **80**

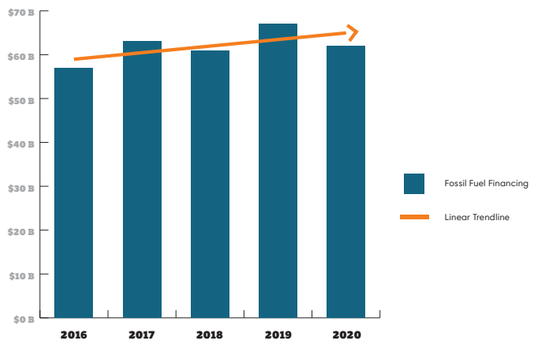
Fossil Fuel Financing of the **16** Largest **European Union Banks**



Average **oil and gas** policy score:	**11** out of **120**
Average **coal** policy score:	**38** out of **80**

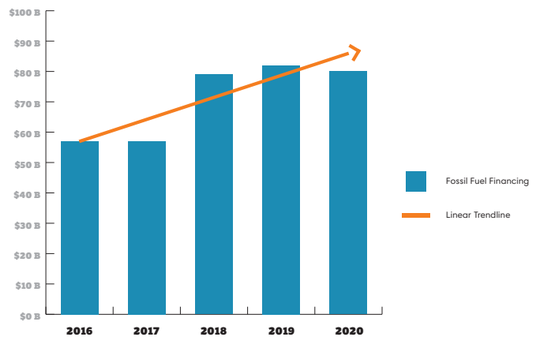
In the UK, and in Japan, a dip in last year's overall fossil fuel financing was not enough to reverse an overall upward trend over the last 5 years.

Fossil Fuel Financing of the **5** Largest **UK Banks**



Average **oil and gas** policy score:	**8** out of **120**
Average **coal** policy score:	**23** out of **80**

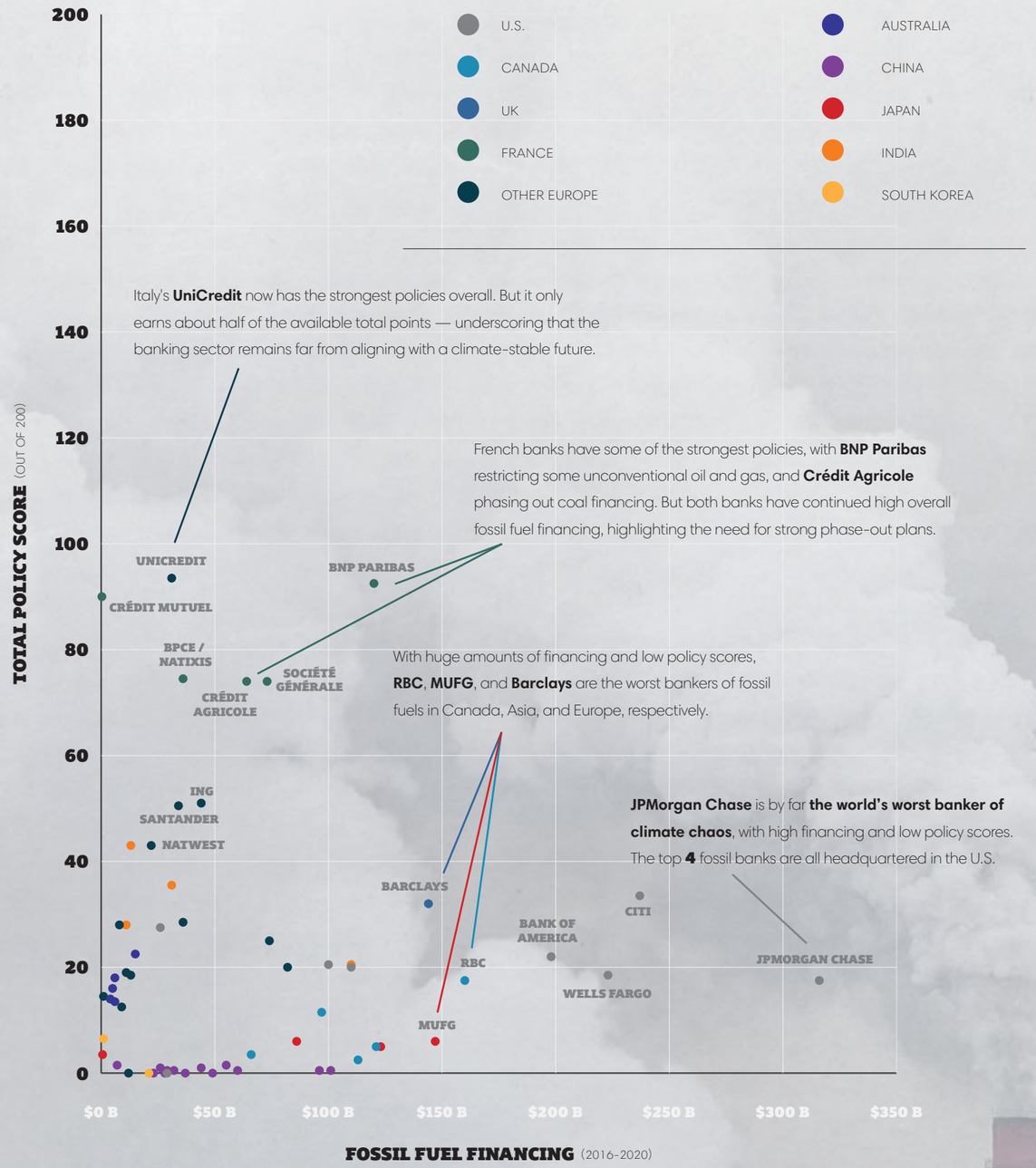
Fossil Fuel Financing of the **4** Largest **Japanese Banks**



Average **oil and gas** policy score:	**1** out of **120**
Average **coal** policy score:	**4** out of **80**

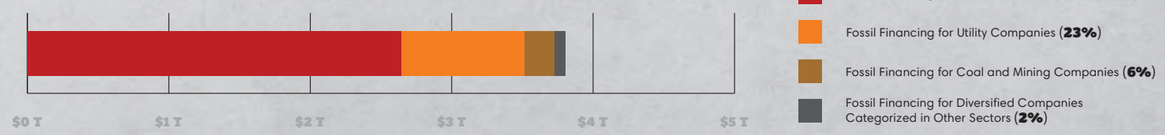
POLICY SCORES

FOSSIL FUEL FINANCING 2016-2020 VS TOTAL POLICY SCORE

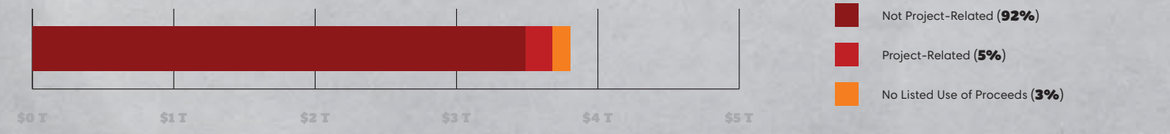


There are several reasons why banks' current fossil fuel policies are not fully addressing the financing of climate chaos.

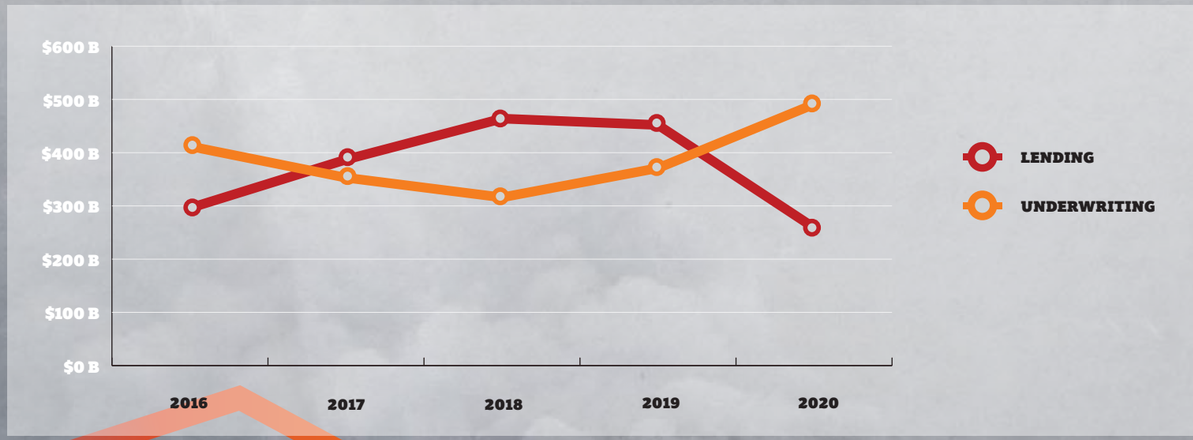
First, while the strongest policies so far are focused on the restriction and phase-out of coal financing, **69%** of the fossil fuel financing analyzed was for oil and gas companies.[25]



And while many policies are focused on project-specific finance, only 5% of fossil fuel financing is marked as project-related. Loans and bonds for "general corporate purposes" go unchecked by weak policies, but do support fossil fuel expansion.



It is also crucial that bank fossil fuel and overall climate policies cover underwriting as well as lending. In 2020, **65%** of bank financing for fossil fuels was through the underwriting of bond and equity issuances.



NET ZERO PROMISES ARE INADEQUATE

17 of the **60** banks have recently pledged to achieve "net zero" financed emissions. But our analysis shows that for many of the world's worst funders of fossil fuels, these plans so far are dangerously weak, half-baked, or vague. (See page **108**)

Even the best overall "climate impact" commitments are not a substitute for explicit commitments on fossil fuels (and deforestation). 2050 commitments should be met with great skepticism unless they are accompanied by **2021** action on coal, oil, and gas.

HALL OF SHAME

#1 *Still the Worst!*

JPMORGAN CHASE

WORLD'S WORST FUNDER OF FOSSIL FUELS

- 5 YEARS IN A ROW -

$317 BILLION TOTAL

CITI

FUNDING THE EXPANDERS

Citi's funding of **100** key companies with the worst fossil fuel expansion plans (like ExxonMobil and Enbridge) is on the rise.

WELLS FARGO

WORLD'S TOP FRACKING FUNDER

Wells Fargo has continued funding fracking companies like Pioneer Natural Resources and Diamondback Energy, making it the top fracking bank four years in a row.

BANK OF AMERICA

ENABLING MORE FRACKING THROUGH LNG

Bank of America had the highest LNG financing in **2020**, continuing its support of fracked gas shippers like Sempra and Cheniere.

WORST IN CANADA

RBC

With the highest overall fossil fuel financing in Canada, **RBC** was also the top funder of tar sands oil in 2020, continuing to finance pure-play tar sands extractors like Suncor, and pipeline expanders like Enbridge.

WORST IN ASIA

MUFG

Japan's **MUFG** is Asia's worst funder of fracking, tar sands, and fossil fuels overall since the Paris Agreement.

WORST IN EUROPE

BARCLAYS

Barclays in the UK is Europe's worst funder of tar sands, fracked oil and gas, coal power, and fossil fuels overall since the Paris Agreement.

STILL SUPPORTING THE OIL MAJORS

BNP PARIBAS

Despite a green ad campaign and specialized restrictions on unconventional oil and gas financing, **BNP Paribas** led huge deals to supermajor companies like BP and Total, pushing it up the rankings.

WORST IN CHINA

BANK OF CHINA

The world's #1 funder of coal power, with almost no fossil fuel policies in place.

WORST IN AUSTRALIA

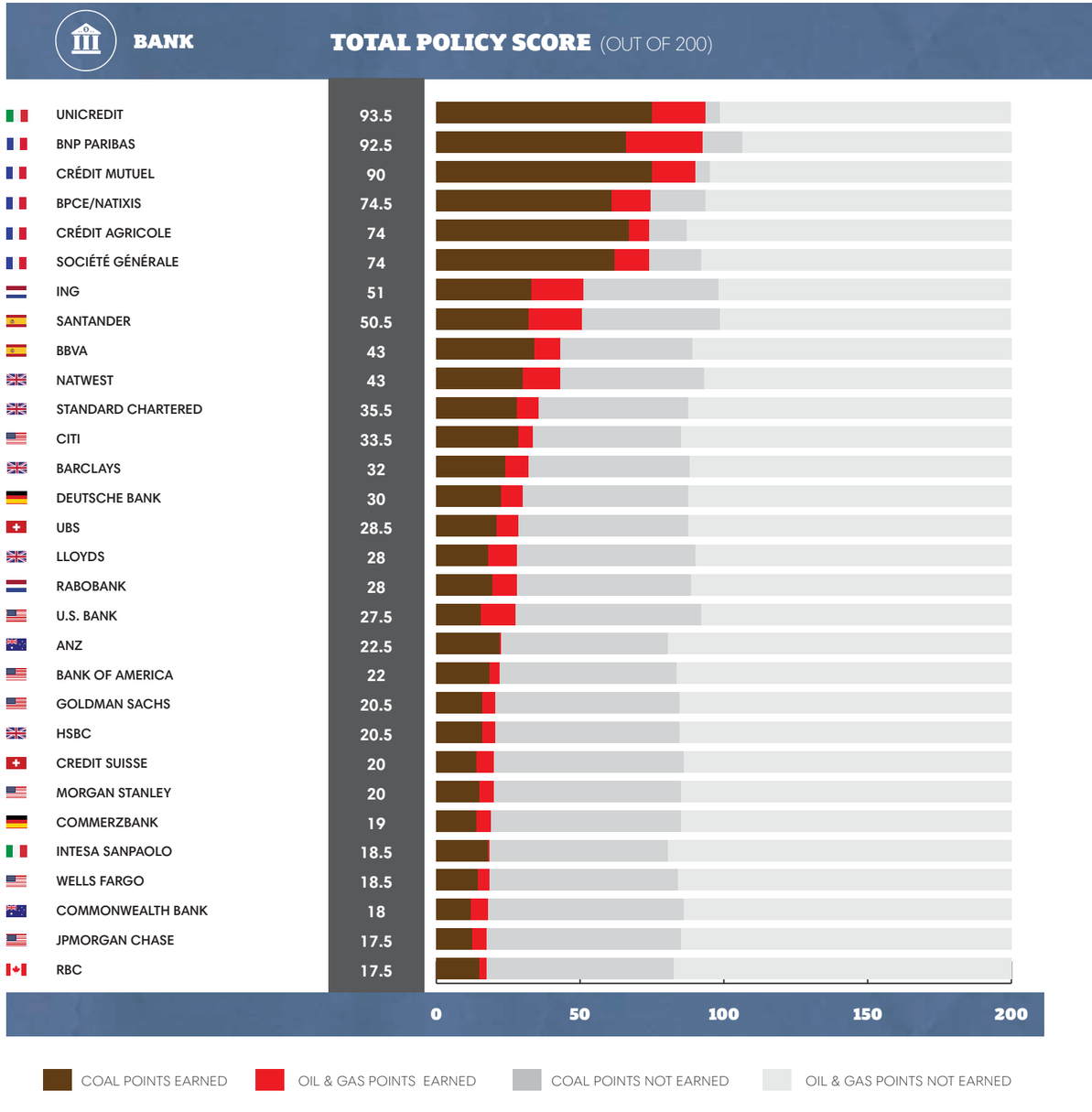
ANZ

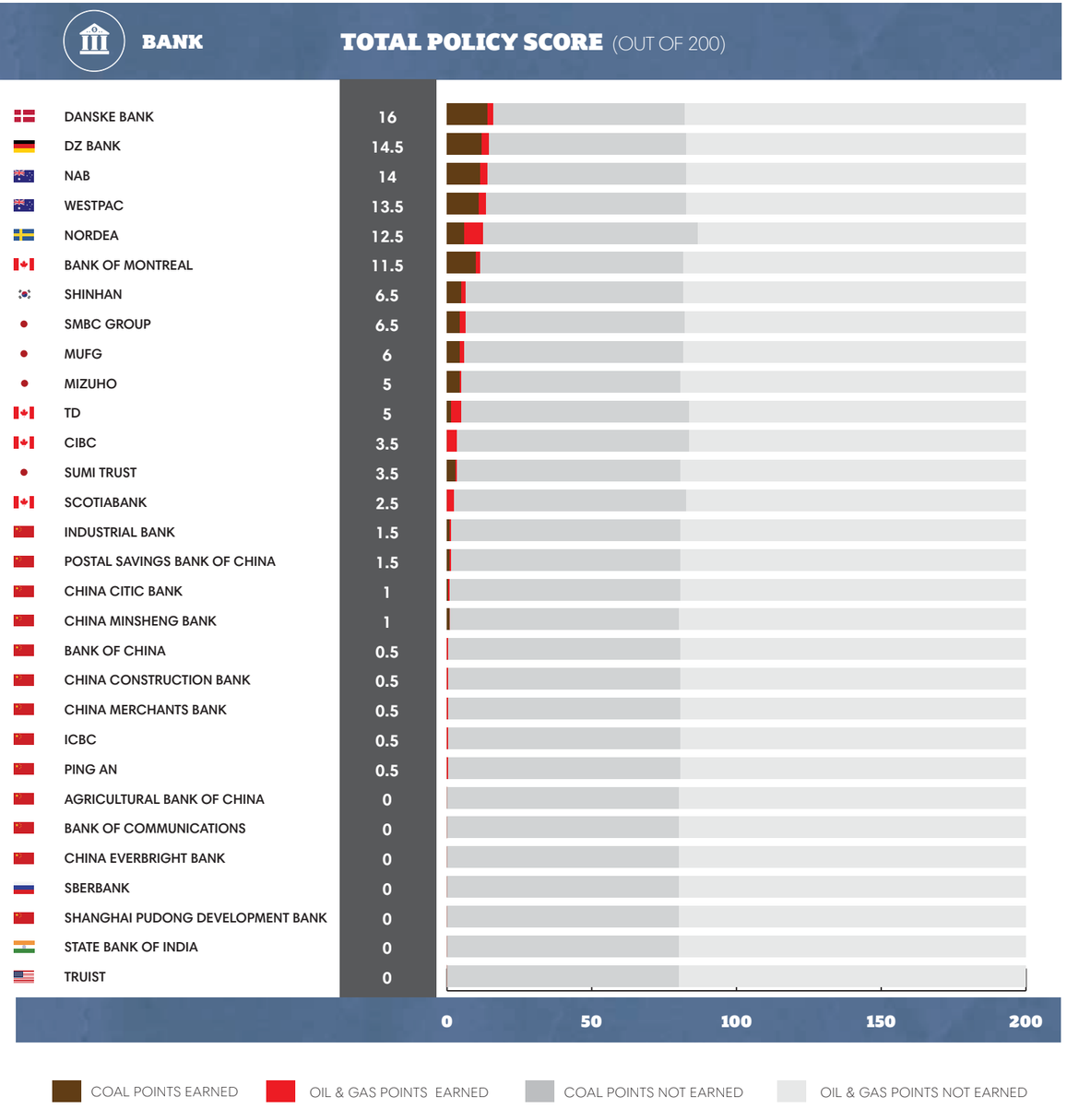
Australia's worst funder of fossil fuels, for five years in a row.

POLICY SCORES SUMMARY

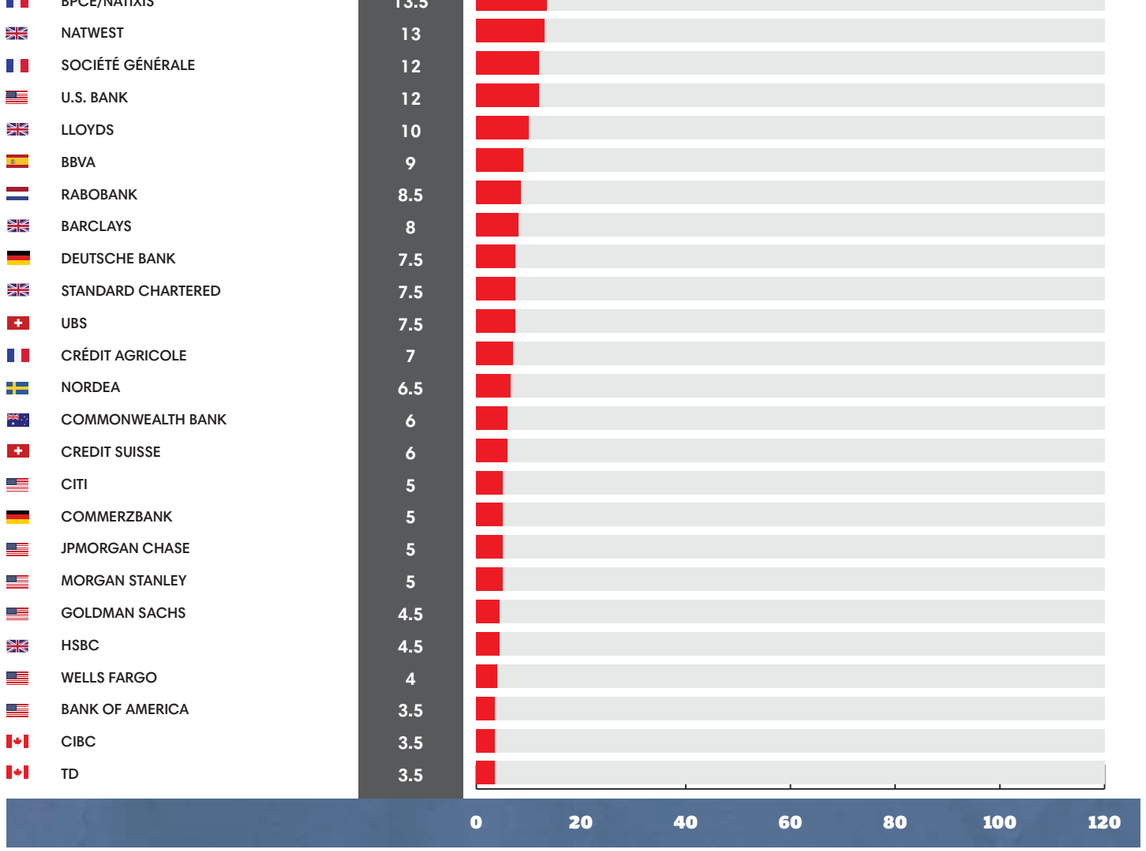
Even the banks at the top of this chart still have a long way to go to truly align their policies with the goals of the Paris Agreement.

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



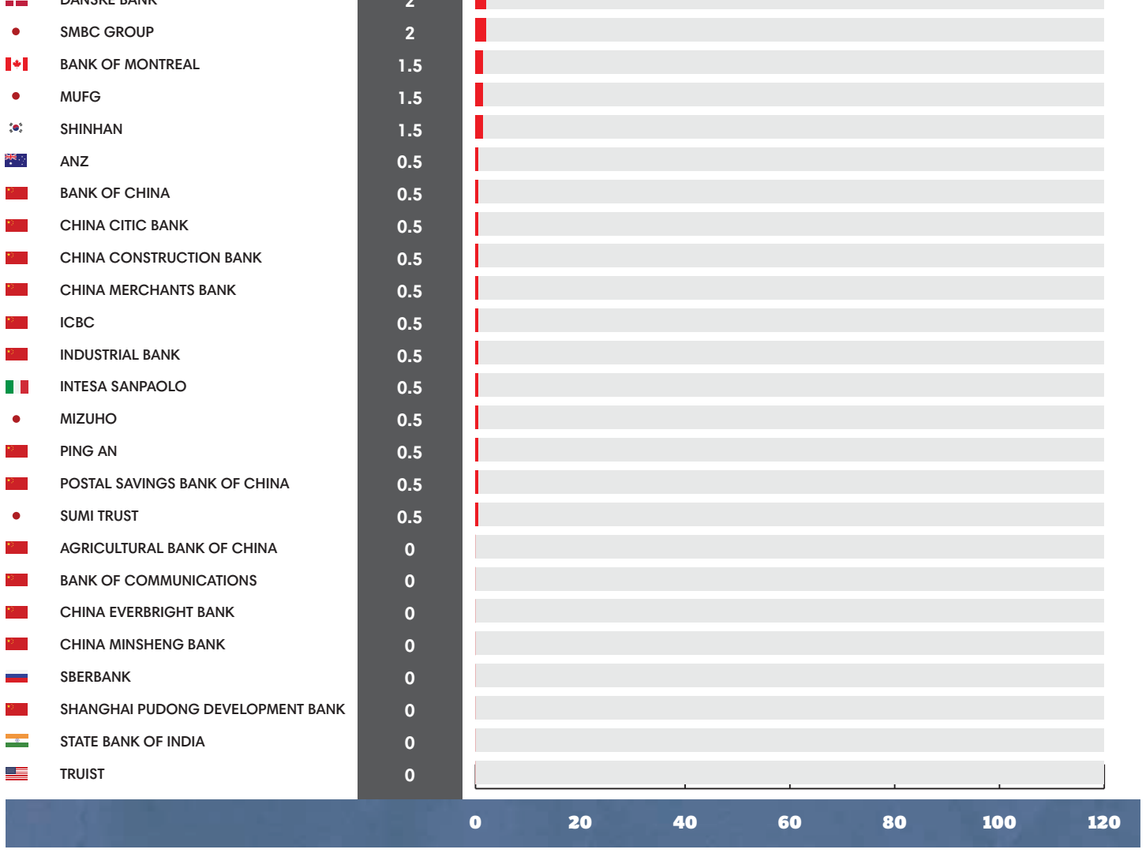


BANK	TOTAL OIL & GAS POLICY SCORE (OUT OF 120)
BNP PARIBAS	26.5
SANTANDER	18.5
UNICREDIT	18.5
ING	18
CRÉDIT MUTUEL	15
BPCE/NATIXIS	13.5
NATWEST	13
SOCIÉTÉ GÉNÉRALE	12
U.S. BANK	12
LLOYDS	10
BBVA	9
RABOBANK	8.5
BARCLAYS	8
DEUTSCHE BANK	7.5
STANDARD CHARTERED	7.5
UBS	7.5
CRÉDIT AGRICOLE	7
NORDEA	6.5
COMMONWEALTH BANK	6
CREDIT SUISSE	6
CITI	5
COMMERZBANK	5
JPMORGAN CHASE	5
MORGAN STANLEY	5
GOLDMAN SACHS	4.5
HSBC	4.5
WELLS FARGO	4
BANK OF AMERICA	3.5
CIBC	3.5
TD	3.5



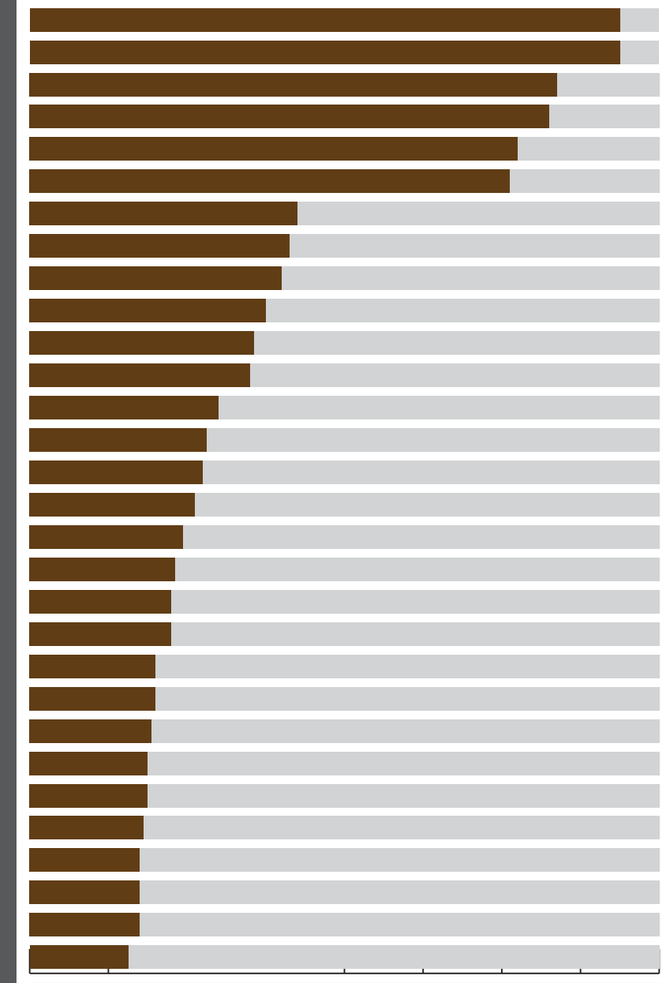
OIL & GAS POINTS EARNED OIL & GAS POINTS NOT EARNED

BANK	TOTAL OIL & GAS POLICY SCORE (OUT OF 120)
DZ BANK	2.5
NAB	2.5
RBC	2.5
SCOTIABANK	2.5
WESTPAC	2.5
DANSKE BANK	2
SMBC GROUP	2
BANK OF MONTREAL	1.5
MUFG	1.5
SHINHAN	1.5
ANZ	0.5
BANK OF CHINA	0.5
CHINA CITIC BANK	0.5
CHINA CONSTRUCTION BANK	0.5
CHINA MERCHANTS BANK	0.5
ICBC	0.5
INDUSTRIAL BANK	0.5
INTESA SANPAOLO	0.5
MIZUHO	0.5
PING AN	0.5
POSTAL SAVINGS BANK OF CHINA	0.5
SUMI TRUST	0.5
AGRICULTURAL BANK OF CHINA	0
BANK OF COMMUNICATIONS	0
CHINA EVERBRIGHT BANK	0
CHINA MINSHENG BANK	0
SBERBANK	0
SHANGHAI PUDONG DEVELOPMENT BANK	0
STATE BANK OF INDIA	0
TRUIST	0



OIL & GAS POINTS EARNED OIL & GAS POINTS NOT EARNED

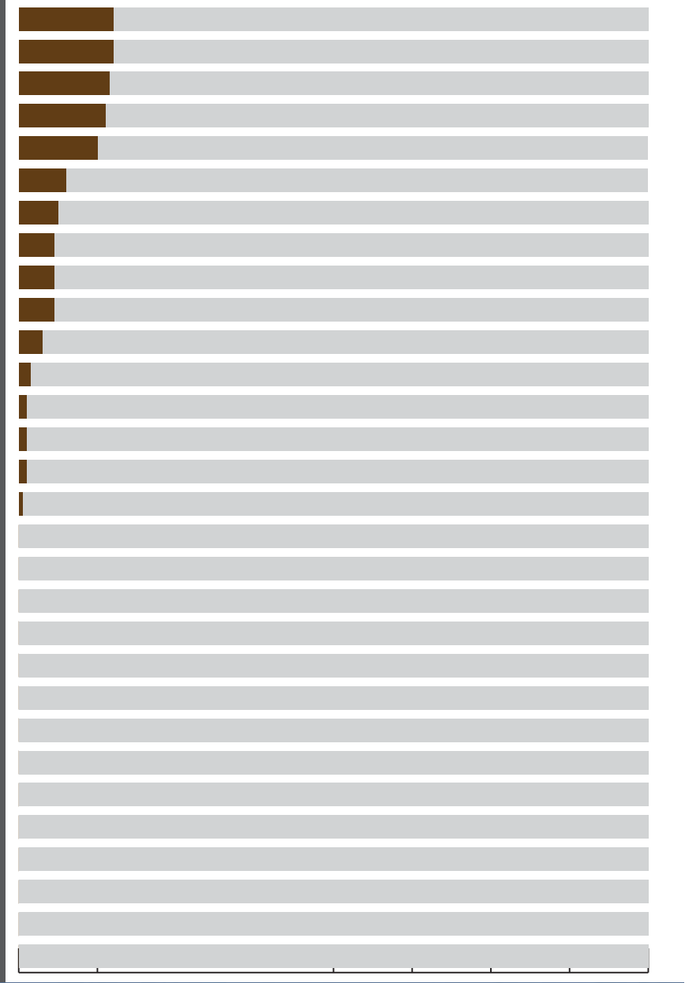
BANK	TOTAL COAL POLICY SCORE (OUT OF 80)
CRÉDIT MUTUEL	75
UNICREDIT	75
CRÉDIT AGRICOLE	67
BNP PARIBAS	66
SOCIÉTÉ GÉNÉRALE	62
BPCE/NATIXIS	61
BBVA	34
ING	33
SANTANDER	32
NATWEST	30
CITI	28.5
STANDARD CHARTERED	28
BARCLAYS	24
DEUTSCHE BANK	22.5
ANZ	22
UBS	21
RABOBANK	19.5
BANK OF AMERICA	18.5
INTESA SANPAOLO	18
LLOYDS	18
GOLDMAN SACHS	16
HSBC	16
U.S. BANK	15.5
MORGAN STANLEY	15
RBC	15
WELLS FARGO	14.5
COMMERZBANK	14
CREDIT SUISSE	14
DANSKE BANK	14
JPMORGAN CHASE	12.5



COAL POINTS EARNED

COAL POINTS NOT EARNED

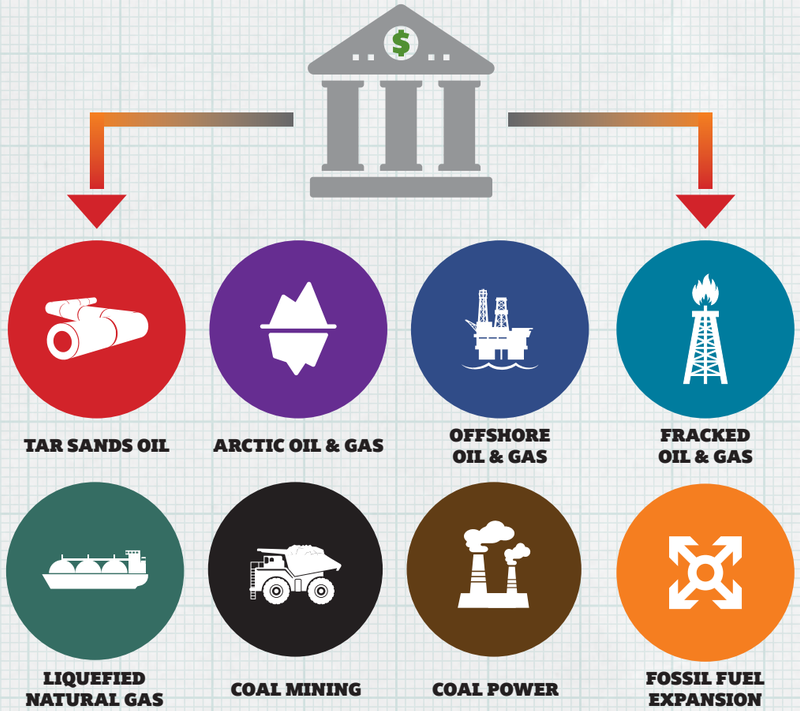
BANK	TOTAL COAL POLICY SCORE (OUT OF 80)
COMMONWEALTH BANK	12
DZ BANK	12
NAB	11.5
WESTPAC	11
BANK OF MONTREAL	10
NORDEA	6
SHINHAN	5
MIZUHO	4.5
MUFG	4.5
SMBC GROUP	4.5
SUMI TRUST	3
TD	1.5
CHINA MINSHENG BANK	1
INDUSTRIAL BANK	1
POSTAL SAVINGS BANK OF CHINA	1
CHINA CITIC BANK	0.5
AGRICULTURAL BANK OF CHINA	0
BANK OF CHINA	0
BANK OF COMMUNICATIONS	0
CHINA CONSTRUCTION BANK	0
CHINA EVERBRIGHT BANK	0
CHINA MERCHANTS BANK	0
CIBC	0
ICBC	0
PING AN	0
SBERBANK	0
SCOTIABANK	0
SHANGHAI PUDONG DEVELOPMENT BANK	0
STATE BANK OF INDIA	0
TRUIST	0



COAL POINTS EARNED

COAL POINTS NOT EARNED

METHODOLOGY



This report is the 12th annual in a series of reports analyzing bank financing for fossil fuels. Its scope is similar to *Banking on Climate Change 2020* in that it assesses private bank financing for the fossil fuel sector as a whole as well as for top expanders of the fossil fuel industry. In addition, the report highlights bank support for and policies regarding certain "spotlight fossil fuels": tar sands oil, Arctic oil and gas, offshore oil and gas, fracked oil and gas, LNG, coal mining, and coal-fired power. These fossil fuels are spotlighted due to their high environmental, social, and climate impacts and/or their heightened risk of becoming stranded assets.[26]

BANKING INDUSTRY SCOPE

Previous editions of this report have analyzed approximately **35** large private-sector commercial banks. This year's report marks a significant expansion in scope, analyzing the world's **60** largest relevant banks by assets. See page **124** for details of all banks included.

FOSSIL INDUSTRY SCOPE

Each of this report's nine league tables looks at bank financing for a different slice of the fossil fuel industry, as follows.

ALL FOSSIL FUELS:

Scope: Approximately **2,300** companies that received financing led by one of the **60** 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[27]

Source: *Bloomberg Finance L.P., urgewald e.V., and Rystad Energy AS provided by Oil Change International*[28]

FOSSIL FUEL EXPANSION:

Scope:

Oil and Gas: Top 60 companies by emissions from reserves projected to be produced from 2021–2050 (hereafter written as "expansion reserves") and 15 companies behind key pipelines and LNG terminals that would expand extraction upstream

Source: *Rystad Energy AS provided by Oil Change International, and company reporting*[29]

Coal: Top 11 companies by annual coal production that have mining expansion plans (limited to one per country except for China, where three are included), and top 15 companies proposing new coal power plants (limited to one per country except for India and China, where three each are included) — an approach that covers key regional players while also accounting for the prominence of Chinese and Indian companies in these sectors — for a total of 25 coal mining and power companies due to overlap

Source: *urgewald e.V*[30]

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*[31]

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*[32]

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*[33]

FRACKED OIL AND GAS:

Scope: Top 30 companies by shale oil and gas reserves under production plus projected shale production between 2021 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*[34]

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*[35]

COAL MINING:

Scope: Top 30 companies by annual coal production[36]

Source: *urgewald e.V.*[37]

COAL POWER:

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

Source: *urgewald e.V.*[38]

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, 2020, 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., in which case the value of a transaction is split between leading banks according to Bloomberg's league credit methodology.[39] This methodology assigns banks league credit when financing is initially issued or renewed, provided the event meets certain criteria. Additional project finance transactions in the LNG and coal power sectors were researched using the IJGlobal database, in which case all involved banks received credit for their participation in a deal.[40]

Each transaction was weighted based on the proportion of the borrower or issuer's operations devoted to the sector 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.[41] For the upstream oil and gas sectors, transactions were adjusted based on a company's reserves in the particular sector out of its total oil and gas reserves in a given year.[42] 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.[43] For pipeline companies in a particular sector, transactions were adjusted based on an estimation of the company's assets or revenue in that sector. All deals marked as green bonds or loans were removed from the dataset.

» **For more detailed methodology and frequently asked questions, visit:** BankingonClimateChaos.org

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 restrictions on direct financing for projects?
- Does the bank restrict financing for expansion via restrictions on financing for expansion companies?
- Does the bank commit to phase out financing for the sector?
- Does the bank commit to exclude companies active above a certain threshold?

Banks can earn a maximum of 80 points for coal and 120 points for oil and gas, for a total fossil fuel policy score of up to 200.

In addition, this year's report assesses banks' commitments to measure, disclose, and set targets to cut the emissions associated with their financing.

Each bank profiled in this report was sent its initial preliminary policy assessment in advance and given the opportunity to comment. See the appendix section for the full scoring rubrics.

» **Detailed explanations of how the points are allocated, as well as full breakdowns of each bank's policy assessment,** are available at: BankingonClimateChaos.org.

PHOTO: Hans Blossey / Alamy Stock Photo

CASE STUDY

FIRES Around the World

Climate chaos is here and now.

Although 2020 will always be remembered as the year in which the COVID-19 pandemic took hold, the coronavirus was not the year's only thematic disaster: 2020 was also a year of massive forest fires, reminding the world that climate chaos is here and now.

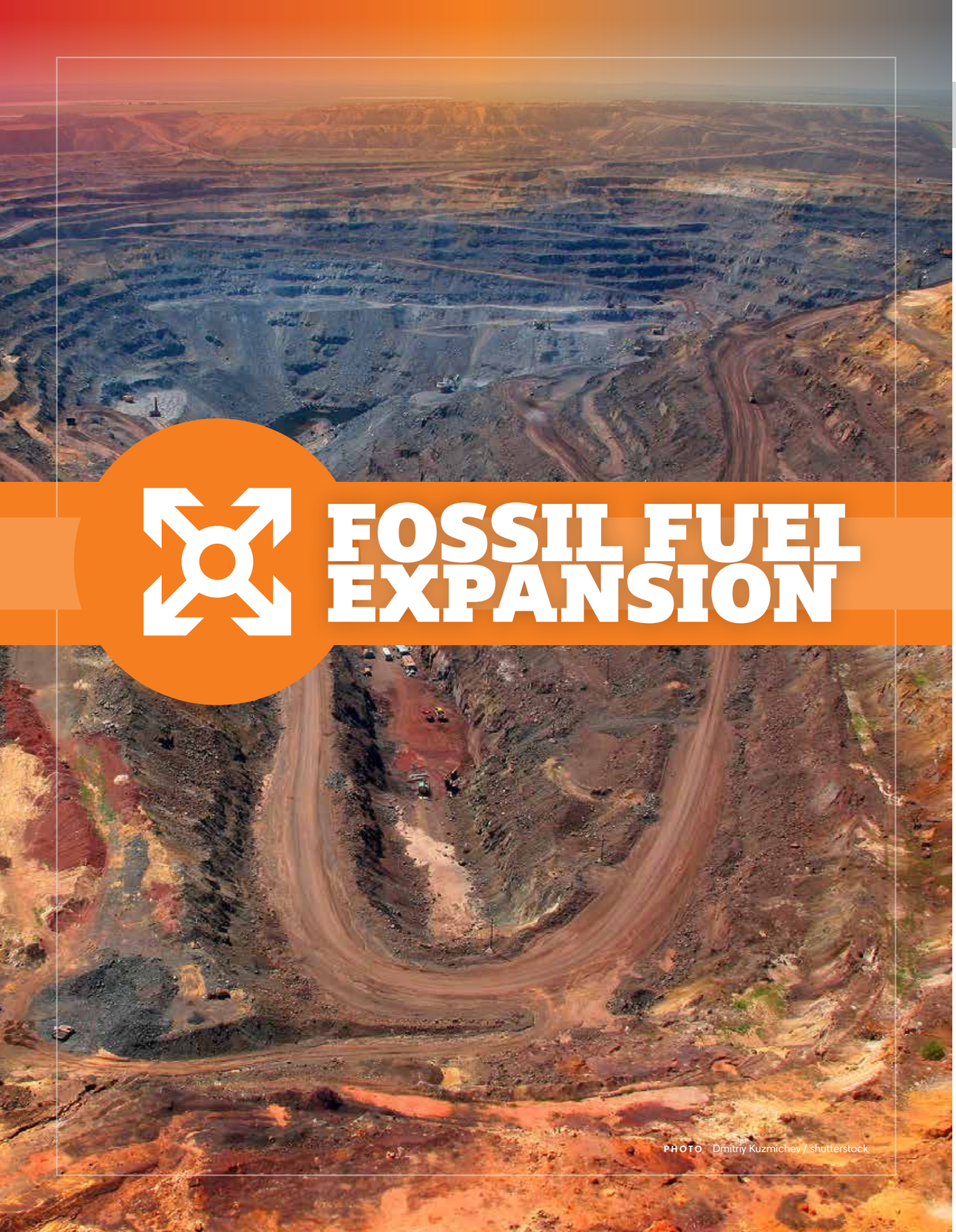
One of the most tangible consequences of climate change is the increase in the frequency and intensity of these fires. While some fires are more directly attributable to land clearing and bad forest management, climate change is certainly worsening the problem.[46] The climate crisis exacerbates forest fires in several ways: warmer conditions mean a longer fire season, climate change leads to more extreme weather events and therefore also more extreme droughts, and a warmer atmosphere leads to higher evaporation rates, which dries out the soils and also increases lightning.[47] It is therefore no surprise that 2020 featured an increase in forest fires in many parts of the world including the Arctic,[48] Australia,[49] the U.S. West Coast,[50] and the Amazon.[51] Though the devastating, headline-grabbing fires in the Amazon have been intentionally set to clear land for agribusiness, climate chaos is making the arson more destructive.[52]

Forest fires most heavily affect local communities, who often see their homes, sources of income, and food security go up in flames. Downwind, the air quality can deteriorate to such an extent that whole cities are shrouded in smoke.[53] Forest fire smoke is extremely harmful to the lungs, especially for children and adults with asthma, COPD, bronchitis, or chronic heart disease. Last but not least, forest fires release enormous amounts of greenhouse gases into the atmosphere, further worsening the climate crisis.

In the meantime, the fossil fuel industry continues to expand fossil fuel production, thereby exacerbating climate change and worsening the frequency and magnitude of future forest fires. And the banks that finance this industry with little restraint — like the top bankers of fossil fuels **JPMorgan Chase**, **Citi**, and **Wells Fargo** — share in the responsibility for these impacts.

The public is increasingly starting to recognize the companies responsible for these so-called natural disasters. Last year, an Australian bushfire victim filed a complaint with the Organisation for Economic Co-operation and Development (OECD) against **ANZ** for its role in worsening the massive forest fires in Australia by continuing to finance fossil fuels.[54]

PHOTO: Victor Moriyama / Greenpeace



FOSSIL FUEL EXPANSION

PHOTO Dmitriy Kuzmichev / shutterstock

BIG OIL REALITY CHECK:
Fossil Fuel Expansion Continues Amid Greenwashing

Increasingly, oil and gas companies claim to be part of the solution to the climate crisis. The reality is very different. A recent report from Oil Change International (endorsed by 30 other civil society organizations) analyzed the current climate commitments of eight of the largest integrated oil and gas companies — BP, Chevron, Eni, Equinor, ExxonMobil, Repsol, Shell, and Total (the "oil majors") — in light of the ambition and integrity required to achieve a 1.5°C-aligned managed decline of oil and fossil gas use. It found that none of the evaluated oil majors' climate strategies, plans, and pledges come close to alignment with the Paris Agreement.[53] Another report from the Transition Pathway Initiative came to the same stark conclusion.[54]

Only one oil major, BP, has committed to make an absolute cut to oil and gas extraction by 2030. However, it has excluded from that commitment around 30% of the carbon pollution associated with its extraction investments. Beyond making the announcement, BP hasn't actually started taking the steps necessary to achieve it.[55]

Similarly, several oil majors' "net zero" emissions pledges contain vast loopholes. Most importantly, Total, Chevron, Shell, BP, Equinor, and Repsol provide no guarantee that they will cut what matters most for the climate: the absolute level of carbon dioxide pollution associated with burning the oil and gas they produce. Other loopholes include ignoring certain jurisdictions (for instance, at that time, Total's commitment only covered emissions from within Europe), or excluding projects where companies share ownership with another company (such as how BP's commitment excludes the assets from its significant ownership share of Rosneft). Chevron and ExxonMobil have no such absolute emissions reduction pledges whatsoever.

Despite the promises made, most of the oil majors are still on the path to significantly increase their oil and gas production between now and 2030. This is according to Rystad Energy projections based on the assets they currently hold and are planning to sanction. This trajectory will not meaningfully shift until these companies commit to not develop new projects in their development pipeline and/or phase out some of their existing assets early. An end to investments in new fields, an end to new reserves going into production, and an acceleration of the phase-out of existing production are all needed for oil and gas production to decline at a pace aligned with keeping global warming below 1.5°C.

No major oil and gas company has yet released a climate pledge or sustainability plan that meets the bare minimum criteria for alignment with the Paris Agreement, and their bankers need to face this reality when making financing decisions.

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	2020	TOTAL 2016-2020	TREND
1	JPMORGAN CHASE	$32.532 B	$23.873 B	$26.589 B	$28.154 B	$31.638 B	$142.786 B	
2	CITI	$18.951 B	$14.817 B	$16.282 B	$27.941 B	$30.271 B	$108.262 B	
3	BANK OF AMERICA	$17.791 B	$11.625 B	$13.735 B	$21.868 B	$27.492 B	$92.510 B	
4	WELLS FARGO	$9.208 B	$13.497 B	$17.742 B	$16.753 B	$12.413 B	$69.614 B	
5	RBC	$11.337 B	$15.883 B	$11.906 B	$12.647 B	$9.333 B	$61.106 B	
6	MUFG	$7.988 B	$12.012 B	$13.088 B	$12.951 B	$14.087 B	$60.125 B	
7	TD	$9.759 B	$16.833 B	$10.911 B	$12.832 B	$9.115 B	$59.449 B	
8	BNP PARIBAS	$6.470 B	$5.036 B	$4.340 B	$14.391 B	$28.348 B	$58.585 B	
9	BARCLAYS	$12.653 B	$8.085 B	$8.152 B	$11.722 B	$17.215 B	$57.826 B	
10	MIZUHO	$9.053 B	$7.429 B	$11.535 B	$13.537 B	$11.832 B	$53.386 B	
11	HSBC	$6.458 B	$9.980 B	$6.107 B	$12.250 B	$16.170 B	$50.965 B	
12	SCOTIABANK	$6.436 B	$10.745 B	$12.318 B	$12.181 B	$6.645 B	$48.325 B	
13	MORGAN STANLEY	$10.393 B	$9.544 B	$4.449 B	$11.267 B	$11.420 B	$47.072 B	
14	BANK OF MONTREAL	$9.050 B	$8.654 B	$8.488 B	$9.954 B	$6.943 B	$43.089 B	
15	GOLDMAN SACHS	$10.554 B	$5.225 B	$4.642 B	$10.836 B	$8.214 B	$39.472 B	
16	ICBC	$11.034 B	$4.657 B	$4.189 B	$8.476 B	$8.935 B	$37.291 B	
17	BANK OF CHINA	$9.980 B	$6.143 B	$7.476 B	$6.488 B	$7.074 B	$37.160 B	
18	SMBC GROUP	$5.021 B	$5.249 B	$6.169 B	$9.009 B	$10.684 B	$36.132 B	
19	SOCIÉTÉ GÉNÉRALE	$4.920 B	$3.243 B	$5.471 B	$7.701 B	$10.946 B	$32.282 B	
20	DEUTSCHE BANK	$8.856 B	$7.181 B	$6.221 B	$3.275 B	$4.905 B	$30.438 B	
21	CRÉDIT AGRICOLE	$4.049 B	$4.327 B	$4.030 B	$6.458 B	$10.935 B	$29.800 B	
22	CREDIT SUISSE	$8.819 B	$6.147 B	$4.762 B	$5.215 B	$3.630 B	$28.574 B	
23	AGRICULTURAL BANK OF CHINA	$5.981 B	$2.851 B	$3.185 B	$4.126 B	$5.303 B	$21.445 B	
24	SANTANDER	$4.157 B	$2.576 B	$2.262 B	$3.783 B	$6.972 B	$19.751 B	
25	CIBC	$2.564 B	$5.085 B	$2.240 B	$4.719 B	$3.955 B	$18.564 B	
26	CHINA MINSHENG BANK	$198 M	$179 M	$1.152 B	$8.243 B	$6.782 B	$16.554 B	
27	CHINA CONSTRUCTION BANK	$5.957 B	$2.919 B	$1.187 B	$3.247 B	$2.861 B	$16.171 B	
28	UBS	$2.377 B	$3.699 B	$3.642 B	$3.510 B	$622 M	$13.851 B	
29	CHINA CITIC BANK	$1.949 B	$1.751 B	$2.351 B	$3.365 B	$3.560 B	$12.975 B	
30	SBERBANK	$3.518 B	$5.521 B	$841 M	$375 M	$888 M	$11.143 B	

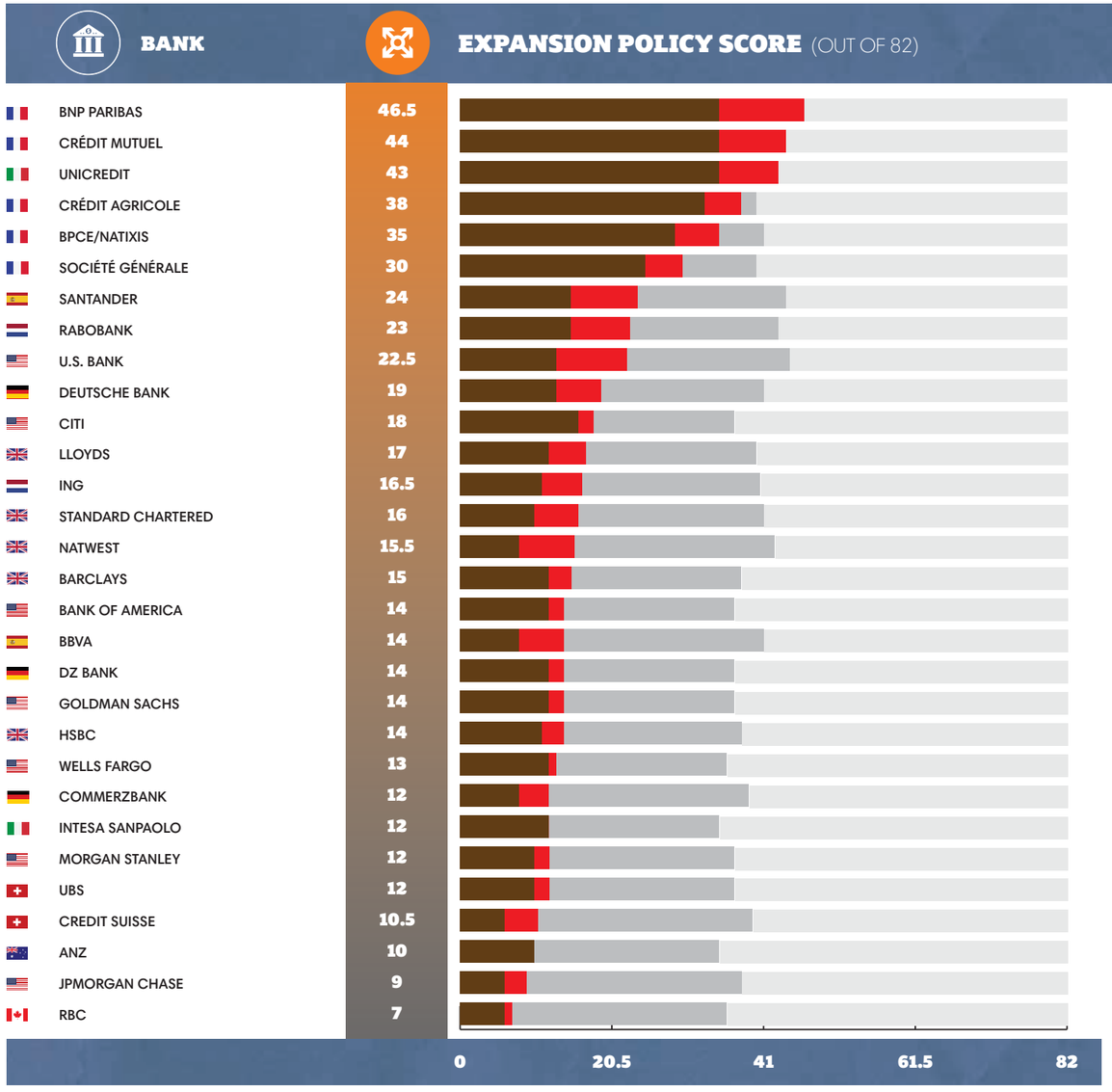
LEAGUE TABLE - *Banking on Fossil Fuel Expansion* (cont'd)

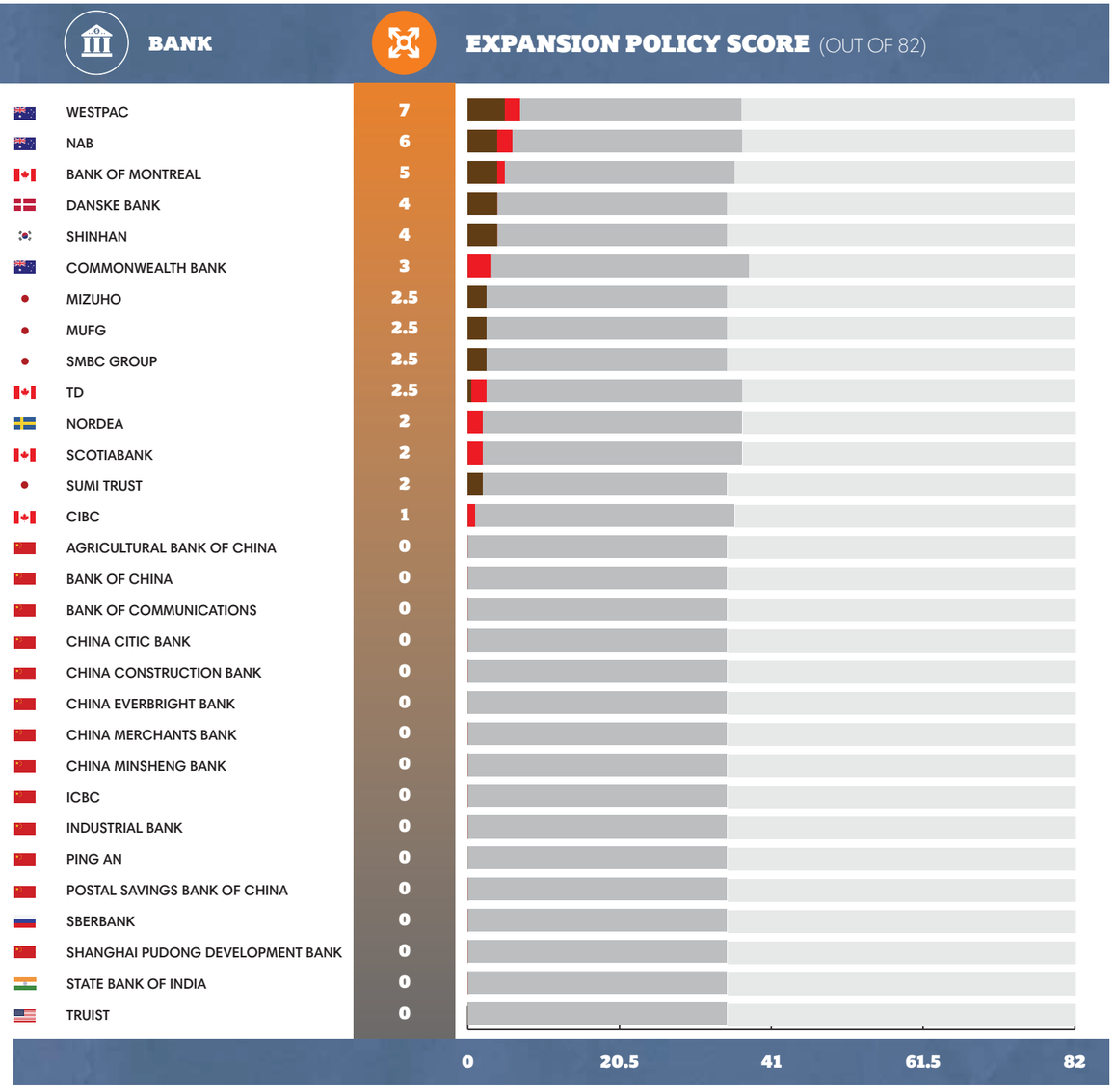
RANK	BANK	2016	2017	2018	2019	2020	TOTAL 2016-2020	2020 COMPARED TO 2016
31	INDUSTRIAL BANK	$1.405 B	$1.837 B	$1.843 B	$1.045 B	$4.248 B	$10.378 B	
32	BBVA	$1.941 B	$1.800 B	$1.618 B	$2.555 B	$1.920 B	$9.836 B	
33	SHANGHAI PUDONG DEVELOPMENT BANK	$2.472 B	$1.439 B	$976 M	$1.226 B	$3.105 B	$9.219 B	
34	STANDARD CHARTERED	$579 M	$1.717 B	$1.539 B	$1.701 B	$3.001 B	$8.537 B	
35	TRUIST	$426 M	$2.176 B	$2.208 B	$1.194 B	$2.126 B	$8.130 B	
36	UNICREDIT	$1.965 B	$786 M	$1.447 B	$652 M	$3.164 B	$8.014 B	
37	CHINA MERCHANTS BANK	$1.509 B	$586 M	$1.969 B	$647 M	$2.052 B	$6.764 B	
38	PING AN	$254 M	$1.418 B	$2.337 B	$862 M	$1.839 B	$6.710 B	
39	BPCE/NATIXIS	$879 M	$1.034 B	$843 M	$1.508 B	$2.139 B	$6.404 B	
40	INTESA SANPAOLO	$1.442 B	$970 M	$2.877 B	$410 M	$637 M	$6.336 B	
41	STATE BANK OF INDIA	$442 M	$605 M	$270 M	$4.290 B	$577 M	$6.185 B	
42	ING	$1.246 B	$704 M	$2.112 B	$1.244 B	$509 M	$5.815 B	
43	BANK OF COMMUNICATIONS	$1.037 B	$972 M	$540 M	$744 M	$1.908 B	$5.200 B	
44	ANZ	$735 M	$992 M	$273 M	$1.308 B	$1.765 B	$5.073 B	
45	CHINA EVERBRIGHT BANK	$706 M	$334 M	$532 M	$98 M	$2.991 B	$4.662 B	
46	COMMERZBANK	$321 M	$699 M	$983 M	$1.357 B	$1.277 B	$4.636 B	
47	U.S. BANK	$461 M	$848 M	$865 M	$740 M	$1.442 B	$4.355 B	
48	NATWEST	$1.153 B	$1.129 B	$563 M	$364 M	$861 M	$4.070 B	
49	LLOYDS	$860 M	$613 M	$701 M	$686 M	$564 M	$3.424 B	
50	POSTAL SAVINGS BANK OF CHINA	-	-	$227 M	$2.057 B	$727 M	$3.011 B	
51	COMMONWEALTH BANK	$107 M	$406 M	$302 M	$364 M	$1.247 B	$2.427 B	
52	WESTPAC	$67 M	$722 M	-	$767 M	$111 M	$1.667 B	
53	NAB	$65 M	$47 M	$129 M	$323 M	$256 M	$820 M	
54	SHINHAN	$155 M	$154 M	$67 M	$158 M	$232 M	$765 M	
55	RABOBANK	$318 M	$97 M	$42 M	$40 M	$53 M	$549 M	
56	SUMI TRUST	-	-	-	-	$426 M	$426 M	
57	DZ BANK	-	$75 M	-	-	$87 M	$162 M	
58	NORDEA	$112 M	-	-	-	-	$112 M	
59	CRÉDIT MUTUEL	-	-	$62 M	-	-	$62 M	
	DANSKE BANK	-	-	-	-	-	-	
	GRAND TOTAL	**$278.668 B**	**$256.931 B**	**$250.784 B**	**$333.616 B**	**$368.455 B**	**$1.488 T**	

POLICY SCORES - *Fossil Fuel Expansion*

Of the total policy points available (**80** for coal and **120** for oil and gas) as shown on page **129-146**, 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 **47** 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 BankingonClimateChaos.org.
See the appendix for the scoring criteria (for each of the fossil fuel sectors) that go into this score.





CASE STUDY

East African Crude Oil Pipeline

The East African Crude Oil Pipeline (EACOP) is a proposed 900 mile (1,445-kilometer) pipeline under development by China National Offshore Oil Corporation (CNOOC) and the French company Total.[56] The pipeline would transport oil from Hoima in northern Uganda to the port of Tanga in Tanzania, from where it would be exported to international markets. If completed, it would be the longest heated pipeline in the world, and would carry 216,000 barrels of crude oil per day.[57] The transported oil would likely result in over 33 million tons of CO_2 emissions each year, an amount significantly greater than the current combined emissions of Uganda and Tanzania.[58] And, importantly, the start of commercial production in Uganda's Kingfisher and Tilenga oil fields is contingent on the completion of the pipeline — meaning the pipeline would enable the expansion of the oil sector.[59]

Besides fueling the climate crisis, EACOP would enable the opening up of critical ecosystems to oil extraction, including Murchison Falls National Park, one of the most visited parks in Uganda.[60] In addition, the project is expected to cause displacement of communities and could have significant negative impacts on incomes and livelihoods.[61] The valuation and compensation process for the land being acquired for the project has reportedly already been characterized by delays in compensation, insufficient provision of information to communities, and irregularities.[62] As such, the project is facing significant local community and civil society resistance.

Total and CNOOC are hoping to secure financing for the pipeline imminently, and to start construction in 2021.[63] The banks already supporting this disastrous project are **SMBC Group**, acting as a financial advisor for Total and joint lead arranger for the project loan;[64] **ICBC**, acting as a financial advisor for CNOOC;[65] and Standard Bank's subsidiary Stanbic Bank Uganda, advising the governments of Uganda and Tanzania and acting as joint lead arranger.[66]

PHOTO: Amis de la Terre; EACOP 350Africa

CASE STUDY

Nigeria LNG

Nigeria LNG Limited (NLNG) is an LNG complex on Bonny Island in the Niger Delta. Among the facilities are six processing units (trains), two export jetties, eight storage tanks, and six gas pipelines that transverse 110 communities.[67] The plant, which is owned by the Nigerian National Petroleum Corporation, Shell, Total, and Eni, started operation in 1999 and has been expanded many times since.[68]

At the moment, NLNG has a production capacity of 22 million tons of LNG per year.[69] However, the plant is about to be expanded again with the addition of a seventh train, which would increase annual production to over 30 million tons.[70]

When the complex was first constructed, communities on Bonny Island were relocated to a reclaimed mangrove area, often with the use of a military task force.[71] The new site does not support traditional sources of income such as fishing and cultivating certain crops. To make matters worse, 20 years later the relocated population had reportedly still not received compensation.[72]

Additional land will have to be cleared for the construction of the seventh train. Clearing this land, most of which is forestland or swamp, will seriously impact the fauna and flora in the area.[73] In addition, frequent gas flaring at the plant further contributes to climate chaos and air pollution.[74] The air pollution has been studied to have a tremendous impact on the health of communities in the area, with gas flaring being linked to kidney problems, cancer, and lung damage, among other problems.[75]

The Nigerian government and NLNG's shareholder companies have faced continued protests from local communities impacted on multiple fronts by this project.[76] Protests at the turn of the century were tragically met with state violence.[77] Despite these impacts, a long list of banks approved financing for the seventh train in May 2020. These banks include **BNP Paribas**, **SMBC Group**, **Standard Chartered**, **Société Générale**, **ICBC**, **Deutsche Bank**, **Bank of China**, **Santander**, and **BPCE/ Natixis**.[78]

SPOTLIGHT FOSSIL FUELS

PHOTO: Starry-sky-visual / shutterstock

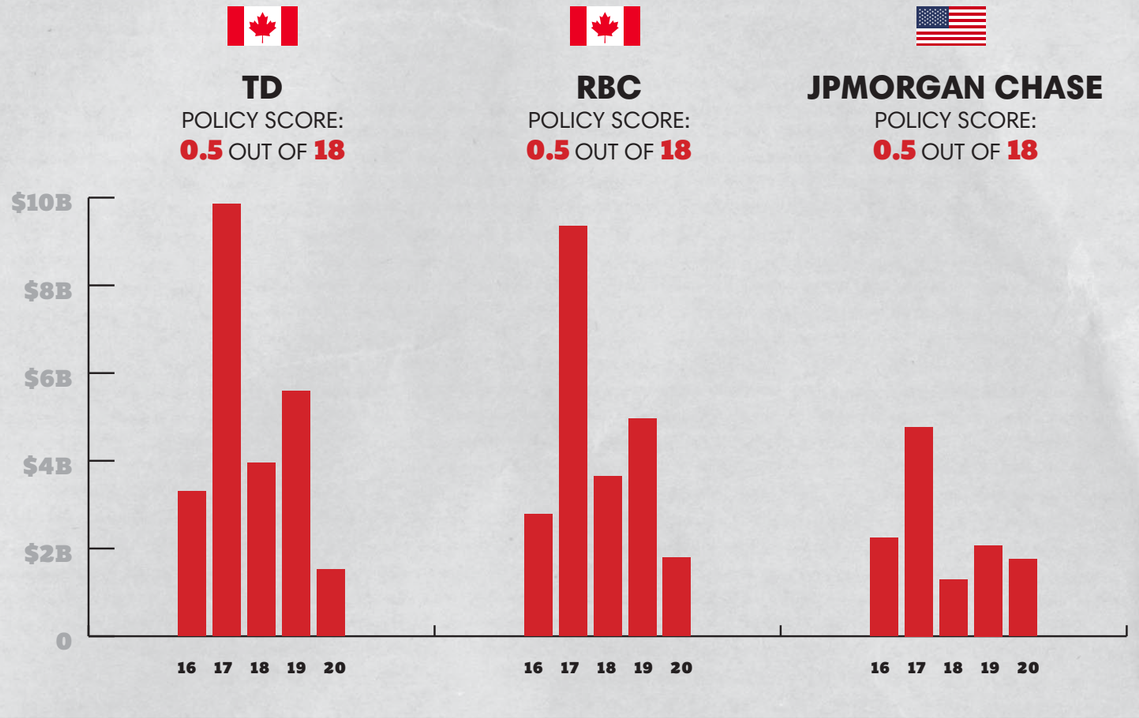
TAR SANDS OIL

PHOTO: Orjan Ellingvag / Alamy Stock Photo

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

Even the tar sands industry has started to acknowledge that it has no place in a zero-carbon world, and needs a just and orderly wind-down. But despite the end of the Teck Frontier megaproject and cancellation of Keystone XL, the industry is still fighting tooth and nail to ram through the proposed Line 3 and Trans Mountain pipelines despite their impacts on Indigenous rights and the climate — and despite strong Indigenous-led opposition.[79]

WORST BANKS BY TOTAL TAR SANDS FINANCING (2016–2020)



LEAGUE TABLE - *Banking on Tar Sands Oil*

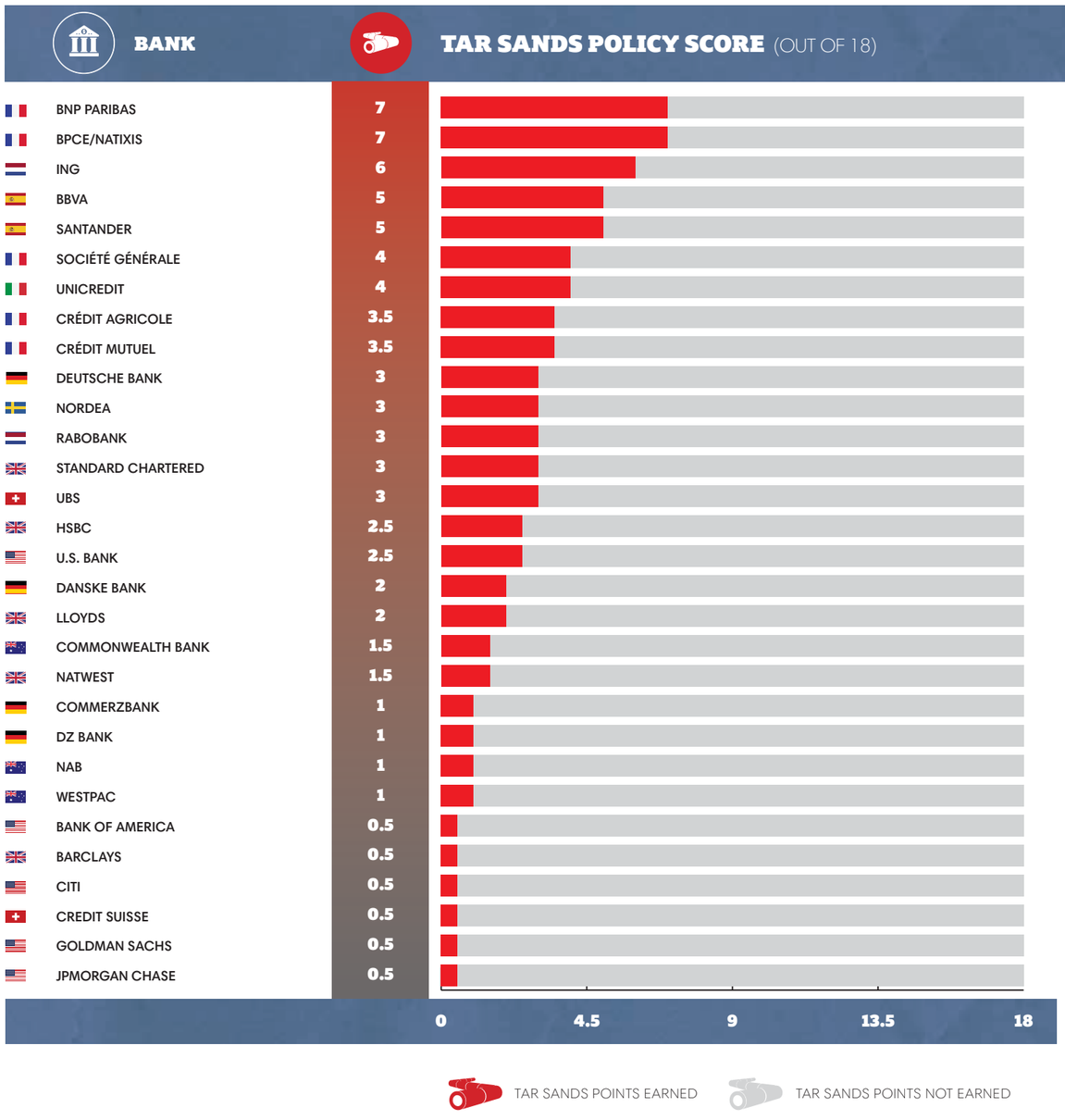
Bank financing for 30 top tar sands production companies and five key tar sands pipeline companies

RANK	BANK	TOTAL 2016-2020	2020	2020 COMPARED TO 2016
1	TD	$24.222 B	$1.529 B	↘
2	RBC	$22.523 B	$1.793 B	↘
3	JPMORGAN CHASE	$12.141 B	$1.758 B	↘
4	CIBC	$11.032 B	$557 M	↘
5	BANK OF MONTREAL	$10.045 B	$1.295 B	↘
6	SCOTIABANK	$8.649 B	$1.466 B	↗
7	BARCLAYS	$3.993 B	$873 M	↗
8	BANK OF AMERICA	$3.610 B	$1.198 B	↗
9	CITI	$3.453 B	$943 M	↗
10	HSBC	$3.026 B	$445 M	↘
11	DEUTSCHE BANK	$1.582 B	$180 M	↘
12	MUFG	$1.571 B	$387 M	↗
13	MORGAN STANLEY	$1.394 B	$717 M	↗
14	BNP PARIBAS	$1.148 B	$647 M	↗
15	WELLS FARGO	$911 M	$61 M	↘
16	CREDIT SUISSE	$838 M	$28 M	↘
17	SOCIÉTÉ GÉNÉRALE	$795 M	$272 M	↗
18	MIZUHO	$743 M	$80 M	↘
19	GOLDMAN SACHS	$742 M	$119 M	↘
20	CRÉDIT AGRICOLE	$664 M	$227 M	↗
21	ICBC	$657 M	$244 M	↗
22	SMBC GROUP	$494 M	$68 M	↗
23	UBS	$415 M	$119 M	↗
24	BANK OF CHINA	$351 M	$84 M	↘
25	CHINA MINSHENG BANK	$334 M	$190 M	↗
26	AGRICULTURAL BANK OF CHINA	$273 M	$115 M	↗
27	CHINA CONSTRUCTION BANK	$169 M	$76 M	↗
28	SANTANDER	$153 M	$55 M	↗
29	INDUSTRIAL BANK	$117 M	$116 M	↗
30	BANK OF COMMUNICATIONS	$117 M	$54 M	↗
31	STANDARD CHARTERED	$115 M	$64 M	↗
32	CHINA EVERBRIGHT BANK	$108 M	$108 M	↗
33	SHANGHAI PUDONG DEVELOPMENT BANK	$76 M	$76 M	↗
34	BBVA	$72 M	$22 M	↗
35	ANZ	$70 M	$22 M	↘
36	CHINA MERCHANTS BANK	$61 M	$51 M	↗
37	LLOYDS	$58 M	$9 M	↘
38	BPCE/NATIXIS	$52 M	$20 M	↗
39	NATWEST	$52 M	$7 M	↘
40	CHINA CITIC BANK	$42 M	$30 M	↗
41	UNICREDIT	$42 M	$17 M	↘
42	COMMERZBANK	$42 M	$11 M	↗
43	ING	$34 M	-	↘
44	TRUIST	$30 M	$5 M	↗
45	COMMONWEALTH BANK	$27 M	-	↘
46	POSTAL SAVINGS BANK OF CHINA	$26 M	$1 M	↗
47	INTESA SANPAOLO	$25 M	-	↘
48	WESTPAC	$18 M	-	↘
49	PING AN	$15 M	$15 M	↗
50	U.S. BANK	$11 M	$5 M	↗
	CRÉDIT MUTUEL	-	-	–
	DANSKE BANK	-	-	–
	DZ BANK	-	-	–
	NAB	-	-	–
	NORDEA	-	-	–
	RABOBANK	-	-	–
	SBERBANK	-	-	–
	SHINHAN	-	-	–
	STATE BANK OF INDIA	-	-	–
	SUMI TRUST	-	-	–
	GRAND TOTAL	**$117.135 B**	**$16.160 B**	↘

POLICY SCORES - *Tar Sands Oil*

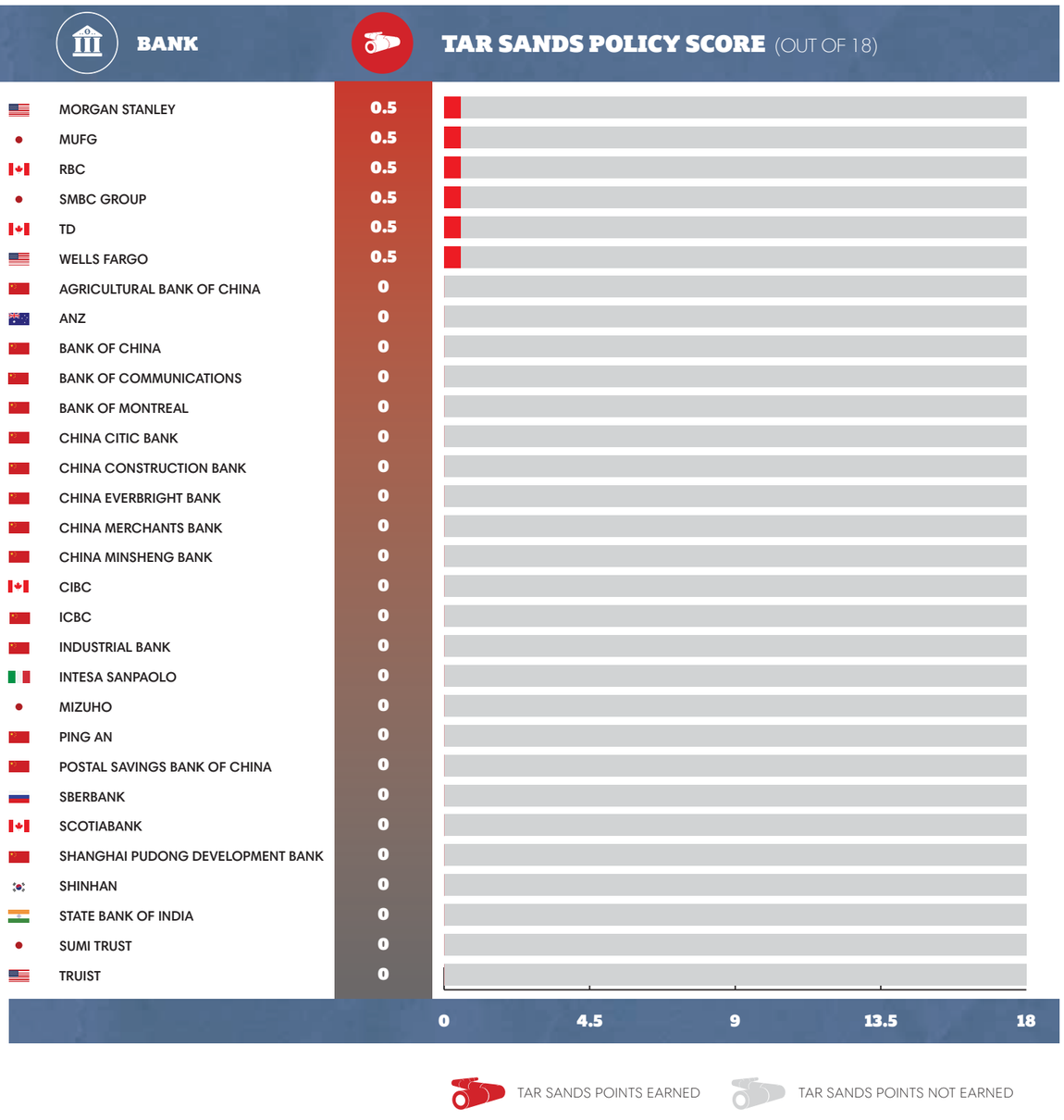
See page **131** for the scoring criteria.

BANK	TAR SANDS POLICY SCORE (OUT OF 18)
BNP PARIBAS	7
BPCE/NATIXIS	7
ING	6
BBVA	5
SANTANDER	5
SOCIÉTÉ GÉNÉRALE	4
UNICREDIT	4
CRÉDIT AGRICOLE	3.5
CRÉDIT MUTUEL	3.5
DEUTSCHE BANK	3
NORDEA	3
RABOBANK	3
STANDARD CHARTERED	3
UBS	3
HSBC	2.5
U.S. BANK	2.5
DANSKE BANK	2
LLOYDS	2
COMMONWEALTH BANK	1.5
NATWEST	1.5
COMMERZBANK	1
DZ BANK	1
NAB	1
WESTPAC	1
BANK OF AMERICA	0.5
BARCLAYS	0.5
CITI	0.5
CREDIT SUISSE	0.5
GOLDMAN SACHS	0.5
JPMORGAN CHASE	0.5



TAR SANDS POINTS EARNED TAR SANDS POINTS NOT EARNED

BANK	TAR SANDS POLICY SCORE (OUT OF 18)
MORGAN STANLEY	0.5
MUFG	0.5
RBC	0.5
SMBC GROUP	0.5
TD	0.5
WELLS FARGO	0.5
AGRICULTURAL BANK OF CHINA	0
ANZ	0
BANK OF CHINA	0
BANK OF COMMUNICATIONS	0
BANK OF MONTREAL	0
CHINA CITIC BANK	0
CHINA CONSTRUCTION BANK	0
CHINA EVERBRIGHT BANK	0
CHINA MERCHANTS BANK	0
CHINA MINSHENG BANK	0
CIBC	0
ICBC	0
INDUSTRIAL BANK	0
INTESA SANPAOLO	0
MIZUHO	0
PING AN	0
POSTAL SAVINGS BANK OF CHINA	0
SBERBANK	0
SCOTIABANK	0
SHANGHAI PUDONG DEVELOPMENT BANK	0
SHINHAN	0
STATE BANK OF INDIA	0
SUMI TRUST	0
TRUIST	0



TAR SANDS POINTS EARNED TAR SANDS POINTS NOT EARNED

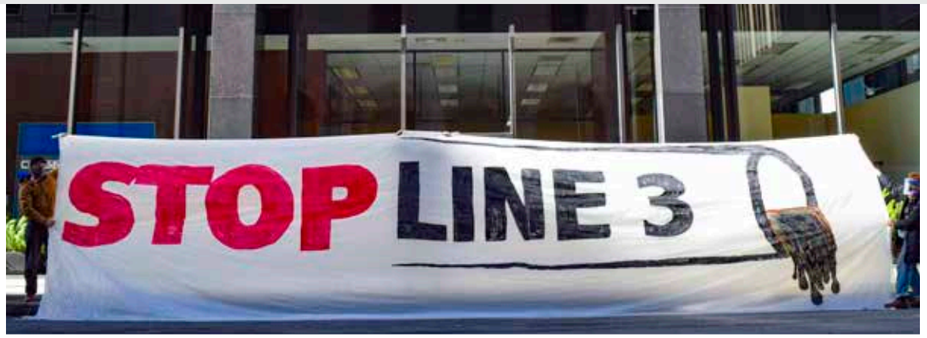
CASE STUDY

Line 3

The resistance to Enbridge's Line 3 tar sands pipeline has grown into an epic battle in the woods of northern Minnesota. With the Biden administration's cancellation of a critical permit for the Keystone XL pipeline, and production from the tar sands higher than ever, there is immense political and financial pressure from Canada and the fossil fuel industry to build Line 3.[80] But the push to build out tar sands infrastructure faces incredible social, legal, financial, and health risks — and this pipeline, which would run from Alberta's tar sands across the border through Minnesota and into Wisconsin, is no exception.

Blockades, water protector camps, and protests at the governor's residence and public hearings have spotlighted what is at stake: Enbridge's Line 3 pipeline runs roughshod over Indigenous rights, threatens the Great Lakes, and jeopardizes our shared climate by expanding access to dirty tar sands oil.[81] Despite fierce opposition, construction is complete in Wisconsin and Canada.[82] In Minnesota, Enbridge secured key state and federal permits in November 2020 and has begun construction on the final length of the pipeline, despite active legal appeals from the Ojibwe peoples of the Red Lake Nation and the White Earth Nation, as well as environmental and youth groups.[83] The project continues to face major obstacles — including one government agency suing another over the project, a pandemic, a worker death and ensuing investigation, and massive public resistance.[84]

As of March 2021, there are at least 29 banks acting as lenders to seven Enbridge credit facilities totaling $12.9 billion, with participation from banks such as **Barclays**, **JPMorgan Chase**, **MUFG**, and **TD**.[85] Given that Enbridge is not seeking any project-level financing for the project, these banks are essentially financing Line 3. Their support for the project comes even without the Free, Prior, and Informed Consent of the Ojibwe peoples, whose territory the pipeline cuts through.[86]



PHOTOS: Toben Dilworth / RAN; Camp Migizi; Sarah LittleRedFeather (Honor the Earth)

ARCTIC OIL & GAS

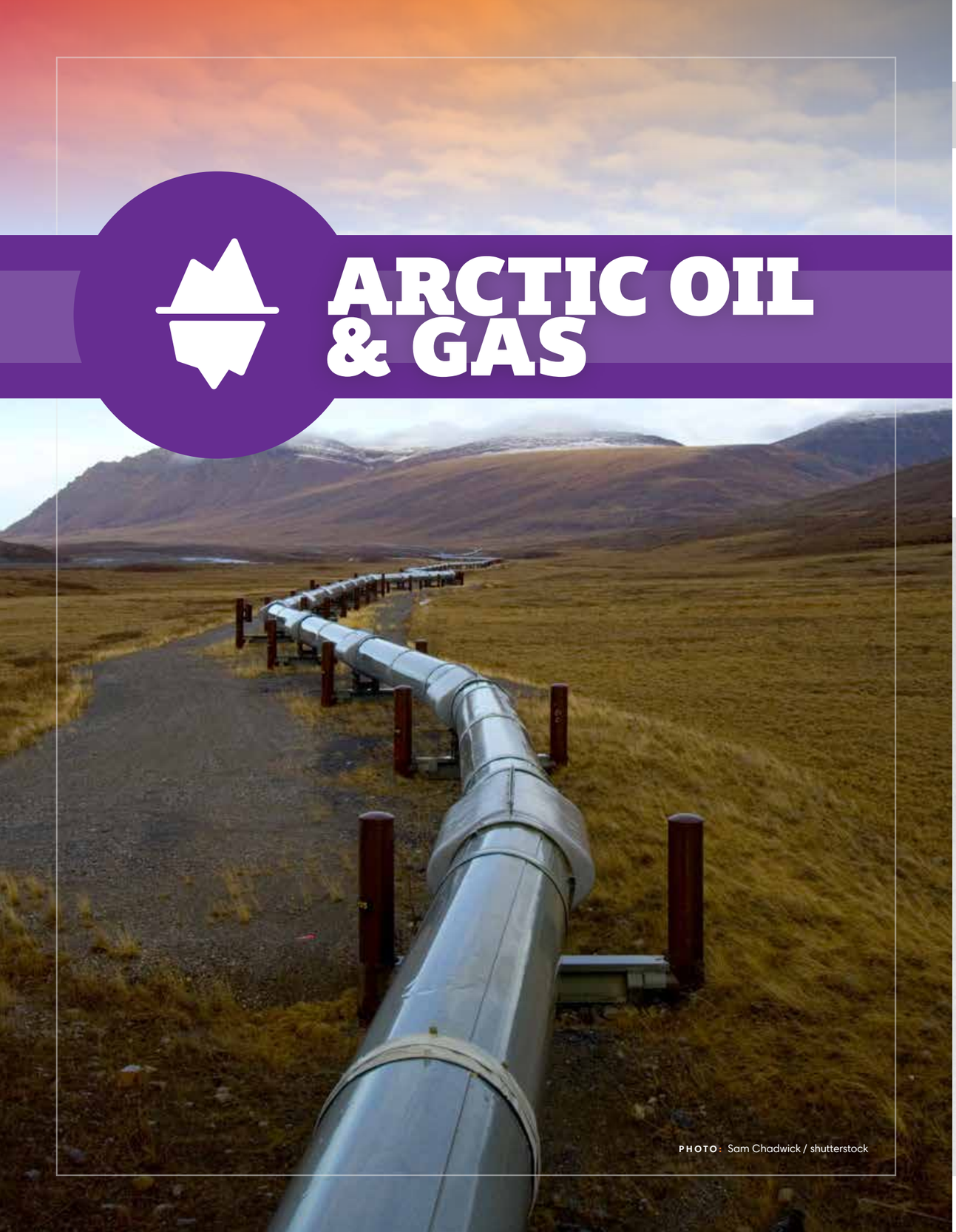
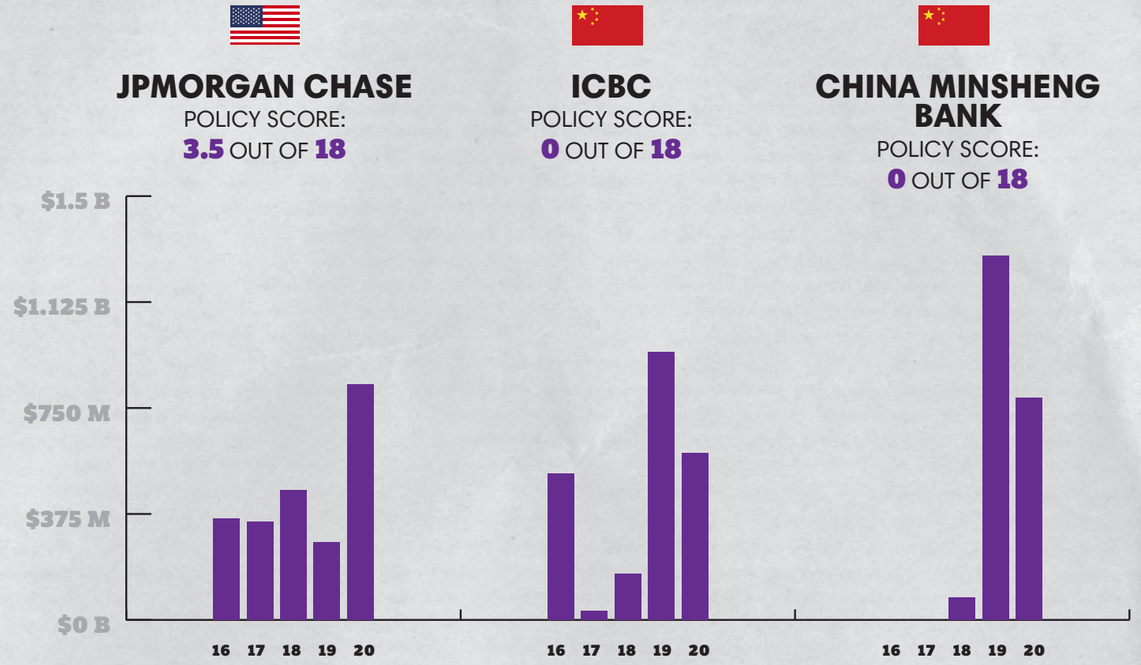


PHOTO: Sam Chadwick / shutterstock

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

More than half of the 60 banks profiled in this report have some sort of restriction on direct financing for oil and gas projects in the Arctic — important first steps. But only eight restrict financing to any companies active in the Arctic, meaning bank support for oil and gas development in this delicate ecosystem has continued largely unabated.[87]

WORST BANKS BY TOTAL ARCTIC OIL AND GAS FINANCING (2016-2020)



LEAGUE TABLE - *Banking on Arctic Oil & Gas*

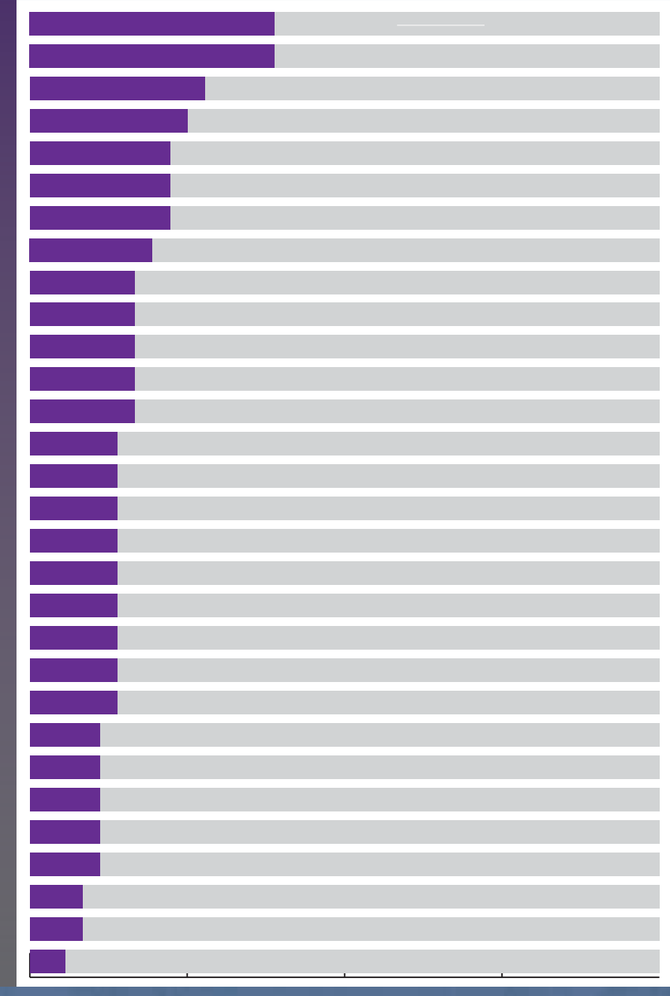
Bank financing for 30 top Arctic oil and gas companies

RANK	BANK	TOTAL 2016-2020	2020	2020 COMPARED TO 2016
1	JPMORGAN CHASE	$2.278 B	$835 M	↗
2	ICBC	$2.255 B	$591 M	↗
3	CHINA MINSHENG BANK	$2.154 B	$786 M	↗
4	SBERBANK	$1.946 B	$199 M	↗
5	CITI	$1.500 B	$484 M	↗
6	UNICREDIT	$1.493 B	$824 M	↗
7	BARCLAYS	$1.427 B	$733 M	↗
8	BANK OF CHINA	$1.404 B	$268 M	→
9	CRÉDIT AGRICOLE	$1.397 B	$843 M	↗
10	SOCIÉTÉ GÉNÉRALE	$1.152 B	$663 M	↗
11	AGRICULTURAL BANK OF CHINA	$1.124 B	$424 M	↗
12	MUFG	$1.043 B	$495 M	↗
13	BANK OF AMERICA	$976 M	$321 M	↗
14	SMBC GROUP	$853 M	$96 M	↗
15	MIZUHO	$827 M	$157 M	↗
16	DEUTSCHE BANK	$735 M	$64 M	→
17	BNP PARIBAS	$714 M	$320 M	↗
18	HSBC	$668 M	$131 M	↗
19	CHINA CONSTRUCTION BANK	$656 M	$189 M	↗
20	GOLDMAN SACHS	$649 M	$231 M	↗
21	STATE BANK OF INDIA	$607 M	$46 M	↗
22	MORGAN STANLEY	$455 M	$74 M	→
23	TD	$400 M	-	→
24	WELLS FARGO	$398 M	-	→
25	COMMERZBANK	$338 M	$90 M	↗
26	CHINA CITIC BANK	$326 M	$207 M	↗
27	CREDIT SUISSE	$308 M	$16 M	→
28	ING	$294 M	-	→
29	WESTPAC	$268 M	$7 M	↗
30	CHINA EVERBRIGHT BANK	$268 M	$268 M	↗
31	DZ BANK	$249 M	$43 M	↗
32	POSTAL SAVINGS BANK OF CHINA	$248 M	$5 M	↗
33	SHANGHAI PUDONG DEVELOPMENT BANK	$240 M	$240 M	↗
34	INTESA SANPAOLO	$227 M	$56 M	↗
35	UBS	$203 M	$37 M	→
36	INDUSTRIAL BANK	$190 M	$181 M	↗
37	BANK OF COMMUNICATIONS	$144 M	$124 M	↗
38	STANDARD CHARTERED	$140 M	$29 M	↗
39	PING AN	$105 M	$105 M	↗
40	BPCE/NATIXIS	$91 M	$74 M	↗
41	BBVA	$80 M	$34 M	↗
42	SANTANDER	$69 M	$30 M	↗
43	RBC	$67 M	$10 M	↗
44	CHINA MERCHANTS BANK	$51 M	$43 M	↗
45	BANK OF MONTREAL	$44 M	-	→
46	ANZ	$43 M	$16 M	↗
47	NATWEST	$30 M	$23 M	↗
48	NORDEA	$28 M	-	→
49	SCOTIABANK	$21 M	-	→
50	COMMONWEALTH BANK	$13 M	-	→
	CIBC	-	-	—
	CRÉDIT MUTUEL	-	-	—
	DANSKE BANK	-	-	—
	LLOYDS	-	-	—
	NAB	-	-	—
	RABOBANK	-	-	—
	SHINHAN	-	-	—
	SUMI TRUST	-	-	—
	TRUIST	-	-	—
	U.S. BANK	-	-	—
	GRAND TOTAL	**$31.199 B**	**$10.413 B**	↗

POLICY SCORES - *Arctic Oil & Gas*

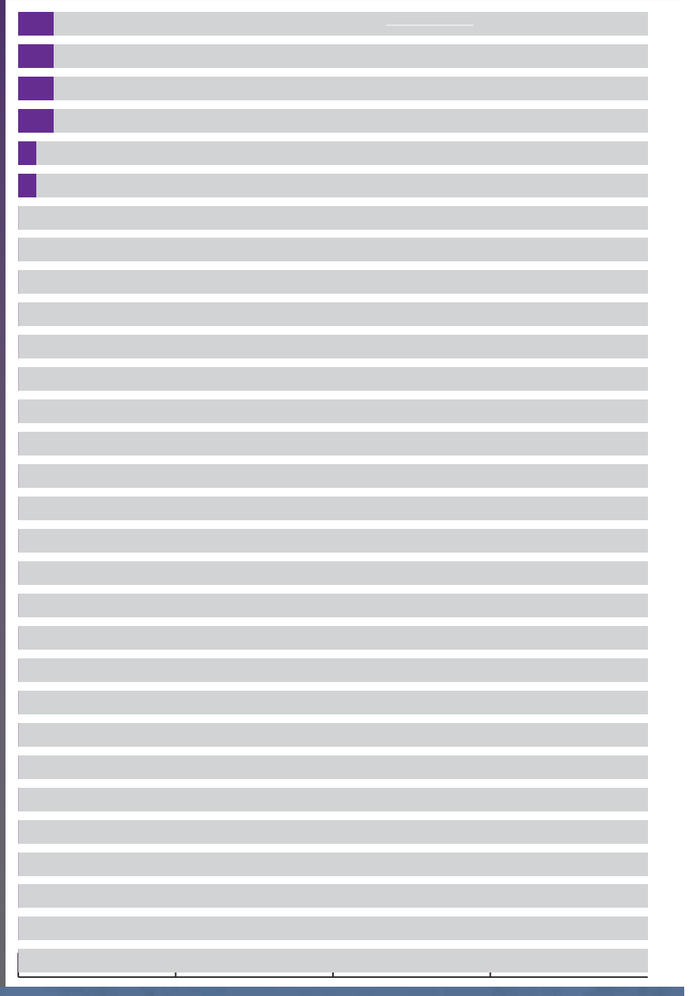
See page **133** for the scoring criteria.

BANK	ARCTIC OIL & GAS POLICY SCORE (OUT OF 18)
BNP PARIBAS	7
SANTANDER	7
ING	5
CRÉDIT MUTUEL	4.5
BARCLAYS	4
SOCIÉTÉ GÉNÉRALE	4
UNICREDIT	4
JPMORGAN CHASE	3.5
BBVA	3
CIBC	3
CREDIT SUISSE	3
STANDARD CHARTERED	3
UBS	3
BANK OF AMERICA	2.5
CITI	2.5
COMMONWEALTH BANK	2.5
CRÉDIT AGRICOLE	2.5
DEUTSCHE BANK	2.5
GOLDMAN SACHS	2.5
MORGAN STANLEY	2.5
NATWEST	2.5
U.S. BANK	2.5
BPCE/NATIXIS	2
COMMERZBANK	2
LLOYDS	2
SCOTIABANK	2
TD	2
RBC	1.5
WELLS FARGO	1.5
BANK OF MONTREAL	1



ARCTIC OIL & GAS POINTS EARNED ARCTIC OIL & GAS POINTS NOT EARNED

BANK	ARCTIC OIL & GAS POLICY SCORE (OUT OF 18)
HSBC	1
NAB	1
RABOBANK	1
WESTPAC	1
MUFG	0.5
SMBC GROUP	0.5
AGRICULTURAL BANK OF CHINA	0
ANZ	0
BANK OF CHINA	0
BANK OF COMMUNICATIONS	0
CHINA CITIC BANK	0
CHINA CONSTRUCTION BANK	0
CHINA EVERBRIGHT BANK	0
CHINA MERCHANTS BANK	0
CHINA MINSHENG BANK	0
DANSKE BANK	0
DZ BANK	0
ICBC	0
INDUSTRIAL BANK	0
INTESA SANPAOLO	0
MIZUHO	0
NORDEA	0
PING AN	0
POSTAL SAVINGS BANK OF CHINA	0
SBERBANK	0
SHANGHAI PUDONG DEVELOPMENT BANK	0
SHINHAN	0
STATE BANK OF INDIA	0
SUMI TRUST	0
TRUIST	0



ARCTIC OIL & GAS POINTS EARNED ARCTIC OIL & GAS POINTS NOT EARNED

CASE STUDY

Arctic National Wildlife Refuge

The Arctic National Wildlife Refuge is one of the world's last intact ecosystems and one of the few places in the United States that has never been developed or industrialized.[88] The coastal plain of the refuge is home to nearly 200 wildlife species, including the Porcupine caribou herd that gathers and gives birth there.[89] The Gwich'in people have thrived in villages along the migration path of the Porcupine caribou herd for millennia and consider the coastal plain to be sacred. In fact, the Gwich'in call the coastal plain "Iizhak Gwats'an Gwandaii Goodlit," meaning "the Sacred Place Where Life Begins."[90]

Despite long-term political efforts to open the area to drilling, polls show an overwhelming majority of Americans oppose drilling in the Arctic Refuge.[91] After 50 years of protection, the refuge was opened to oil and gas leasing and development by an unrelated provision tacked onto a 2017 tax bill.[92] Following that, the rushed process that the Trump administration used to accelerate leasing was improperly conducted and ignored the voices of the Gwich'in and the overwhelming will of the public.[93]

In recent years, a growing number of major banks around the world have begun to exclude financing for oil and gas development in the Arctic Refuge and the broader Arctic region. The six largest U.S. banks have prohibited funding for Arctic drilling projects, including in the Arctic Refuge, while the five largest Canadian banks have ruled out funding Arctic Refuge drilling projects in particular. In total, around 30 global banks have exclusion policies on Arctic drilling.[94]

This public repudiation of direct financing for Arctic drilling projects may have contributed to the low commercial interest in the lease sale held at the end of Trump's presidency. Ultimately, fewer than half the leases offered were sold, and those that were sold generated less than 1% of the revenue that the tax bill had projected.[95] And yet, to fully end support for Arctic oil and gas activities, banks need to end not just direct financing for projects in the region but also financing for companies active there. Without these guardrails, banks like **JPMorgan Chase**, **ICBC**, **China Minsheng Bank**, and **Sberbank** were the biggest bankers of Arctic oil and gas in the five years since the adoption of the Paris Agreement.

PHOTO: Ben Cushing / Sierra Club

PHOTOS: Alexis Bonogofsky

OFFSHORE OIL & GAS

PHOTO: Kanok Sulaiman / shutterstock

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

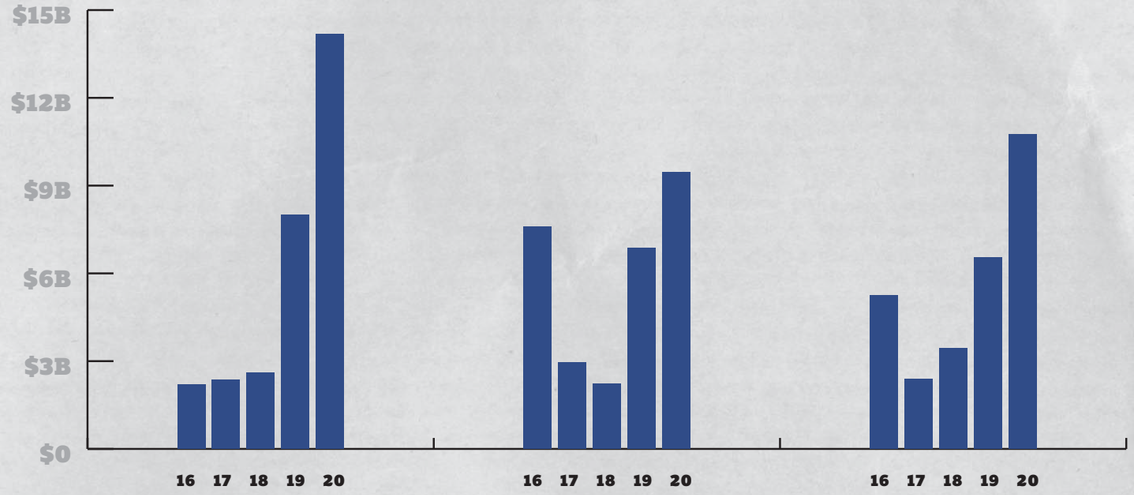
Offshore oil and gas production not only has disruptive impacts on the surrounding ocean ecosystem, but can also harm communities on land nearby, who depend on the sea for their food and livelihoods.[96]

WORST BANKS BY TOTAL OFFSHORE OIL AND GAS FINANCING (2016–2020)

BNP PARIBAS
POLICY SCORE:
0.5 OUT OF **18**

JPMORGAN CHASE
POLICY SCORE:
0 OUT OF **18**

CITI
POLICY SCORE:
0.5 OUT OF **18**



LEAGUE TABLE - *Banking on Offshore Oil & Gas*

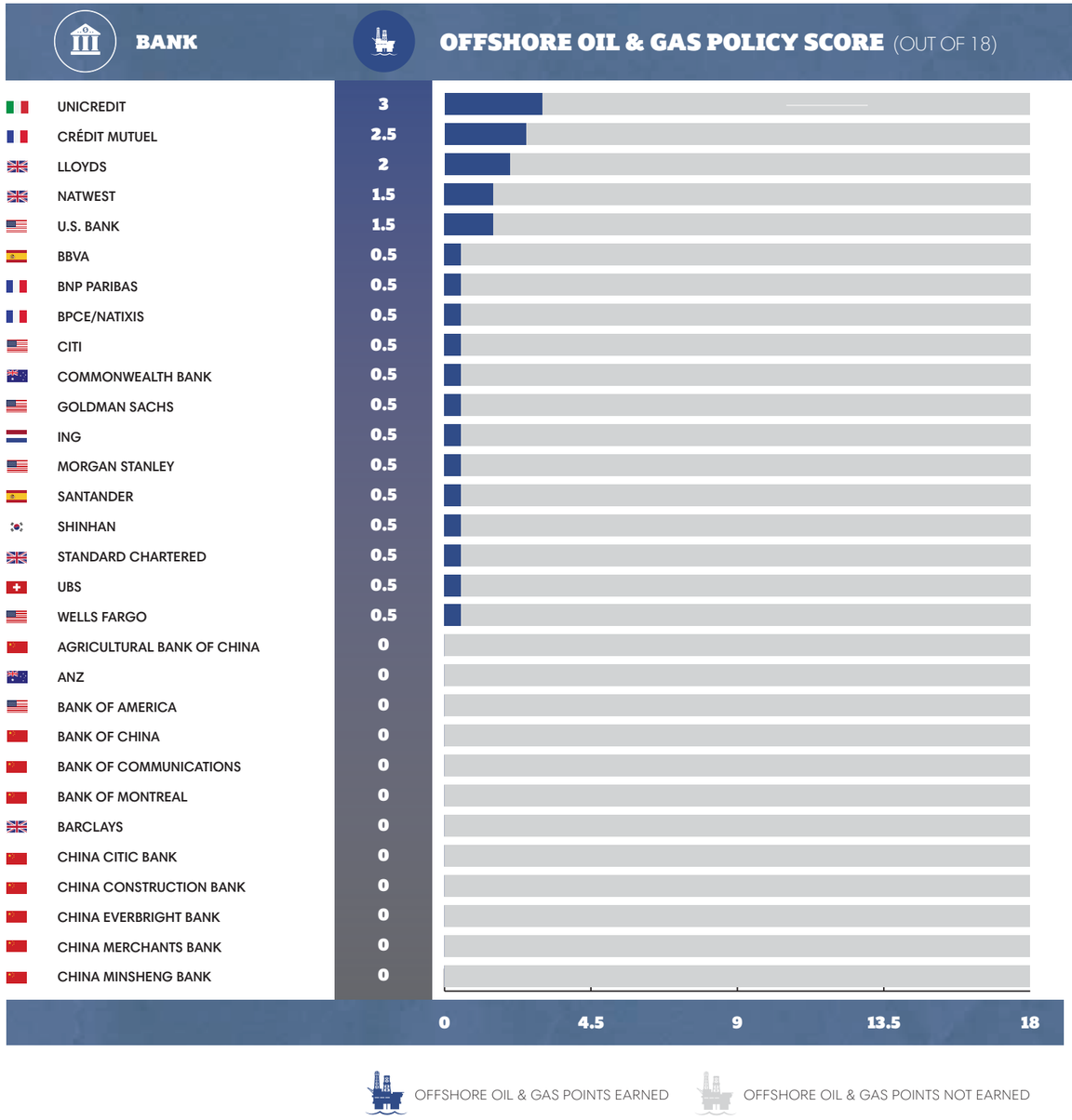
Bank financing for 30 top offshore oil and gas companies

RANK	BANK	TOTAL 2016-2020	2020	2020 COMPARED TO 2016
1	BNP PARIBAS	$29.327 B	$14.174 B	↗
2	JPMORGAN CHASE	$29.070 B	$9.454 B	↗
3	CITI	$28.347 B	$10.753 B	↗
4	BANK OF AMERICA	$24.517 B	$10.620 B	↗
5	HSBC	$21.614 B	$7.766 B	↗
6	MORGAN STANLEY	$17.143 B	$5.185 B	↗
7	BARCLAYS	$15.827 B	$6.777 B	↗
8	CRÉDIT AGRICOLE	$14.758 B	$5.805 B	↗
9	MIZUHO	$12.640 B	$2.873 B	↗
10	GOLDMAN SACHS	$11.650 B	$3.345 B	↗
11	SMBC GROUP	$11.249 B	$4.402 B	↗
12	SANTANDER	$11.045 B	$3.424 B	↗
13	MUFG	$10.505 B	$4.013 B	↗
14	SOCIÉTÉ GÉNÉRALE	$9.742 B	$4.210 B	↗
15	ICBC	$8.416 B	$1.647 B	→
16	DEUTSCHE BANK	$7.585 B	$1.797 B	→
17	CHINA MINSHENG BANK	$7.269 B	$1.922 B	↗
18	BANK OF CHINA	$5.889 B	$941 M	→
19	AGRICULTURAL BANK OF CHINA	$4.047 B	$1.034 B	↗
20	BBVA	$3.961 B	$616 M	→
21	CREDIT SUISSE	$3.744 B	$782 M	→
22	UBS	$3.676 B	$50 M	→
23	STATE BANK OF INDIA	$2.954 B	$150 M	↗
24	UNICREDIT	$2.789 B	$1.341 B	↗
25	ANZ	$2.774 B	$1.364 B	↗
26	STANDARD CHARTERED	$2.677 B	$953 M	↗
27	SCOTIABANK	$2.643 B	$1.014 B	↗
28	CHINA CONSTRUCTION BANK	$2.412 B	$381 M	→
29	RBC	$2.354 B	$369 M	→
30	BPCE/NATIXIS	$2.185 B	$446 M	→
31	INTESA SANPAOLO	$1.668 B	$141 M	→
32	WELLS FARGO	$1.651 B	$650 M	↗
33	LLOYDS	$1.243 B	$274 M	↗
34	COMMONWEALTH BANK	$1.075 B	$1.051 B	↗
35	CHINA CITIC BANK	$1.004 B	$536 M	↗
36	COMMERZBANK	$997 M	$178 M	↗
37	NATWEST	$975 M	$232 M	↗
38	POSTAL SAVINGS BANK OF CHINA	$966 M	$12 M	↗
39	WESTPAC	$793 M	$85 M	↗
40	BANK OF COMMUNICATIONS	$777 M	$299 M	→
41	TD	$685 M	-	→
42	SHANGHAI PUDONG DEVELOPMENT BANK	$586 M	$586 M	↗
43	ING	$558 M	$106 M	→
44	CHINA EVERBRIGHT BANK	$538 M	$538 M	↗
45	INDUSTRIAL BANK	$356 M	$322 M	↗
46	RABOBANK	$298 M	$50 M	→
47	SHINHAN	$286 M	$85 M	↗
48	PING AN	$274 M	$274 M	↗
49	SBERBANK	$184 M	$57 M	↗
50	CIBC	$58 M	-	→
51	CHINA MERCHANTS BANK	$37 M	$12 M	↗
	BANK OF MONTREAL	-	-	—
	CRÉDIT MUTUEL	-	-	—
	DANSKE BANK	-	-	—
	DZ BANK	-	-	—
	NAB	-	-	—
	NORDEA	-	-	—
	SUMI TRUST	-	-	—
	TRUIST	-	-	—
	U.S. BANK	-	-	—
	GRAND TOTAL	**$327.817 B**	**$114.094 B**	↗

POLICY SCORES - *Offshore Oil & Gas*

Offshore Arctic oil and gas policies already scored in the previous section are not counted here.

See page **135** for the scoring criteria.



CASE STUDY

Barents Sea

The Barents Sea is located on the northern coasts of Norway and Russia, within the Arctic Circle. The sea is shallow, with an average depth of only 750 feet (230 meters), and has a unique ecosystem including walruses, polar bears, narwhals, and beluga whales.[97] The sea also contains significant oil and gas deposits, which Norwegian oil companies want to explore, most notably the Norwegian oil major Equinor.

Offshore oil drilling is always risky, but the long distance from land, harsh Arctic weather conditions, darkness, and sea ice make drilling in the Barents Sea even riskier. Since the Arctic is warming faster than any place on Earth, the ecosystems there are already under severe pressure.[98] An oil spill in this region would be catastrophic for the unique ecosystem. The oil industry has no effective way of removing oil from the ice.[99]

In mid-2020 the Norwegian government proposed to open up 125 new oil exploration blocks in the Barents Sea.[100] A few months later, Equinor was given permission to drill an exploration well in the area.[101] Just a month after that, the Norwegian Supreme Court upheld the exploration licenses in the Arctic in a case brought by environmental groups, but left an open question as to whether the discovered oil could actually be produced, given potential greenhouse gas emissions.[102]

Beyond its intent to drill in the Barents Sea, Equinor is on the wrong track overall when it comes to the climate crisis, with plans to increase overall oil and gas production by 300% by 2030.[103] In April and May 2020 Equinor issued over $8 billion in bonds arranged by banks including **JPMorgan Chase**, **Bank of America**, **Barclays**, **BNP Paribas**, **Citi**, and **Goldman Sachs**.[104]

CASE STUDY

Offshore Cape Three Points

Offshore Cape Three Points is an integrated oil and gas project in the Tano Basin, approximately 37 miles (60 kilometers) off the coast of Ghana. The project is run by Eni, Vitol, and Ghana National Petroleum Corporation.[105] It includes, among other things, the development of three gas fields and two oil fields in water ranging from 1,600 to 3,600 feet (500 to 1,100 meters) in depth, a 39 mile (63-kilometer) gas pipeline to the coast, 19 undersea wells, and a floating gas processing, storage, and off-loading (FPSO) unit. The fields' reserves are significant, estimated at 500 million barrels of oil and 40 billion cubic feet (1.1 billion cubic meters) of gas.[106]

The project is already in operation, with oil production starting in 2017 and gas production in 2018. However, Eni is looking at expanding the project area following the discovery of more gas during exploratory drilling in Offshore Cape Three Points Block 4 in 2019.[107]

Communities nearby are reportedly already experiencing a range of negative impacts from the development and production of the current project area. Fisherfolk face loss of income due to a decline in fish catch.[108] The cost of food — including fish — has risen, along with other commodities.[109] Marine life, especially fish and seaweeds, have also reportedly been affected by pollution from the project and drilling activities.[110]

And yet a range of banks have supported the Offshore Cape Three Points project and associated infrastructure on multiple occasions. Among the banks who financed the oil and gas field development in 2017 are **Mizuho**, **Standard Chartered**, **Bank of China**, **BPCE/Natixis**, **MUFG**, **HSBC**, **Société Générale**, and **ING**. In April 2020, **BPCE/Natixis**, **Société Générale**, **SMBC Group**, **Standard Chartered**, and **MUFG** were also involved in renewing finance for the FPSO unit.[111]

PHOTO: Andrea Izzotti / shutterstock

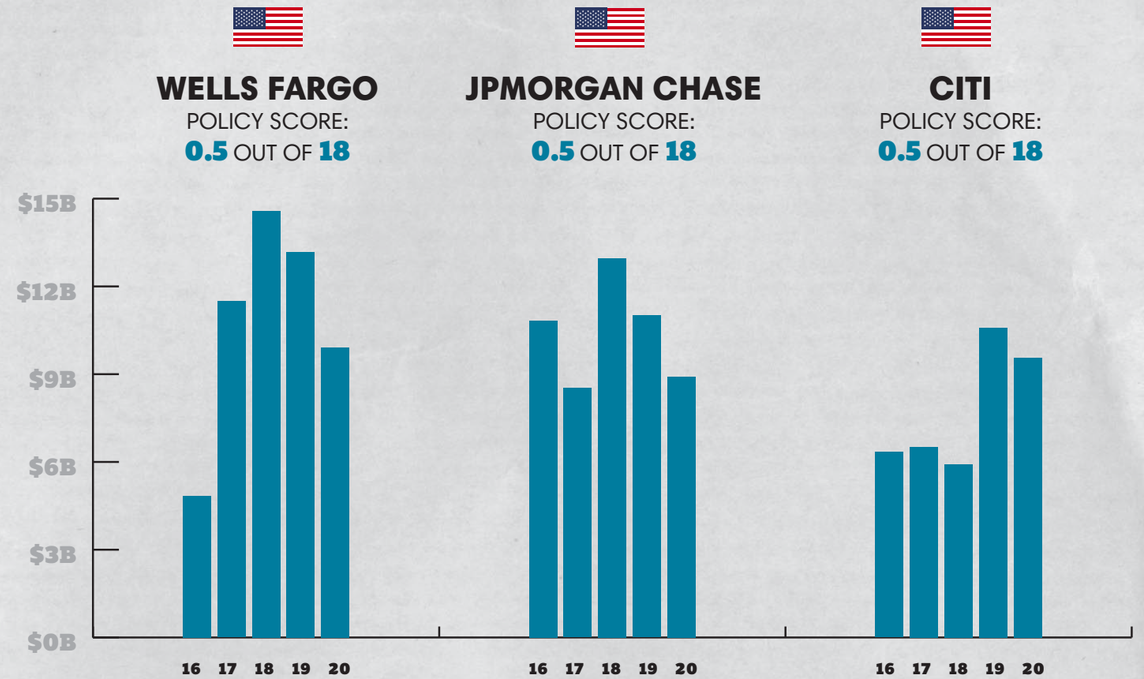
FRACKED OIL & GAS

PHOTO: Christopher Halloran / shutterstock

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

While the COVID-19 pandemic has caused pain economy-wide, the impact on the fracking industry and its lenders and investors has been particularly acute. And yet, banks have continued financing fracking through the years, despite numerous warnings that the sector was financially unsustainable — on top of the well-documented environmental, health and climate impacts of fracking.[112]

WORST BANKS BY TOTAL FRACKED OIL AND GAS FINANCING (2016–2020)



LEAGUE TABLE - *Banking on Fracked Oil & Gas*

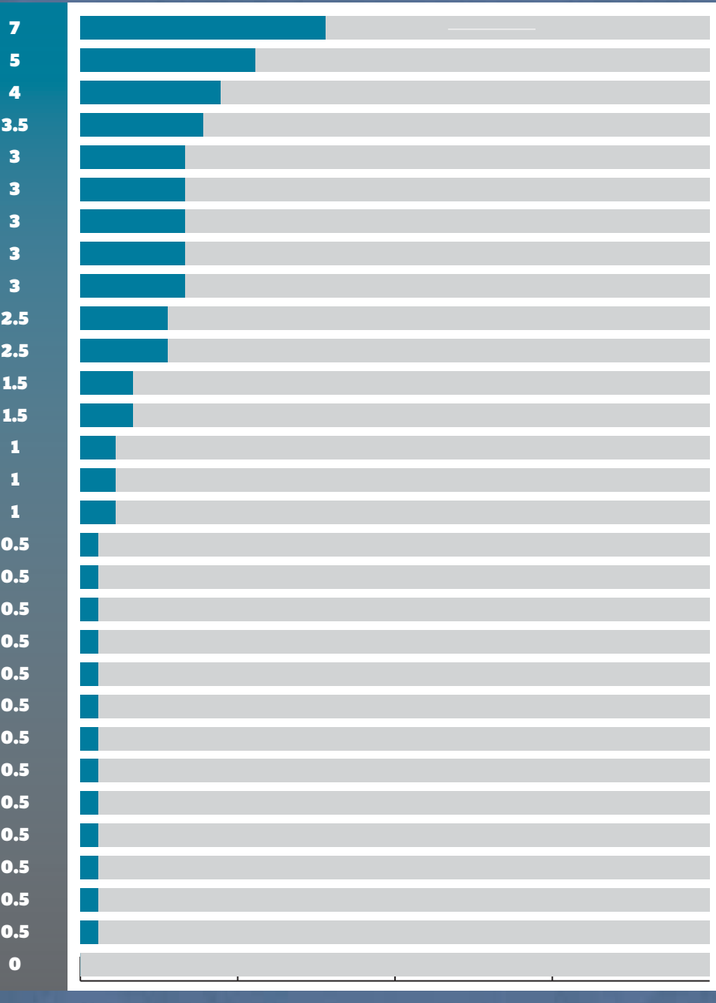
Bank financing for 30 top fracking companies and 10 key fracked oil and gas pipeline companies

RANK	BANK	TOTAL 2016-2020	2020	2020 COMPARED TO 2016
1	WELLS FARGO	$53.991 B	$9.912 B	↗
2	JPMORGAN CHASE	$52.232 B	$8.918 B	↘
3	CITI	$38.928 B	$9.568 B	↗
4	BANK OF AMERICA	$38.906 B	$8.857 B	↗
5	BARCLAYS	$23.991 B	$5.444 B	↗
6	MUFG	$21.776 B	$4.049 B	↗
7	MIZUHO	$19.756 B	$3.735 B	↗
8	SCOTIABANK	$18.261 B	$1.545 B	↘
9	RBC	$16.009 B	$3.706 B	↗
10	CREDIT SUISSE	$16.008 B	$1.781 B	↘
11	TD	$13.827 B	$3.537 B	↗
12	MORGAN STANLEY	$12.704 B	$2.996 B	↗
13	GOLDMAN SACHS	$12.673 B	$1.459 B	↘
14	BANK OF MONTREAL	$8.560 B	$2.066 B	↗
15	DEUTSCHE BANK	$8.042 B	$1.480 B	↘
16	HSBC	$7.360 B	$2.910 B	↗
17	SMBC GROUP	$7.199 B	$1.493 B	↗
18	TRUIST	$6.635 B	$1.769 B	↗
19	SOCIÉTÉ GÉNÉRALE	$6.124 B	$2.071 B	↗
20	BNP PARIBAS	$5.592 B	$3.056 B	↗
21	CRÉDIT AGRICOLE	$4.275 B	$803 M	↗
22	U.S. BANK	$3.484 B	$1.150 B	↗
23	CIBC	$2.915 B	$1.420 B	↗
24	UBS	$2.582 B	$23 M	↘
25	ICBC	$2.546 B	$661 M	↘
26	CHINA MINSHENG BANK	$1.980 B	$852 M	↗
27	BANK OF CHINA	$1.787 B	$289 M	↘
28	BPCE/NATIXIS	$1.773 B	$529 M	↗
29	BBVA	$1.713 B	$294 M	↗
30	AGRICULTURAL BANK OF CHINA	$1.244 B	$448 M	↗
31	SANTANDER	$1.233 B	$740 M	↗
32	NATWEST	$901 M	$36 M	↘
33	COMMERZBANK	$863 M	$425 M	↗
34	CHINA CONSTRUCTION BANK	$597 M	$173 M	↗
35	LLOYDS	$359 M	$76 M	↗
36	CHINA CITIC BANK	$336 M	$244 M	↗
37	STANDARD CHARTERED	$327 M	$190 M	↗
38	CHINA EVERBRIGHT BANK	$245 M	$245 M	↗
39	SHANGHAI PUDONG DEVELOPMENT BANK	$244 M	$244 M	↗
40	POSTAL SAVINGS BANK OF CHINA	$192 M	$5 M	↗
41	ANZ	$161 M	$39 M	↗
42	INDUSTRIAL BANK	$141 M	$124 M	↗
43	PING AN	$125 M	$125 M	↗
44	BANK OF COMMUNICATIONS	$113 M	$113 M	↗
45	ING	$51 M	-	↘
46	CHINA MERCHANTS BANK	$10 M	$5 M	↗
	COMMONWEALTH BANK	-	-	—
	CRÉDIT MUTUEL	-	-	—
	DANSKE BANK	-	-	—
	DZ BANK	-	-	—
	INTESA SANPAOLO	-	-	—
	NAB	-	-	—
	NORDEA	-	-	—
	RABOBANK	-	-	—
	SBERBANK	-	-	—
	SHINHAN	-	-	—
	STATE BANK OF INDIA	-	-	—
	SUMI TRUST	-	-	—
	UNICREDIT	-	-	—
	WESTPAC	-	-	—
	GRAND TOTAL	**$418.772 B**	**$89.605 B**	↗

POLICY SCORES - *Fracked Oil & Gas*

See page **137** for the scoring criteria.

BANK	FRACKED OIL & GAS POLICY SCORE (OUT OF 18)
BNP PARIBAS	7
SANTANDER	5
UNICREDIT	4
CRÉDIT MUTUEL	3.5
BARCLAYS	3
BPCE/NATIXIS	3
ING	3
NORDEA	3
RABOBANK	3
NATWEST	2.5
U.S. BANK	2.5
DEUTSCHE BANK	1.5
SOCIÉTÉ GÉNÉRALE	1.5
COMMERZBANK	1
DZ BANK	1
LLOYDS	1
CITI	0.5
COMMONWEALTH BANK	0.5
CRÉDIT AGRICOLE	0.5
CREDIT SUISSE	0.5
GOLDMAN SACHS	0.5
HSBC	0.5
JPMORGAN CHASE	0.5
MORGAN STANLEY	0.5
SMBC GROUP	0.5
STANDARD CHARTERED	0.5
TD	0.5
UBS	0.5
WELLS FARGO	0.5
AGRICULTURAL BANK OF CHINA	0



FRACKED OIL & GAS POINTS EARNED

FRACKED OIL & GAS POINTS NOT EARNED

BANK	FRACKED OIL & GAS POLICY SCORE (OUT OF 18)
ANZ	0
BANK OF AMERICA	0
BANK OF CHINA	0
BANK OF COMMUNICATIONS	0
BANK OF MONTREAL	0
BBVA	0
CHINA CITIC BANK	0
CHINA CONSTRUCTION BANK	0
CHINA EVERBRIGHT BANK	0
CHINA MERCHANTS BANK	0
CHINA MINSHENG BANK	0
CIBC	0
DANSKE BANK	0
ICBC	0
INDUSTRIAL BANK	0
INTESA SANPAOLO	0
MIZUHO	0
MUFG	0
NAB	0
PING AN	0
POSTAL SAVINGS BANK OF CHINA	0
RBC	0
SBERBANK	0
SCOTIABANK	0
SHANGHAI PUDONG DEVELOPMENT BANK	0
SHINHAN	0
STATE BANK OF INDIA	0
SUMI TRUST	0
TRUIST	0
WESTPAC	0

FRACKED OIL & GAS POINTS EARNED

FRACKED OIL & GAS POINTS NOT EARNED

CASE STUDY

Vaca Muerta

In Argentina's Patagonia region, the Vaca Muerta oil and gas reserves make up the world's second-largest shale deposit.[113] While only 4% of the basin is under development thus far, the total potential emissions of the oil and gas reserves make up an enormous carbon bomb of 8.7 gigatons of CO_2 equivalent.[114] The Argentinian government had pegged hopes of economic salvation on the project, looking to export much of the oil and gas and use the proceeds to pay down the country's national debt. Hundreds of millions of dollars in subsidies have been provided to the oil and gas companies operating in Vaca Muerta.[115] This approach comes at the expense of the Indigenous Mapuche communities who are opposing the project on their land.[116]

The companies active in Vaca Muerta include subsidiaries of global majors such as BP and Total, as well as the Argentinian state-owned company YPF. Since the Paris Agreement was adopted five years ago, the top bankers of the nearly 40 companies fracking in Vaca Muerta are **JPMorgan Chase**, **Citi**, **Bank of America**, **HSBC**, and **Barclays**.[117]

The COVID-19 pandemic and its resulting squeeze on oil demand has slowed down development in Vaca Muerta, though the government is trying to support this industry through new subsidies.[118] As with so many other projects, the test will come in how the Argentinian government, and these foreign banks, choose to emerge from the pandemic. Instead of attempting to revive the fracking industry, the recovery must be in favor of a just energy transition into a sustainable Argentinian economy.

PHOTO: Martín Álvarez Mullally

CASE STUDY

Mountain Valley Pipeline

The Mountain Valley Pipeline (MVP) is a 375-mile (600-kilometer) fracked gas project that would run from the Marcellus Shale fields in West Virginia, through Virginia and end with the "MVP Southgate" extension in North Carolina.[119] Originally proposed in 2015 with a $3.5 billion budget, the project is now three years behind schedule, only half-complete, and has more than doubled in cost, making it the most expensive fracked gas pipeline in the United States.[120]

MVP construction has caused long-lasting harm to clean water and habitat for multiple endangered species. State agencies have penalized MVP more than $2 million for over 350 environmental violations of all kinds, including improper erosion control and stormwater mismanagement. If completed, the pipeline could result in 128.7 million metric tons of greenhouse gas emissions annually — equivalent to building 37 new coal-fired power plants.[121] Most damningly, the gas carried by the pipeline is simply not needed, as the bulk of shipping contracts for gas it would carry are held by the same companies developing it, and regional gas demand is dropping.[122]

The Mountain Valley Pipeline has faced staunch opposition from impacted communities and from clean water and environmental advocates challenging flawed and rushed permit processes in court. State and federal courts have rescinded multiple necessary permits; as a result, construction is stalled and MVP currently lacks permits to cross hundreds of waterways along its route.[123]

With no clear path to completion and a price tag of $20 million per month to simply maintain the unfinished project, MVP and MVP Southgate are increasingly a losing bet for banks and investors backing the project.[124] Adding to these financial woes, dozens of groups have launched a new DivestMVP Coalition to pressure MVP's funders — including **Bank of America**, **Wells Fargo**, and **JPMorgan Chase** — to drop their support of this dirty, dangerous, and unnecessary fracked gas pipeline.[125]

PHOTO: Anne Way Bernard

CASE STUDY

Coastal GasLink

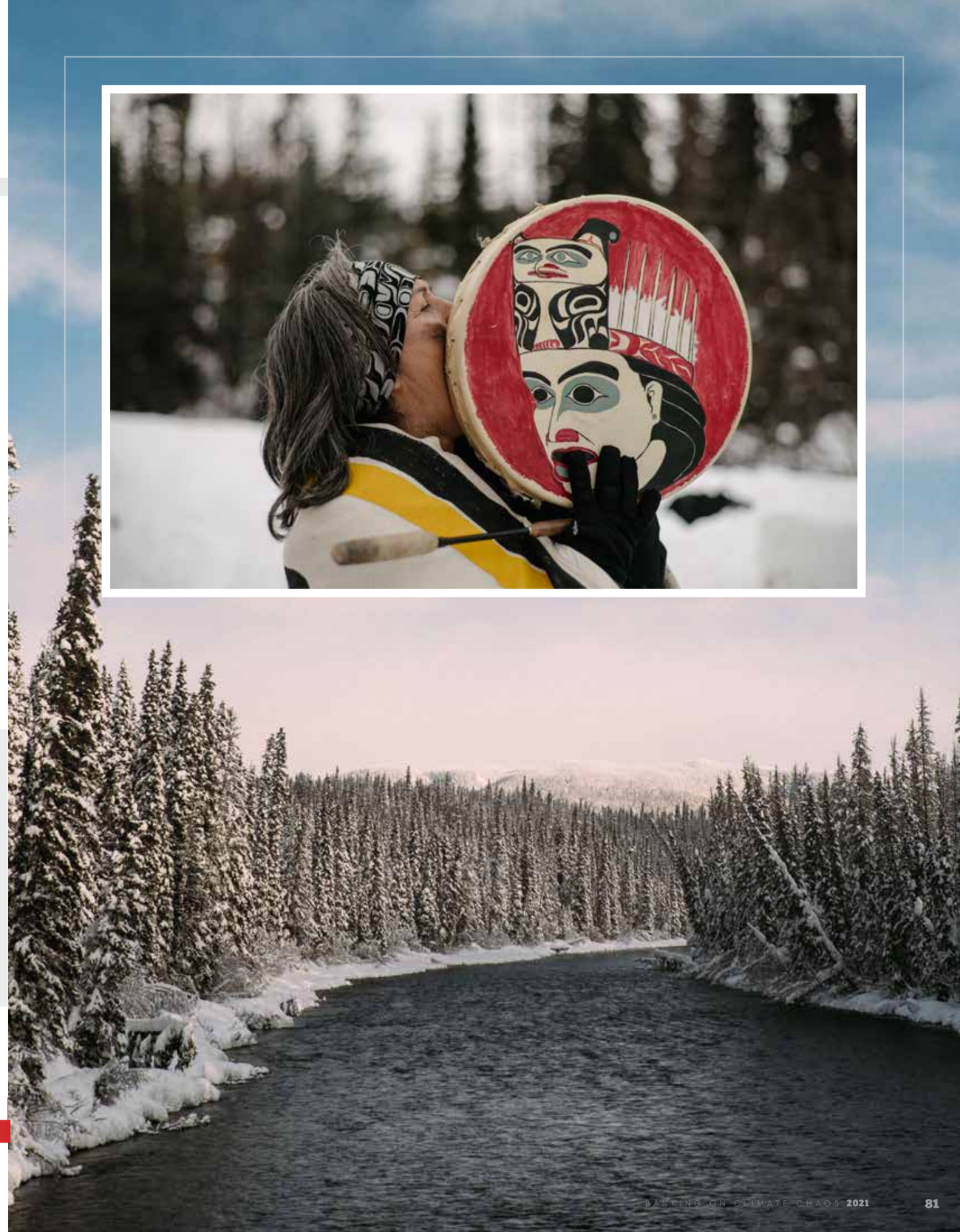
In British Columbia, construction is ongoing on the Coastal GasLink pipeline, which will bring fracked gas across 420 miles (675 kilometers) from the northeastern part of the province to the LNG Canada terminal, to be liquefied and exported to Asia.[126] The Wet'suwet'en, the Indigenous people of the area, have long fought to assert their sovereignty and stop fossil fuel companies from trespassing on their lands, and have faced militarized police raids in opposing this project.[127] The risks have compounded during the COVID-19 pandemic, as infections spread at worker camps deemed "essential."[128]

And yet in May 2020, TC Energy, the company behind the pipeline (and the infamous Keystone XL pipeline recently canceled by the Biden administration) secured a $4.7 billion loan to build Coastal GasLink.[129] Twenty-six banks signed up to directly fund this pipeline's construction, in the midst of the pandemic, even though the project has failed to receive the Free, Prior, and Informed Consent of the five clans of the Wet'suwet'en.[130] In October, the banks upped Coastal GasLink's allowance by an additional $122 million.[131]

Of the banks covered in this report, the following proved the ineffectiveness of their due diligence procedures by directly funding the Coastal GasLink project:[132]

- Australia: **NAB**
- Canada: **Bank of Montreal**, **CIBC**, **RBC**, **Scotiabank**, **TD**
- China: **Bank of China**, **China Construction Bank**, **ICBC**
- Japan: **Mizuho**, **MUFG**, **SMBC Group**, **SuMi TRUST**
- U.S.: **Bank of America**, **Citi**, **JPMorgan Chase**, **Truist**

A water is life banner at the Gidim'ten Checkpoint; Land defenders at Unist'ot'en Camp; Freda Huson, Chief Howilhkat of Unist'ot'en; Wedzin Kwa river, the headwaters of Wet'suwet'en territory. **PHOTOS:** Michael Toledano



LIQUEFIED NATURAL GAS

PHOTO: Bildagentur Zoonar GmbH / shutterstock

Who's Banking on **LNG?**

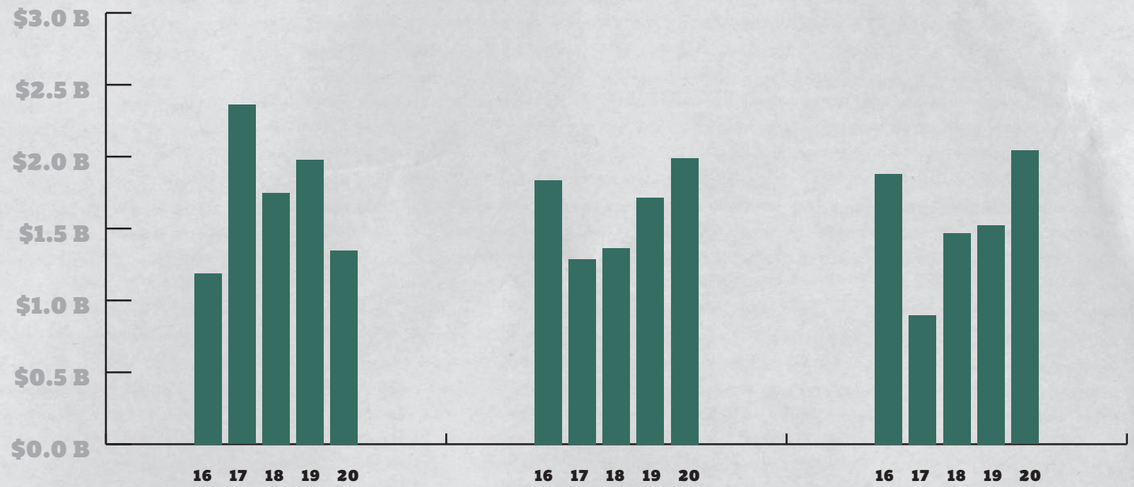
The LNG export industry's projected expansion coming to fruition would likely put the goal of limiting warming to 1.5°C out of reach. The climate cannot afford locking in dependence on fossil gas use via massive LNG terminals that harm communities and ecosystems.[133]

WORST BANKS BY TOTAL LNG FINANCING (2016–2020)

MORGAN STANLEY
POLICY SCORE:
0.5 OUT OF **18**

CITI
POLICY SCORE:
0.5 OUT OF **18**

JPMORGAN CHASE
POLICY SCORE:
0 OUT OF **18**



LEAGUE TABLE - *Banking on LNG*

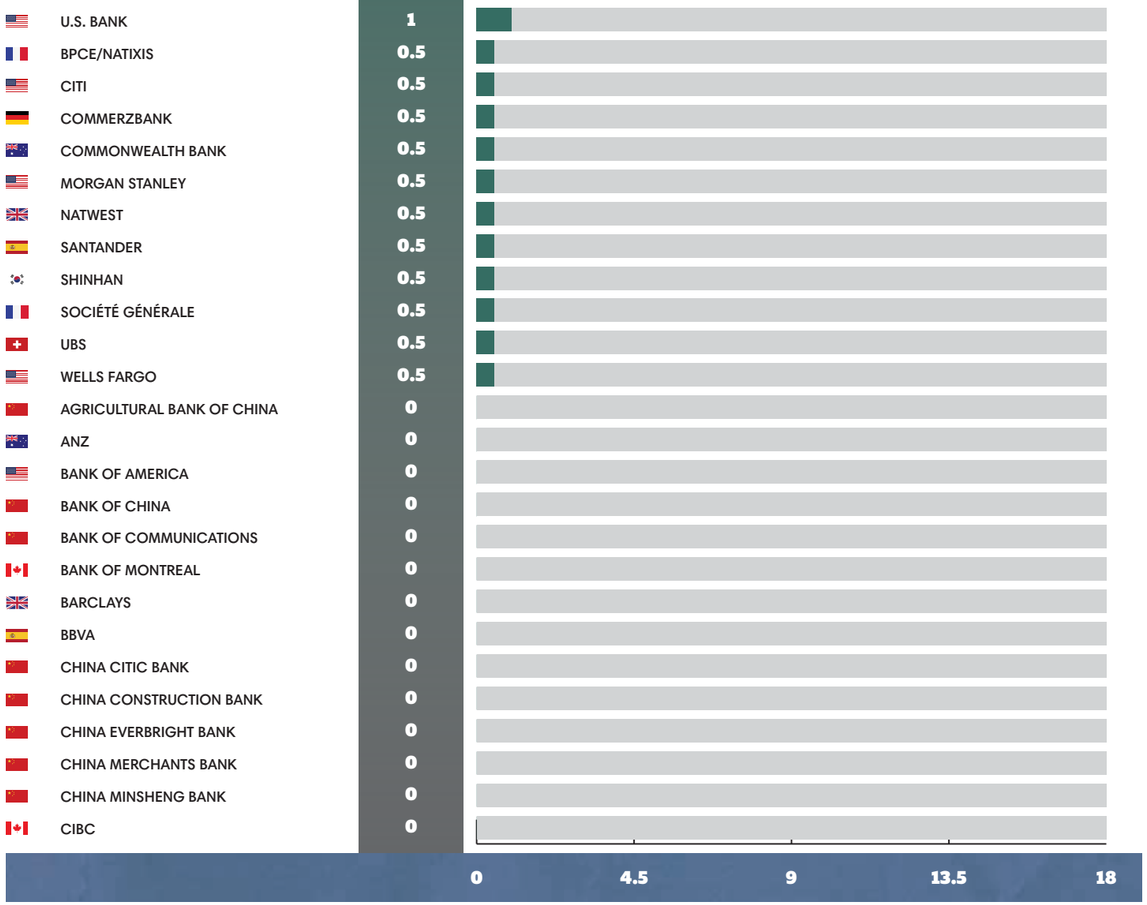
Bank financing for 30 top liquefied natural gas import and export companies

RANK	BANK	TOTAL 2016-2020	2020	2020 COMPARED TO 2016
1	MORGAN STANLEY	$8.620 B	$1.346 B	↗
2	CITI	$8.193 B	$1.990 B	↗
3	JPMORGAN CHASE	$7.811 B	$2.043 B	↗
4	BANK OF AMERICA	$6.555 B	$2.072 B	↗
5	SMBC GROUP	$6.540 B	$1.489 B	↗
6	MIZUHO	$6.460 B	$1.709 B	↗
7	SOCIÉTÉ GÉNÉRALE	$6.182 B	$1.318 B	→
8	MUFG	$5.094 B	$1.216 B	→
9	BNP PARIBAS	$4.514 B	$2.015 B	↗
10	HSBC	$4.346 B	$1.732 B	↗
11	RBC	$3.739 B	$688 M	→
12	BARCLAYS	$3.724 B	$1.067 B	→
13	GOLDMAN SACHS	$3.706 B	$837 M	↗
14	UBS	$3.629 B	$3 M	→
15	SCOTIABANK	$3.289 B	$709 M	↗
16	SANTANDER	$3.203 B	$1.072 B	↗
17	SBERBANK	$3.069 B	-	→
18	CRÉDIT AGRICOLE	$2.999 B	$920 M	↗
19	ICBC	$2.790 B	$804 M	↗
20	ING	$2.670 B	$269 M	→
21	CREDIT SUISSE	$2.483 B	$247 M	→
22	BPCE/NATIXIS	$2.159 B	$666 M	↗
23	BANK OF CHINA	$1.956 B	$253 M	→
24	BBVA	$1.916 B	$571 M	↗
25	STANDARD CHARTERED	$1.869 B	$870 M	↗
26	INTESA SANPAOLO	$1.564 B	$275 M	→
27	DEUTSCHE BANK	$1.328 B	$443 M	→
28	LLOYDS	$966 M	$58 M	→
29	ANZ	$922 M	$43 M	→
30	NORDEA	$886 M	$77 M	→
31	WESTPAC	$787 M	-	↗
32	WELLS FARGO	$719 M	$331 M	↗
33	COMMONWEALTH BANK	$560 M	$74 M	↗
34	UNICREDIT	$518 M	$27 M	→
35	DANSKE BANK	$508 M	$77 M	→
36	CHINA CONSTRUCTION BANK	$472 M	$62 M	→
37	CIBC	$461 M	$252 M	↗
38	NAB	$406 M	$134 M	↗
39	AGRICULTURAL BANK OF CHINA	$348 M	$165 M	↗
40	CHINA MERCHANTS BANK	$300 M	$11 M	↗
41	CHINA MINSHENG BANK	$282 M	$68 M	↗
42	COMMERZBANK	$235 M	$30 M	↗
43	SUMI TRUST	$200 M	$200 M	↗
44	NATWEST	$175 M	$44 M	→
45	DZ BANK	$162 M	$87 M	↗
46	INDUSTRIAL BANK	$132 M	$132 M	↗
47	CHINA EVERBRIGHT BANK	$98 M	$98 M	↗
48	BANK OF COMMUNICATIONS	$96 M	$51 M	↗
49	U.S. BANK	$80 M	$38 M	↗
50	CHINA CITIC BANK	$79 M	$78 M	↗
51	CRÉDIT MUTUEL	$62 M	-	→
52	TD	$56 M	-	→
53	POSTAL SAVINGS BANK OF CHINA	$43 M	< $1M	↗
54	PING AN	$41 M	$41 M	↗
55	BANK OF MONTREAL	$20 M	-	→
56	SHANGHAI PUDONG DEVELOPMENT BANK	$17 M	$17 M	↗
	RABOBANK	-	-	—
	SHINHAN	-	-	—
	STATE BANK OF INDIA	-	-	—
	TRUIST	-	-	—
	GRAND TOTAL	**$120.044 B**	**$28.817 B**	→

POLICY SCORES - *LNG*

See page **139** for the scoring criteria.

BANK	LNG POLICY SCORE (OUT OF 18)
BNP PARIBAS	3
UNICREDIT	3
CRÉDIT MUTUEL	1
RABOBANK	1
U.S. BANK	1
BPCE/NATIXIS	0.5
CITI	0.5
COMMERZBANK	0.5
COMMONWEALTH BANK	0.5
MORGAN STANLEY	0.5
NATWEST	0.5
SANTANDER	0.5
SHINHAN	0.5
SOCIÉTÉ GÉNÉRALE	0.5
UBS	0.5
WELLS FARGO	0.5
AGRICULTURAL BANK OF CHINA	0
ANZ	0
BANK OF AMERICA	0
BANK OF CHINA	0
BANK OF COMMUNICATIONS	0
BANK OF MONTREAL	0
BARCLAYS	0
BBVA	0
CHINA CITIC BANK	0
CHINA CONSTRUCTION BANK	0
CHINA EVERBRIGHT BANK	0
CHINA MERCHANTS BANK	0
CHINA MINSHENG BANK	0
CIBC	0



BANK	LNG POLICY SCORE (OUT OF 18)
CRÉDIT AGRICOLE	0
CREDIT SUISSE	0
DANSKE BANK	0
DEUTSCHE BANK	0
DZ BANK	0
GOLDMAN SACHS	0
HSBC	0
ICBC	0
INDUSTRIAL BANK	0
ING	0
INTESA SANPAOLO	0
JPMORGAN CHASE	0
LLOYDS	0
MIZUHO	0
MUFG	0
NAB	0
NORDEA	0
PING AN	0
POSTAL SAVINGS BANK OF CHINA	0
RBC	0
SBERBANK	0
SCOTIABANK	0
SHANGHAI PUDONG DEVELOPMENT BANK	0
SMBC GROUP	0
STANDARD CHARTERED	0
STATE BANK OF INDIA	0
SUMI TRUST	0
TD	0
TRUIST	0
WESTPAC	0

LNG POINTS EARNED LNG POINTS NOT EARNED

LNG POINTS EARNED LNG POINTS NOT EARNED

CASE STUDY

Energía Costa Azul LNG

North American fracked gas, especially from the Permian Basin, is one of the world's major carbon bombs: its continued expansion is flatly incompatible with limiting climate change to 1.5°C.[134] Exporting North American fracked gas in the form of liquefied natural gas is particularly damaging to the climate, with a growing body of research showing that LNG may be worse than coal in the short term.[135]

The industry has been desperate to build LNG export facilities on the Pacific coast in order to cut shipping costs to Asia. But community opposition to fracked gas export infrastructure on the West Coast of the United States and Canada has been fierce, as the Jordan Cove LNG and Coastal GasLink pipeline fights have shown.[136] The industry has been eyeing Mexico's Pacific coast as an alternative, and after years of pushing, California-based Sempra Energy reached a final investment decision on its proposed Energía Costa Azul (ECA) LNG export terminal, in Baja California, in November 2020.[137]

ECA LNG was the only North American fracked gas export terminal to reach financial close in 2020, showing its backers' determination to resume business as usual emerging from the COVID-19 pandemic.[138] The project required the first-ever gas export permit from Mexico.[139]

The project, begun as a joint venture by two Sempra Energy subsidiaries — Sempra LNG and IEnova — would convert an existing LNG import facility into an export terminal, sited on what had previously been the last undeveloped stretch of coastline between Tijuana and Ensenada, rich with marine life.[140]

Banks that funded the project include **BBVA**, **BPCE/Natixis**, **Mizuho**, **Scotiabank**, and **SMBC Group**.[141] In joining this deal, banks backed a project sponsored by a company with serious red flags in its public track record. Sempra Energy rammed through the Agua Prieta pipeline in the face of fierce opposition by the Yaqui in Sonora, Mexico.[142] In 2015, its Aliso Canyon gas leak was the single worst fossil gas leak in U.S. history, and possibly the single worst greenhouse gas accident in U.S. history.[143]

CASE STUDY

Mozambique LNG Projects

The LNG industry in Cabo Delgado is currently made up of three major offshore and partly onshore projects to extract and then liquefy gas for export: Rovuma LNG, led by Eni and ExxonMobil; Mozambique LNG, led by Total; and Coral South floating LNG (FLNG), led by Eni.[144]

The gas isn't expected to be extracted until 2024, and only 12% of it will be used in Mozambique — and yet communities in the gas region have reportedly been suffering from the impacts of the industry for years. They have been forced to move from their homes to make way for Total's onshore support facilities and airport, housed in the 27-square-mile (70-square-kilometer) Afungi LNG Park.[145] Total relocated over 550 families from their homes to build this park, moving fisherfolk far from the ocean and compensating farmers with land a tenth of the size of what they'd had, far from their new houses.[146] Formerly self-sustaining villages have been left without livelihoods and are reliant on food parcels.[147] Total's promises of jobs have proven to be hot air: the only jobs community members have received have been short-term construction, cleaning, and other unskilled jobs.[148] On top of the violence already faced by the region given the ongoing violent conflict in Cabo Delgado province, with Mozambique LNG communities also face brutality from the heavy-handed military, whose priority is protecting the industry.[149]

Project finance for the Rovuma LNG project has not yet been secured and the final investment decision has been postponed.[150] Mozambique LNG and Coral South FLNG did reach financial close with direct support from 14 of the 60 banks profiled in this report:[151]

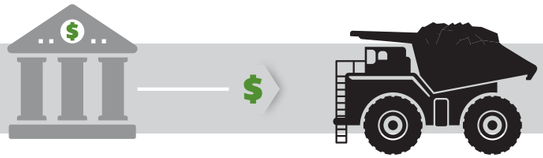
- China: **Bank of China**, **ICBC**
- France: **BNP Paribas**, **BPCE/Natixis**, **Crédit Agricole**, **Société Générale**
- UK: **HSBC**, **Standard Chartered**
- U.S.: **JPMorgan Chase**
- Japan: **Mizuho**, **MUFG**, **SMBC Group**, **SuMi TRUST**
- Italy: **UniCredit**

Mozambique remains one of the world's poorest, least developed, and most heavily indebted countries — 70% of its population has no electricity access, and 40% are illiterate.[152] Development of Mozambique LNG and associated projects has yet to solve any of these challenges, and the gamble that it will is, as one article calls it, "a bet [that] can only pay off on a dangerously overheated planet."[153]

PHOTO: Justiça Ambiental/Friends of the Earth Mozambique

COAL MINING

PHOTO: lcrms / shutterstock



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

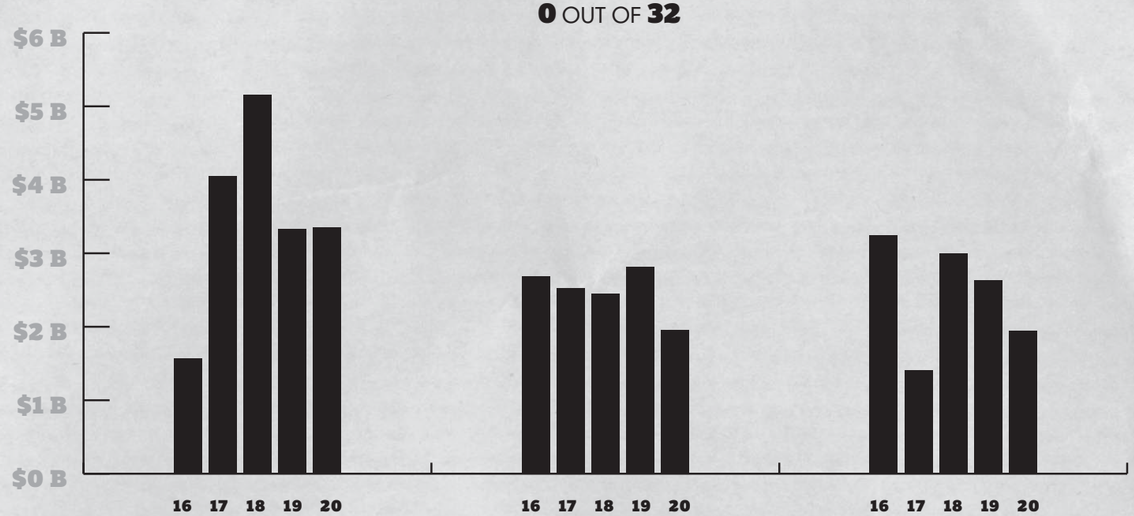
The 13 Chinese banks in this report make up fully 80% of all coal mining financing analyzed, and all lack policies to proactively restrict such support.

WORST BANKS BY TOTAL COAL MINING FINANCING (2016–2020)

INDUSTRIAL BANK
POLICY SCORE:
0.5 OUT OF **32**

CHINA CONSTRUCTION BANK
POLICY SCORE:
0 OUT OF **32**

BANK OF CHINA
POLICY SCORE:
0 OUT OF **32**



LEAGUE TABLE - *Banking on Coal Mining*

Bank financing for 30 top coal mining companies

RANK	BANK	TOTAL 2016-2020	2020	2020 COMPARED TO 2016
1	INDUSTRIAL BANK	$17.472 B	$3.354 B	↗
2	CHINA CONSTRUCTION BANK	$12.451 B	$1.958 B	→
3	BANK OF CHINA	$12.228 B	$1.946 B	→
4	SHANGHAI PUDONG DEVELOPMENT BANK	$9.048 B	$2.547 B	↗
5	CHINA CITIC BANK	$6.978 B	$1.411 B	→
6	BANK OF COMMUNICATIONS	$6.976 B	$1.428 B	↗
7	ICBC	$6.604 B	$672 M	→
8	CHINA EVERBRIGHT BANK	$6.116 B	$2.518 B	↗
9	PING AN	$5.735 B	$2.336 B	↗
10	CHINA MERCHANTS BANK	$4.862 B	$359 M	→
11	AGRICULTURAL BANK OF CHINA	$4.573 B	$1.285 B	↗
12	CREDIT SUISSE	$2.405 B	$227 M	↗
13	DEUTSCHE BANK	$2.257 B	$600 M	↗
14	CHINA MINSHENG BANK	$2.021 B	$603 M	↗
15	JPMORGAN CHASE	$1.899 B	$100 M	↗
16	CITI	$1.599 B	$208 M	→
17	GOLDMAN SACHS	$1.537 B	$157 M	→
18	POSTAL SAVINGS BANK OF CHINA	$973 M	$806 M	↗
19	COMMERZBANK	$962 M	$227 M	↗
20	MORGAN STANLEY	$900 M	$86 M	↗
21	UBS	$810 M	$86 M	↗
22	BANK OF MONTREAL	$781 M	$159 M	↗
23	SOCIÉTÉ GÉNÉRALE	$684 M	$86 M	→
24	BANK OF AMERICA	$679 M	$264 M	↗
25	UNICREDIT	$673 M	$86 M	→
26	MUFG	$545 M	$86 M	↗
27	BARCLAYS	$510 M	$181 M	↗
28	STANDARD CHARTERED	$469 M	$154 M	↗
29	ING	$446 M	$86 M	→
30	BNP PARIBAS	$425 M	$86 M	↗
31	HSBC	$418 M	$86 M	↗
32	INTESA SANPAOLO	$414 M	-	→
33	SBERBANK	$404 M	$54 M	→
34	SANTANDER	$396 M	$86 M	↗
35	NATWEST	$386 M	$86 M	↗
36	RBC	$382 M	$86 M	↗
37	TD	$377 M	$159 M	↗
38	MIZUHO	$370 M	$90 M	↗
39	CRÉDIT AGRICOLE	$369 M	$86 M	↗
40	BBVA	$351 M	$86 M	↗
41	NAB	$326 M	$86 M	↗
42	SCOTIABANK	$304 M	$86 M	↗
42	COMMONWEALTH BANK	$304 M	$86 M	↗
44	SMBC GROUP	$299 M	$86 M	↗
45	ANZ	$283 M	$86 M	↗
46	RABOBANK	$194 M	-	→
47	STATE BANK OF INDIA	$143 M	-	→
48	NORDEA	$87 M	-	→
49	CIBC	$35 M	-	→
50	LLOYDS	$26 M	-	→
51	DZ BANK	$26 M	-	→
52	WESTPAC	$4 M	-	→
	BPCE/NATIXIS	-	-	—
	CRÉDIT MUTUEL	-	-	—
	DANSKE BANK	-	-	—
	SHINHAN	-	-	—
	SUMI TRUST	-	-	—
	TRUIST	-	-	—
	U.S. BANK	-	-	—
	WELLS FARGO	-	-	—
	GRAND TOTAL	**$119.512 B**	**$25.352 B**	→

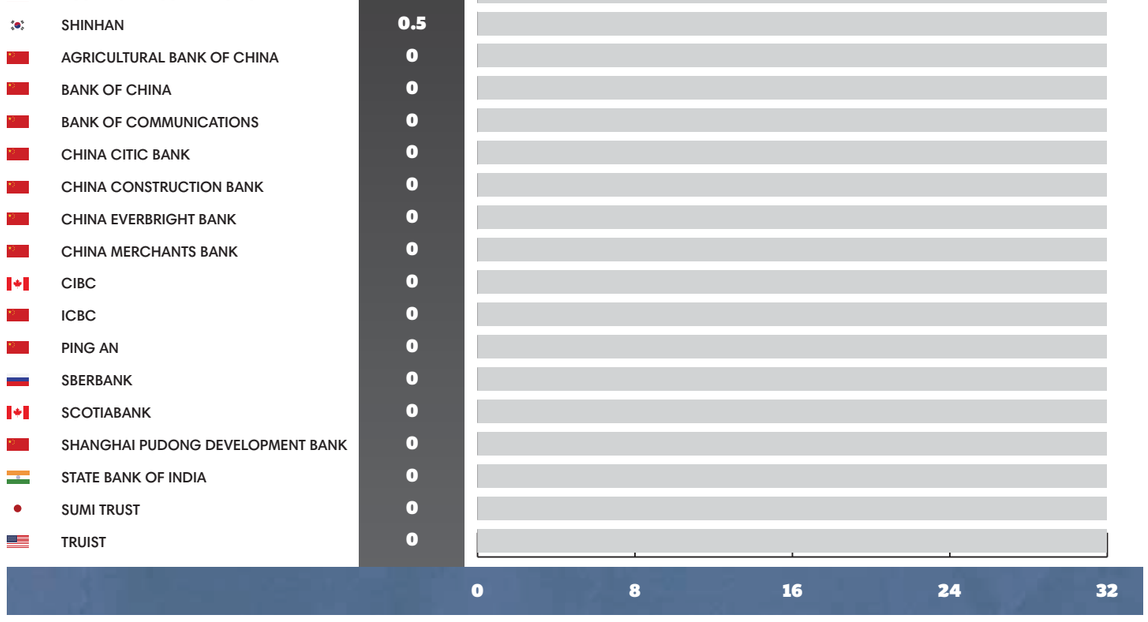
POLICY SCORES - *Coal Mining*

See page **143** for the scoring criteria.

BANK	COAL MINING POLICY SCORE (OUT OF 32)
BNP PARIBAS	30
BPCE/NATIXIS	30
CRÉDIT MUTUEL	30
UNICREDIT	30
CRÉDIT AGRICOLE	27
SOCIÉTÉ GÉNÉRALE	26
BBVA	17
SANTANDER	17
ING	15
NATWEST	15
STANDARD CHARTERED	13
BANK OF AMERICA	12
BARCLAYS	12
UBS	12
INTESA SANPAOLO	11
CITI	9.5
DEUTSCHE BANK	9.5
GOLDMAN SACHS	9.5
DANSKE BANK	9
LLOYDS	9
NAB	9
ANZ	8.5
HSBC	8.5
JPMORGAN CHASE	8
WELLS FARGO	8
MORGAN STANLEY	7.5
COMMERZBANK	7
CREDIT SUISSE	7
RBC	6.5
WESTPAC	6.5

COAL MINING POINTS EARNED COAL MINING POINTS NOT EARNED

BANK	COAL MINING POLICY SCORE (OUT OF 32)
COMMONWEALTH BANK	6
DZ BANK	6
RABOBANK	6
U.S. BANK	6
BANK OF MONTREAL	5
NORDEA	3
MIZUHO	1
MUFG	1
SMBC GROUP	1
TD	1
CHINA MINSHENG BANK	0.5
INDUSTRIAL BANK	0.5
POSTAL SAVINGS BANK OF CHINA	0.5
SHINHAN	0.5
AGRICULTURAL BANK OF CHINA	0
BANK OF CHINA	0
BANK OF COMMUNICATIONS	0
CHINA CITIC BANK	0
CHINA CONSTRUCTION BANK	0
CHINA EVERBRIGHT BANK	0
CHINA MERCHANTS BANK	0
CIBC	0
ICBC	0
PING AN	0
SBERBANK	0
SCOTIABANK	0
SHANGHAI PUDONG DEVELOPMENT BANK	0
STATE BANK OF INDIA	0
SUMI TRUST	0
TRUIST	0



COAL MINING POINTS EARNED COAL MINING POINTS NOT EARNED

CASE STUDY

Carmichael Coal Mine

An Australian subsidiary of the Indian coal mining company Adani has started to construct a giant coal mine in the Galilee Basin in Queensland, one of the largest untapped coal reserves in the world.[154] The Carmichael mine and related infrastructure, if brought into operation, would facilitate the opening of more mining projects in the basin, and would drive build-out of coal ports along the Great Barrier Reef coast — such as the existing Abbot Point terminal.[155]

The Wangan and Jagalingou people, traditional owners of the land, have not consented to the Carmichael mine, which they've been fighting for years.[156] In the fight to stop the project, Adrian Burragubba, spokesman for the Wangan and Jagalingou family council, was bankrupted after Adani sought reimbursement for court costs.[157]

Over 40 banks have publicly committed to refrain from financing the Carmichael mine.[158] However, in December 2020 it was reported that **State Bank of India** is ready to offer Adani a loan of approximately $678 million for the project.[159] International investors, including BlackRock, Amundi, Axa, and Storebrand have spoken out against the loan.[160] As of early 2021, it is unclear whether the deal will go ahead.

Apart from this potential project loan, other banks remain tied to the project. Bowen Rail Company, a subsidiary of Adani Ports and Special Economic Zone, will reportedly transport coal from the mine to the Abbot Point export terminal[161] — meaning there is potential risk that financing for Adani Ports and Special Economic Zone supports the Carmichael coal mine.[162] **Bank of America**, **Barclays**, **Citi**, **Credit Suisse**, **JPMorgan Chase**, **Mizuho**, **MUFG**, and **Standard Chartered** all underwrote bond issuances for this company in the second half of 2020[163] — even though most of them (**Bank of America**, **Barclays**, **Citi**, **Credit Suisse**, **JPMorgan Chase**, and **Standard Chartered**) have made commitments either not to fund coal mines generally, or not to fund Carmichael coal and the Abbot Point port in particular.[164] These banks urgently need to cut ties with Adani Ports and Special Economic Zone if they want to be wholly sure that they are not supporting the disastrous Carmichael project.

PHOTO: Stop Adani / flickr

CASE STUDY

Hasdeo Arand

The Hasdeo Arand Coalfield lies in the Hasdeo Arand forest, one of the largest intact forests in Central India and an active elephant corridor.[165] The coalfield is spread over 1,167 square miles (1,878 square kilometers), of which 933 miles (1,502 kilometers) had forest cover as of 2014.[166]

In 2019, India's Ministry of Environment, Forest, and Climate Change gave Rajasthan Rajya Vidyut Utpadan Nigam Limited (RVUNL) approval to mine coal in the 3-square-mile Parsa block of the Hasdeo Arand Coalfield. RVUNL is the same public sector power corporation that since 2013 had already been mining in the Hasdeo Arand forest through a joint venture with Adani Enterprises.[167] For the most part, these companies are financed by state-owned Indian banks — though **Standard Chartered** lent to a mining-related Adani subsidiary in 2017.[168]

Indian law requires the consent of the gram sabhas (village councils) for development in the Hasdeo Arand forests — but impacted people have alleged that this step was bypassed.[169] Local villagers have formed Hasdeo Arand Bachao Sangharsh Samiti (Save Hasdeo Arand Campaign Committee), a community movement that includes Indigenous people and traditional forest dwellers who want to protect the forest from the impacts of coal mining.[170]

From October to December 2019, thousands of villagers protested mining in the area. The protest ended in December 2019 as attention turned to local government elections, and then was not resumed due to the onset of the COVID-19 pandemic.[171]

In June 2020, the Indian government proposed putting another five coal blocks in the Hasdeo Arand forests up for auction. Building on the years of resistance by the Indigenous communities residing in the Hasdeo Arand forest, and after objections by the state government, in August 2020 the mining ministry took those blocks off the auction list.[172] While this is a temporary respite, the struggle of the Hasdeo Arand communities will likely continue so long as the threat of future development looms over the forest.

Local community leader Bajrang Singh Pakra was quoted in *The Ecologist* explaining, "This jungle, it is the link between the past, present and the future, between our ancestors, us and our future generations." Jainandan Singh Porte, another local, stated: "They use our coal to generate electricity and the shame is that we only recently got it two and a half years ago. They say that they cannot give us a railway or telephone line because the forest is too dense, yet there is now a coal train that runs through the forest, all day, every day."[173]

CASE STUDY

Adaro

Adaro Energy is one of the largest coal producers in Indonesia, producing over 54 million tons of coal per year.[174] Adaro is a major supplier to the global seaborne thermal coal market. Its coal is used throughout Europe, Asia, and the Americas.

Adaro Energy operates the largest single-site coal mine in Kalimantan, Indonesia. In January 2021, flooding in South Kalimantan killed 24 people and forced nearly 100,000 people to flee their homes.[175] Local environmental activists are questioning whether this flooding is linked to the massive deforestation and mining activities near the watershed area.[176]

In 2017, Adaro stated that it would diversify its business away from thermal coal mining, yet its latest annual report does not detail how the company will diversify or phase out coal.[177] In fact, in 2019, Adaro generated 92% of its revenue from coal mining, 6% from mining services, and the remainder from other activities like coal power generation, including its involvement in the controversial Batang coal-fired power plant in Indonesia.[178]

Citi, **MUFG**, and **UBS** were the most recent banks in this report's scope to fund the company, underwriting a bond issuance in late 2019.[179] As of February 2021, Adaro is reportedly seeking a $400 million loan from a syndicate of banks — an opportunity for these and other banks to make clear that they will no longer fund Adaro's harmful coal operations.[180]

PHOTOS: JATAM - Indonesia Mining Advocacy Network

COAL POWER

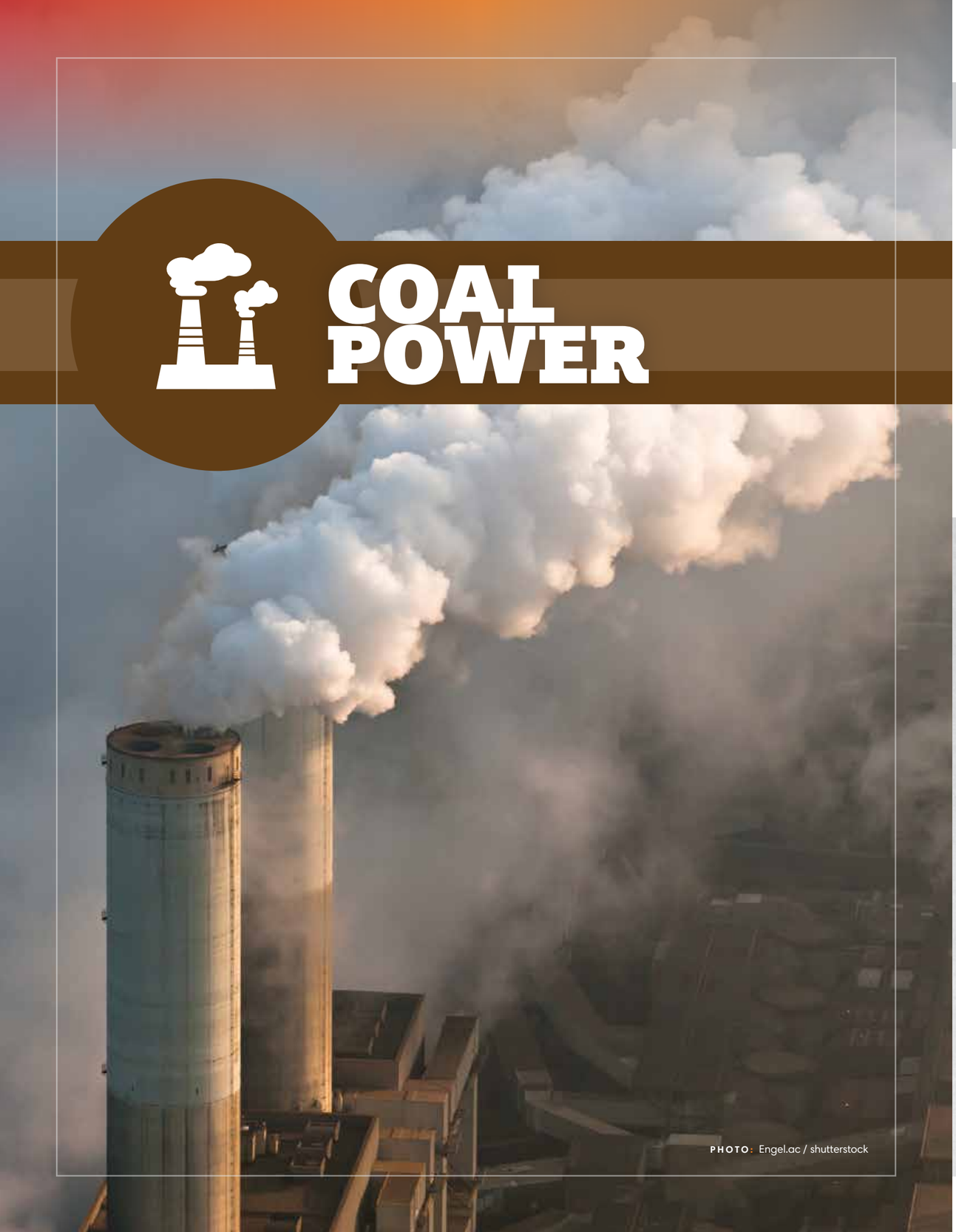


PHOTO: Engel.ac / shutterstock

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

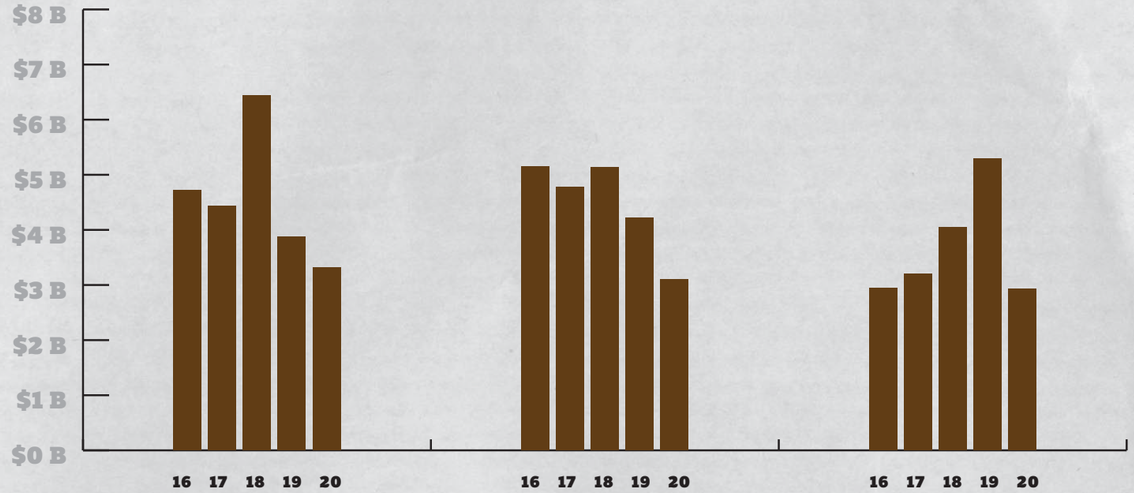
A small but growing number of banks have adopted best practice coal power policies, which include prohibiting funding for all companies developing new coal plants, both new and current clients. These restrictions are yet to be adopted by the sector's biggest funders.

WORST BANKS BY TOTAL COAL POWER FINANCING (2016–2020)

BANK OF CHINA
POLICY SCORE:
0 OUT OF **32**

ICBC
POLICY SCORE:
0 OUT OF **32**

CHINA CITIC BANK
POLICY SCORE:
0.5 OUT OF **32**



LEAGUE TABLE - *Banking on Coal Power*

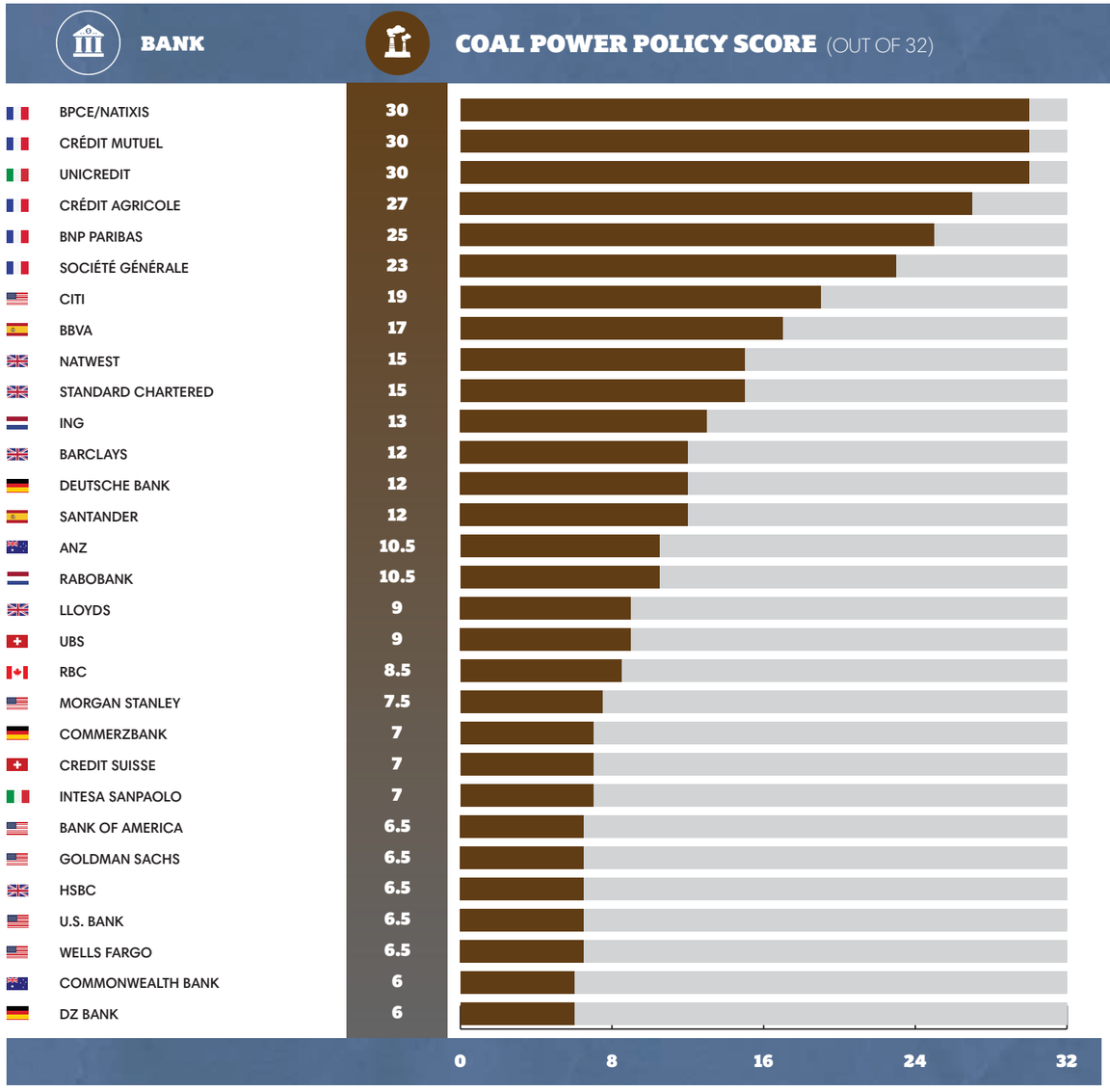
Bank financing for 30 top coal power companies

RANK	BANK	TOTAL 2016-2020	2020	2020 COMPARED TO 2016
1	BANK OF CHINA	$22.785 B	$3.320 B	→
2	ICBC	$22.372 B	$3.097 B	→
3	CHINA CITIC BANK	$18.415 B	$2.929 B	→
4	AGRICULTURAL BANK OF CHINA	$16.067 B	$3.455 B	→
5	CHINA CONSTRUCTION BANK	$15.876 B	$2.487 B	→
6	PING AN	$13.455 B	$2.381 B	↗
7	CHINA MERCHANTS BANK	$12.373 B	$2.486 B	→
8	SHANGHAI PUDONG DEVELOPMENT BANK	$9.587 B	$1.575 B	→
9	INDUSTRIAL BANK	$8.566 B	$1.668 B	↗
10	CHINA EVERBRIGHT BANK	$7.939 B	$1.667 B	→
11	CITI	$5.754 B	$1.049 B	↗
12	MUFG	$5.728 B	$1.052 B	→
13	MIZUHO	$4.181 B	$796 M	→
14	BARCLAYS	$4.076 B	$763 M	↗
15	JPMORGAN CHASE	$3.417 B	$648 M	↗
16	BANK OF AMERICA	$3.212 B	$841 M	↗
17	HSBC	$3.187 B	$550 M	↗
18	CREDIT SUISSE	$3.097 B	$578 M	→
19	BANK OF COMMUNICATIONS	$3.075 B	$484 M	→
20	POSTAL SAVINGS BANK OF CHINA	$2.873 B	$881 M	↗
21	WELLS FARGO	$2.556 B	$619 M	↗
22	SMBC GROUP	$2.125 B	$779 M	↗
23	STANDARD CHARTERED	$2.113 B	$400 M	↗
24	SCOTIABANK	$1.805 B	$326 M	↗
25	RBC	$1.773 B	$509 M	↗
26	MORGAN STANLEY	$1.687 B	$139 M	→
27	UBS	$1.558 B	$46 M	→
28	GOLDMAN SACHS	$1.498 B	$428 M	↗
29	CHINA MINSHENG BANK	$1.452 B	$732 M	↗
30	BNP PARIBAS	$1.404 B	$171 M	→
31	STATE BANK OF INDIA	$1.373 B	$350 M	→
32	CRÉDIT AGRICOLE	$1.035 B	$390 M	↗
33	TRUIST	$986 M	$408 M	↗
34	TD	$872 M	$233 M	→
35	ANZ	$744 M	$109 M	→
36	U.S. BANK	$697 M	$340 M	↗
37	DEUTSCHE BANK	$488 M	$48 M	→
38	SANTANDER	$393 M	-	→
39	SUMI TRUST	$366 M	$226 M	↗
40	INTESA SANPAOLO	$245 M	-	→
41	BBVA	$183 M	$27 M	↗
42	COMMERZBANK	$135 M	$44 M	↗
43	COMMONWEALTH BANK	$124 M	-	→
43	NAB	$124 M	-	→
45	SOCIÉTÉ GÉNÉRALE	$124 M	-	→
46	UNICREDIT	$60 M	-	→
47	WESTPAC	$50 M	-	→
48	DZ BANK	$46 M	-	→
48	LLOYDS	$46 M	-	→
50	SBERBANK	$44 M	$17 M	↗
51	NATWEST	$23 M	-	→
52	BPCE/NATIXIS	$9 M	$4 M	↗
	BANK OF MONTREAL	-	-	—
	CIBC	-	-	—
	CRÉDIT MUTUEL	-	-	—
	DANSKE BANK	-	-	—
	ING	-	-	—
	NORDEA	-	-	—
	RABOBANK	-	-	—
	SHINHAN	-	-	—
	GRAND TOTAL	**$212.174 B**	**$39.052 B**	→

POLICY SCORES - *Coal Power*

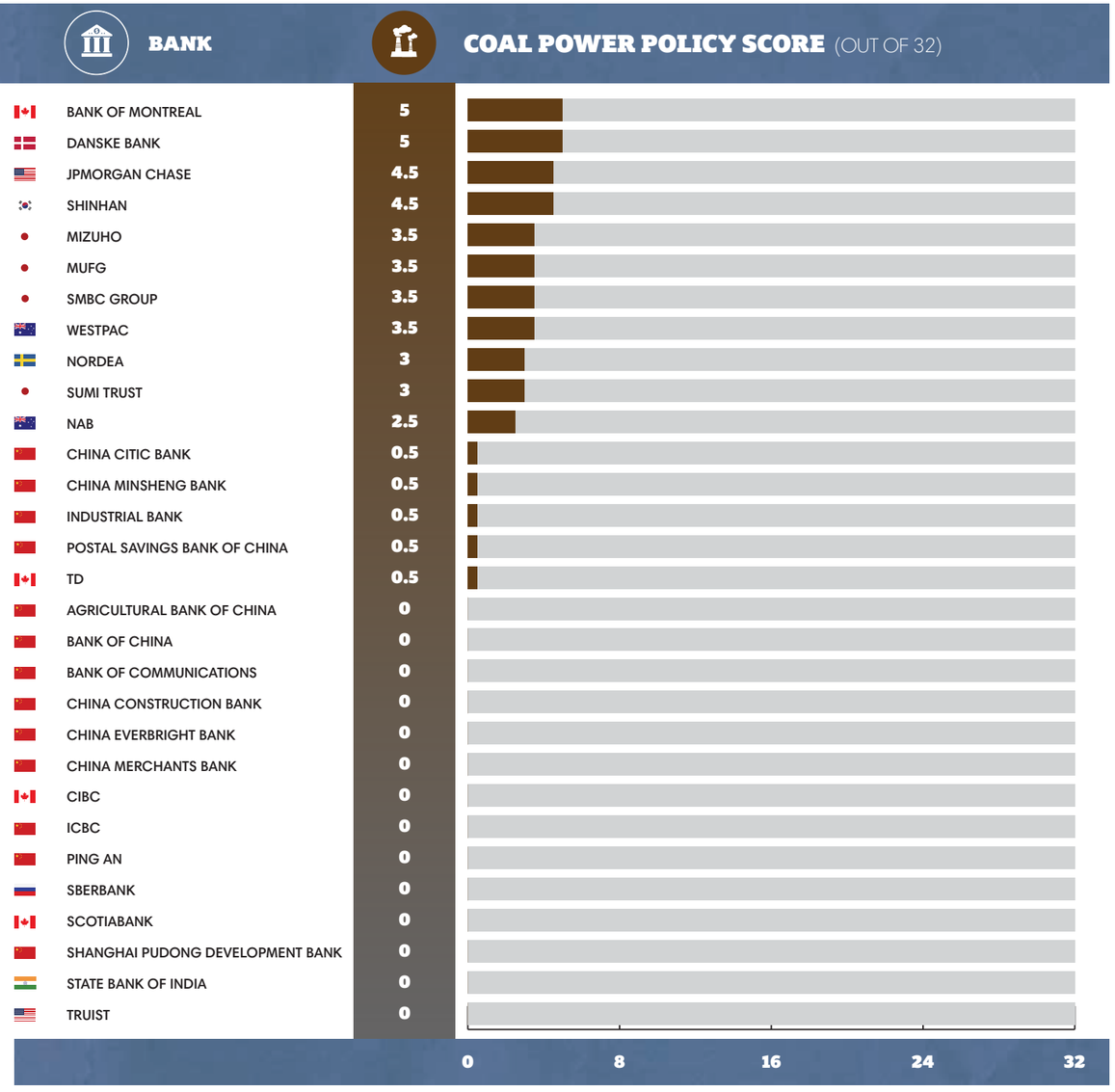
See page **145** for the scoring criteria.

BANK	COAL POWER POLICY SCORE (OUT OF 32)
BPCE/NATIXIS	30
CRÉDIT MUTUEL	30
UNICREDIT	30
CRÉDIT AGRICOLE	27
BNP PARIBAS	25
SOCIÉTÉ GÉNÉRALE	23
CITI	19
BBVA	17
NATWEST	15
STANDARD CHARTERED	15
ING	13
BARCLAYS	12
DEUTSCHE BANK	12
SANTANDER	12
ANZ	10.5
RABOBANK	10.5
LLOYDS	9
UBS	9
RBC	8.5
MORGAN STANLEY	7.5
COMMERZBANK	7
CREDIT SUISSE	7
INTESA SANPAOLO	7
BANK OF AMERICA	6.5
GOLDMAN SACHS	6.5
HSBC	6.5
U.S. BANK	6.5
WELLS FARGO	6.5
COMMONWEALTH BANK	6
DZ BANK	6



COAL POWER POINTS EARNED COAL POWER POINTS NOT EARNED

BANK	COAL POWER POLICY SCORE (OUT OF 32)
BANK OF MONTREAL	5
DANSKE BANK	5
JPMORGAN CHASE	4.5
SHINHAN	4.5
MIZUHO	3.5
MUFG	3.5
SMBC GROUP	3.5
WESTPAC	3.5
NORDEA	3
SUMI TRUST	3
NAB	2.5
CHINA CITIC BANK	0.5
CHINA MINSHENG BANK	0.5
INDUSTRIAL BANK	0.5
POSTAL SAVINGS BANK OF CHINA	0.5
TD	0.5
AGRICULTURAL BANK OF CHINA	0
BANK OF CHINA	0
BANK OF COMMUNICATIONS	0
CHINA CONSTRUCTION BANK	0
CHINA EVERBRIGHT BANK	0
CHINA MERCHANTS BANK	0
CIBC	0
ICBC	0
PING AN	0
SBERBANK	0
SCOTIABANK	0
SHANGHAI PUDONG DEVELOPMENT BANK	0
STATE BANK OF INDIA	0
TRUIST	0



COAL POWER POINTS EARNED COAL POWER POINTS NOT EARNED

CASE STUDY
Jawa 9 and 10

Jawa 9 and 10 is a 2,000-megawatt coal power project proposed to be built in Indonesia's Banten province, an area already saturated with coal plants. Reports have highlighted the horrendous air pollution and associated respiratory and skin diseases affecting the local population.[181] Modelling of health impacts has estimated that Jawa 9 and 10 will contribute to 4,700 premature deaths over its operating lifetime.[182] Over the years of development, local fisherfolk have had to go increasingly further offshore to catch fish, and worry another coal power plant will only exacerbate the problem.[183]

The pollution and other impacts caused by Jawa 9 and 10 would be especially egregious given that much of the electricity produced by Jawa 9 and 10 may go unused. Indonesia's electricity demand was estimated to come in 9.7% below expectations in 2020,[184] and the Jawa-Bali grid, where Jawa 9 and 10 is located, was projected to be oversupplied by up to 41.5%.[185]

The total cost of Jawa 9 and 10 is estimated at around $3.4 billion, and the sponsors of the project are the Korea Electric Power Company (KEPCO), Indonesia's state utility Perusahaan Listrik Negara (PLN), and the private Indonesian company Barito Pacific. KEPCO decided to invest in Jawa 9 and 10 despite the fact that a pre-feasibility study required by the Korean government estimated that the project could have a lifetime negative profitability of $43.58 million, meaning a potential $7 million loss for KEPCO.[186]

In July 2020, a syndicate of banks from across Asia, including **Bank of China**, came together on a $2.5 billion, 15-year loan to fund this massive polluting coal power plant.[187]

CASE STUDY
Matarbari

The Matarbari coal projects are part of a proposed power complex on the remote Matarbari Island, in Cox's Bazar district on the southeastern coast of Bangladesh. The first power plant, Matarbari Phase I, is being developed by Coal Power Generation Company Bangladesh Limited (CPGCBL) and Sumitomo Corporation, and is already under construction. Matarbari Phase II will likely be built by Sumitomo Corporation, Toshiba, and IHI Corporation of Japan. The third proposed plant is Kohelia, a Sembcorp and CPGCBL project. The three projects together will add up to 3,100 megawatts of coal power capacity.[188]

While construction on Matarbari Phase I has already started, there is a chance that the Matarbari Phase II and Kohelia power plants will be canceled under the proposed new energy plan from Bangladesh's Ministry of Power, Energy and Mineral Resources. If the plan is approved, all but five coal projects across the country will be canceled.[189]

Impacts from the construction of Matarbari Phase I are reportedly already being felt by local communities and would be further aggravated by the construction of the Matarbari Phase II and Kohelia plants. Families have been displaced by the land acquisition process, have lost traditional livelihoods in salt cultivation and shrimp farming, and say they have, to date, not been adequately compensated.[190] Construction of the plant has blocked water gates and drainage systems, contributing to the waterlogging of 22 villages and the drowning of five children.[191] In addition, pollution from Matarbari Phase I and II and Kohelia is projected to contribute to over 10,000 premature deaths over the projects' operational period.[192]

Despite these impacts and the political risk faced by these projects, Japan International Cooperation Agency (JICA) provided finance for Matarbari Phase I and was also asked to provide finance for Phase II, and **SMBC Group** is acting as financial advisor for Matarbari Phase I and the Kohelia project.[193]

CASE STUDY
EMBA Hunutlu

EMBA Hunutlu is a 1,320-megawatt coal power plant under construction in southern Turkey.[194] The plant is located in the country's Iskenderun Bay area, which is already suffering from air pollution caused by industrial facilities including a gas power plant, two coal power plants, and a steel factory.[195] Three new coal plants are proposed or under construction, of which EMBA Hunutlu is closest to completion.[196] Once operational, EMBA Hunutlu will run on 2.8 million tons of imported coal per year and will emit more than 200 million tons of CO_2 during its projected lifespan.[197]

The entire Iskenderun Bay area, including the two million inhabitants in the nearby city of Adana, will be affected by the increased air pollution coming from EMBA Hunutlu. Studies estimate that its operations will contribute to 2,000 deaths over its 40-year lifetime.[198] EMBA Hunutlu will likely also have a severe impact on the Yumurtalik biodiversity hotspot, which is a reproduction zone for marine turtles that are protected by three different international conventions.[199]

The project is a joint venture between China's Shanghai Electric Power Company, Avic-International Project Engineering Company, and two Turkish investors.[200] It is expected to cost $1.7 billion and is partly financed by the China Development Bank, **ICBC**, and **Bank of China** via a 15-year loan.[201] EMBA Hunutlu is one of China's largest investments in Turkey and is a project under China's Belt and Road Initiative.[202] In the summer of 2020, more than 20 NGOs called on the Chinese banks behind the project to withdraw.[203]

PHOTOS: Dhemas Reviyanto Atmodjo / TrendAsia; Melvinas Prianada / TrendAsia

FINANCED EMISSIONS
And The Road to Glasgow

The banks evaluated in this report are among the world's major drivers of climate chaos. Their single biggest contribution to climate change is their financing of fossil fuels, which this report has detailed. Banks' most urgent task in fighting the climate crisis is therefore ending support for the expansion of fossil fuels and committing to a 1.5°C-aligned phase-out of fossil fuel financing. On that score, while banks have taken some important steps, especially on coal, their policies remain insufficient, as this report has also shown.

The current wave of bank commitments to "net zero by 2050," as well as related policies like measuring and disclosing financed emissions, must be seen in this context. These steps are no substitute for, and must not delay adoption of, policies on fossil fuels. No bank making a climate commitment for 2050 should be taken seriously unless it also acts on fossil fuels in 2021 — banks must immediately end support for fossil expansion, and commit to the date by which their fossil financing will reach zero.[204] Any bank that makes a net zero by 2050 commitment and treats that as a license to continue with fossil fuel financing business as usual should, and will, be seen as greenwashing. (While it is beyond the scope of this report, the same applies to bank financing of deforestation, given that deforestation is the second-leading cause of climate change after fossil fuels.[205])

Furthermore, no additional analysis is necessary for banks to know that curbing their fossil fuel financing will reduce their financed emissions, and in fact it is the most reliable and shovel-ready way for them to do so. While establishing financed emissions standards will be important going forward, the climate simply will not offer us a grace period while these are implemented.

In assessing financed emissions commitments — of which "net zero by 2050" is currently the most visible element — we should recall where "zero" and "2050" come from. At the Paris climate conference in December 2015, the climate movement, led by island nations and other communities on the front lines of the climate crisis, raised the world's ambition and established staying below 1.5°C temperature rise as a global goal enshrined in the Paris Agreement itself, winning a commitment for a special Intergovernmental Panel on Climate Change (IPCC) report on meeting that goal.[206] In October 2018, that special report underlined the moral urgency of limiting global warming to a maximum of 1.5°C and established that the most prudent pathway for doing so requires global emissions to be almost halved from 2010 levels by 2030, and brought to effectively zero by 2050.[207]

To limit global warming to 1.5°C, every major emitter must align its emissions trajectory with those benchmarks. That includes global financial institutions, especially given the Paris Agreement's aim of "making finance flows consistent with a pathway towards low greenhouse gas emissions."[208] The current wave of "net zero by 2050" commitments represents a tacit acknowledgement by banks that they too are major emitters. This is long overdue. In fact, for years banks have resisted acknowledging their harmful climate impact (their contributions to climate change) at all, preferring to instead focus almost entirely on climate risk (their vulnerability to climate change).[209]

It is also vital to interrogate the "net" in "net zero." The 2018 IPCC report notes that some degree of negative emissions will be necessary for climate stability. But, as an important recent report on net zero from a coalition of climate justice groups, including Indigenous Environmental Network, reminds us, "Right now, the only approaches to deliver real carbon removal are based in nature: ecosystem restoration and ecological management of working forests, croplands, and grasslands."[210] The report, "Chasing Carbon Unicorns," calls for "real zero" as a north star: "reducing emissions to as close to zero as possible and using ecological approaches to remove residual emissions." In fact, a precautionary approach to trajectory-setting demands exactly this: banks must not rely on negative-emissions technologies which we simply cannot assume will succeed at scale (and bank regulators must ensure that banks do not rely on hypothetical future technologies).[211]

In practice, the need for some degree of negative emissions has been seized on by corporations as an excuse to delay real cuts in emissions, to set emissions reduction targets that fall far short of what the science demands, to rely on assumptions about future carbon capture that are absurd on their face, and to lock in emissions sacrifice zones. Furthermore, many of these corporations — including many of the banks in the scope of this report — are actively fueling deforestation, destroying the single most crucial natural carbon sink.[212] (The next section explores this critical issue of the "net" in "net zero" in more detail.)

If long-term financed emissions commitments are to be more than a fig leaf for delayed action on climate change, they must urgently be supplemented to actually bring banks in line with a 1.5°C-aligned trajectory. "Principles for Paris-Aligned Financial Institutions," released in September 2020 by more than 60 climate and rights groups from around the world, offers a number of criteria for assessing financed emissions policies. The following presents an initial analysis of the current state of play, based on those Paris Principles, with the clear takeaway being that banks' present policies fall dangerously short.

continued on page **110** »

PHOTO: Engel.ac / shutterstock

- **Commitment to zero out financed emissions.**

  Banks must commit to zeroing out their financed emissions by 2050 at the latest.

  As detailed above, this is one of the areas where banks have been most active, with 17 banks of the 60 in the scope of this report making "net zero by 2050" commitments. And indeed, banks are major emitters, and they must zero out their emissions by 2050 at the latest. The shortcomings are in delaying cuts in emissions, and in dangerous reliance on the "net" in "net zero."

- **Intermediate commitment to cut financed emissions.**

  Banks' financed emissions must decline sharply year-on-year from 2021 onward, and they must make interim commitments of at least halving their financed emissions by 2030 at the latest.

  It is not only the endpoint of the emissions curve that matters — so does the area under the curve. We are long past the time for any further grace periods; serious cuts in emissions are necessary starting immediately, with 2030 a crucial midterm checkpoint.

  Furthermore, banks' intermediate commitments — like the commitments of all major emitters — must be made in absolute terms, to ensure they are doing their part to cut global greenhouse gas emissions. While intensity commitments may be a stepping-stone to absolute emissions commitments, they are not a substitute.

  NatWest and **Lloyds** have committed to cutting climate impact in half by 2030.

- **Disavowal of discredited "net" schemes: credits or offsets that violate human rights, particularly the rights of Indigenous Peoples; excuse continued fossil emissions; or rely on unfeasible schemes or hypothetical technologies.**

  As noted above and explored further in the next section, the "net" in "net zero" is being treated by some fossil fuel companies as a license to set emissions targets that fall short of what the science demands, based on copious offsetting or absurd assumptions about future carbon-capture schemes. The scaling up of carbon markets amplifies the threat. Almost no bank has so far disavowed such schemes, though we have seen a pair of limited steps in the right direction. In a resolution not yet ratified by shareholders at press time, **HSBC** proposes to use scenarios "which are not overly reliant on negative emissions technologies."[213] **Barclays**, the #1 banker of fossil fuels in Europe by a 31% margin, has declared that it aims to not rely on negative-emissions technologies that do not already exist.[214]

- **Commitment to drop clients that don't align with a 1.5°C trajectory.**

  Banks must require all fossil fuel clients to publish plans to align their emissions trajectories to align with 1.5°C, including immediately ending expansion of fossil fuels and committing to time-bound fossil fuel exit strategies. And banks must commit to drop clients that do not do so.

  A number of banks, including **Crédit Agricole**, have policies of this sort regarding their coal clients. On oil and gas, so far only **NatWest** has made any commitment along these lines; while its pledge to drop major oil and gas clients that do not align with the Paris Agreement is promising, the criteria have so far not been made public.

- **Measure and disclose financed emissions.**

  As noted above, while no further analysis is needed for banks to know that fossil fuel financing is a central source of their financed emissions, and the climate does not offer a grace period on cuts to emissions while standards are established, it will be important to set up and strengthen financed emissions methodologies going forward. Fifteen of the 60 banks in this report are now members of the Partnership for Carbon Accounting Financials (PCAF), the leading finance industry–led methodology for measuring and disclosing absolute financed emissions; **Morgan Stanley** is a member of the steering committee.[215] Going forward, PCAF's scope must expand from lending and investing to also include banks' capital markets activity. **Barclays** has committed to account for the impact of its underwriting as well as its lending and investing, and also to account for the full value of revolving credit facilities, regardless of how much clients draw them down. But the fact that **Barclays** remains Europe's biggest banker of fossil fuels by a 31% margin, illustrates how much immediate work it still has to do.

  By contrast, measurement methodologies that are limited to emissions intensity are insufficient; as noted above, intensity-based intermediate commitments are insufficient, and what a bank measures determines what it will cut.

As UN Secretary-General António Guterres said in February 2021, "Long-term commitments must be matched by immediate actions to launch the decade of transformation that people and planet so desperately need."[216] This applies to banks just as it does to any major emitter. The UN Climate Change Conference in Glasgow in November, COP26, is a clear deadline for demonstrating that net zero by 2050 policies are not greenwashing by pairing them with immediate action on fossil fuels.

Aerial View of the Almeda Wildfire in Southern Oregon Talent Phoenix Northern California.
PHOTO: Aarboursabroad / shutterstock

POLICY ASSESSMENT - *Financed Emissions*

WEAKEST STRONGEST

	BANK	COMMITMENT TO ZERO OUT FINANCED EMISSIONS	INTERMEDIATE COMMITMENT TO CUT FINANCED EMISSIONS	DISAVOWAL OF "NET" SCHEMES THAT VIOLATE RIGHTS, EXCUSE CONTINUED FOSSIL EMISSIONS, OR RELY ON UN-FEASIBLE SCHEMES OR HYPOTHETICAL TECHNOLOGIES	COMMITMENT TO DROP CLIENTS THAT DON'T ALIGN WITH A 1.5°C TRAJECTORY**	FINANCED EMISSIONS MEASUREMENT AND DISCLOSURE	COMMITMENT TO ALIGN WITH PARIS AGREEMENT VIA OTHER INITIATIVES
CONTINENTAL EUROPE	BBVA	Pledged to publish long-term target for aligning with Paris temperature goals (CCCA)	Pledged to publish intermediate target for aligning with Paris temperature goals (CCCA) and set SBT	None	None	Committed to measurement and disclosure as prerequisite to setting SBT; PACTA to measure emissions intensity of sector(s)	PRB signatory
	BNP PARIBAS	Pledged to publish long-term target for aligning with Paris temperature goals (CCCA)	Some sector-based intermediate commitment(s)*; committed to set SBT	None	Committed to drop coal clients that don't meet strict time-bound critieria	Committed to measurement and disclosure as prerequisite to setting SBT; PACTA to measure emissions intensity of sector(s)	PRB signatory
	BPCE/NATIXIS	Pledged to publish long-term target for aligning with Paris temperature goals (CCCA)	Pledged to publish intermediate target for aligning with Paris temperature goals (CCCA)	None	Committed to drop coal clients that don't meet strict time-bound critieria	Committed to measurement of carbon footprint; methodology not detailed	PRB signatory
	COMMERZBANK	Pledged to set target by 2022 (German CCCA)	Pledged to publish interim commitments by 2022 (German CCCA) and set SBT	None	None	Committed to measurement and disclosure as prerequisite to setting SBT; committed to measure and report emissions intensity	PRB signatory
	CRÉDIT AGRICOLE	Pledged to publish long-term target for aligning with Paris temperature goals (CCCA)	Pledged to publish intermediate target for aligning with Paris temperature goals (CCCA) and set SBT	None	Committed to drop coal clients that don't meet strict time-bound critieria	P9XCA methodology for carbon footprinting; committed to measurement and disclosure as prerequisite to setting SBT	PRB signatory
	CRÉDIT MUTUEL	None	Cut financed emissions 15% by 2023 (corporate client, asset management, and insurance portfolios)	None	Committed to drop coal clients that don't meet strict time-bound critieria	Initial financed emissions-related disclosure; methodology not detailed	PRB signatory
	CREDIT SUISSE	Net zero by 2050	Pledged to publish interim commitments and set SBT	None	None	Committed to measurement and disclosure as a prerequisite to setting SBT	PRB signatory
	DANSKE BANK	Pledged to set target by 2023	None	None	None	PCAF member, not yet disclosed	PRB signatory
	DEUTSCHE BANK	Pledged to set target by 2022 (German CCCA)	Pledged to publish interim commitments by 2022 (German CCCA)	None	None	PCAF member, not yet disclosed	PRB signatory
	DZ BANK	None	None	None	None	None	PRB signatory
	ING	Pledged to publish long-term target for aligning with Paris temperature goals (CCCA)	Some sector-based intermediate commitment(s)*; committed to set SBT	None	None	Committed to measurement and disclosure as prerequisite to setting SBT; Terra/PACTA to measure emissions intensity of sector(s)	PRB signatory
	INTESA SANPAOLO	None	None	None	None	None	PRB signatory
	NORDEA BANK	Net zero by 2050 (lending and investment)	Cut lending and investment emissions 40-50% by 2030	None	None	PCAF member, not yet disclosed	PRB signatory
	RABOBANK	None	Pledged to publish interim commitments by 2022	None	None	PCAF member, initial disclosure	PRB signatory
	SANTANDER	Net zero by 2050 (lending, advisory or investment services)	Pledged to publish interim commitments	None	None	Committed to measurement and disclosure; methodology not detailed	PRB signatory
	SBERBANK	None	None	None	None	None	PRB signatory
	SOCIÉTÉ GÉNÉRALE	Pledged to publish long-term target for aligning with Paris temperature goals (CCCA)	Some sector-based intermediate commitment(s)*; committed to set SBT	None	Committed to drop coal clients that don't meet strict time-bound critieria	Committed to measurement and disclosure as prerequisite to setting SBT; PACTA to measure emissions intensity of sector(s)	PRB signatory
	UBS	None	None	None	None	None	PRB signatory
	UNICREDIT	None	None	None	Committed to drop coal clients that don't meet strict time-bound critieria	PACTA to measure emissions intensity of sector(s)	PRB signatory

To download this chart with sources, visit: BankingonClimateChaos.org

	BANK	COMMITMENT TO ZERO OUT FINANCED EMISSIONS	INTERMEDIATE COMMITMENT TO CUT FINANCED EMISSIONS	DISAVOWAL OF "NET" SCHEMES THAT VIOLATE RIGHTS, EXCUSE CONTINUED FOSSIL EMISSIONS, OR RELY ON UN-FEASIBLE SCHEMES OR HYPOTHETICAL TECHNOLOGIES	COMMITMENT TO DROP CLIENTS THAT DON'T ALIGN WITH A 1.5°C TRAJECTORY**	FINANCED EMISSIONS MEASUREMENT AND DISCLOSURE	COMMITMENT TO ALIGN WITH PARIS AGREEMENT VIA OTHER INITIATIVES
UNITED KINGDOM	BARCLAYS	Net zero by 2050 (all financing activity, including underwriting)	Cut energy absolute emissions 15% by 2025; additional sector-based intermediate commitment*	Barclays "do[es] not wish to rely on … future net-negative technologies"	None	Committed to measure financed emissions from lending and underwriting, using PCAF and/or proprietary BlueTrack methodology; initial baseline disclosed	PRB signatory
	HSBC	Net zero by 2050 or sooner	Pledged to publish interim commitments in 2022; committed to set SBT	In a resolution not yet ratified by shareholders at press time, HSBC proposes to use scenarios "which are not overly reliant on negative emissions technologies"	None	Committed to measurement and disclosure as prerequisite to setting SBT; committed to measure and disclose some intensity metrics; PACTA to measure emissions intensity of sector(s)	
	LLOYDS	None	Cut financed emissions more than 50% by 2030; additional sector-based intermediate commitment*	None	None	PCAF member; initial absolute emissions disclosed	PRB signatory
	NATWEST	Pledged to publish long-term target for aligning with Paris temperature goals (CCCA)	Cut climate impact of lending 50% by 2030; committed to set sector-specific commitments by 2022; committed to set SBT	None	Committed to drop major oil and gas producers that don't have a credible plan to align with the Paris Agreement by 2021; criteria not detailed	PCAF member; initial absolute emissions disclosed; committed to measurement and disclosure as prerequisite to setting SBT	PRB signatory
	STANDARD CHARTERED	Net zero by 2050	Pledged to publish intermediate target for aligning with Paris temperature goals (CCCA) and set SBT	None	None	Committed to develop a methodology to measure financed emissions; committed to measurement and disclosure as prerequisite to setting SBT; PACTA to measure emissions intensity of sector(s)	PRB signatory
CANADA	BANK OF MONTREAL	Net zero by 2050 (lending)	Pledged to publish interim commitments	None	None	PCAF member, not yet disclosed	PRB signatory
	CIBC	None	None	None	None	PCAF member, not yet disclosed	
	RBC	Net zero by 2050 (lending)	Pledged to publish interim commitments	None	None	PCAF member, not yet disclosed	
	SCOTIABANK	None	Pledged to publish interim commitments	None	None	Committed to measure emissions intensity of loan book and underwriting activities, and disclose on progress once targets are set	
	TD	Net zero by 2050	Pledged to publish interim commitments	None	None	PCAF member, not yet disclosed	
UNITED STATES	BANK OF AMERICA	Net zero by before 2050	Pledged to publish interim commitments	None	None	PCAF member, not yet disclosed	
	CITI	Net zero by 2050	Pledged to publish interim commitments by 2022	None	None	PCAF member, not yet disclosed	PRB signatory
	GOLDMAN SACHS	Net zero by 2050	Pledged to publish interim commitments	None	None	Committed to measurement and disclosure; methodology not detailed	PRB signatory
	JPMORGAN CHASE	None***	Pledged to publish interim commitments	None	None	Committed to measure clients' carbon intensity	
	MORGAN STANLEY	Net zero by 2050	Pledged to publish interim commitments	None	None	PCAF steering committee member, not yet disclosed	
	TRUIST	None	None	None	None	None	
	U.S. BANK	None	None	None	None	None	
	WELLS FARGO	Net zero by 2050	Pledged to publish interim commitments by 2022	None	None	Committed to measurement and disclosure; methodology not detailed but will be within a year	
AUSTRALIA	ANZ	None	Pledged to publish interim commitments by 2021	None	None	Committed to measurement and disclosure; PACTA to measure emissions intensity of sector(s)	PRB signatory
	COMMONWEALTH BANK	Net zero by 2050 (business lending)	Pledged to publish interim commitments	None	None	Committed to measurement and disclosure of emissions intensity of business lending portfolio, with initial baseline disclosed	PRB signatory
	NAB	Net zero by 2050 (lending)	Pledged to publish intermediate target for aligning with Paris temperature goals (CCCA)	None	None	Committed to measure and disclose emissions from lending portfolio; initial disclosure of emissions from lending in Australia, with transparent methodology	PRB signatory
	WESTPAC	None	Some sector-based intermediate commitment(s)*; committed to set SBT	None	None	Committed to analyze financed emissions profile and report annually; methodology not detailed; committed to measurement and disclosure as prerequisite to setting SBT	PRB signatory

	BANK	COMMITMENT TO ZERO OUT FINANCED EMISSIONS	INTERMEDIATE COMMITMENT TO CUT FINANCED EMISSIONS	DISAVOWAL OF "NET" SCHEMES THAT VIOLATE RIGHTS, EXCUSE CONTINUED FOSSIL EMISSIONS, OR RELY ON UN-FEASIBLE SCHEMES OR HYPOTHETICAL TECHNOLOGIES	COMMITMENT TO DROP CLIENTS THAT DON'T ALIGN WITH A 1.5°C TRAJECTORY**	FINANCED EMISSIONS MEASUREMENT AND DISCLOSURE	COMMITMENT TO ALIGN WITH PARIS AGREEMENT VIA OTHER INITIATIVES
JAPAN	MIZUHO	None	None	None	None	Measures and discloses emissions from large-scale power generation projects financed	PRB signatory
JAPAN	MUFG	None	None	None	None	None	PRB signatory
JAPAN	SMBC GROUP	None	None	None	None	None	PRB signatory
JAPAN	SUMI TRUST	None	None	None	None	None	PRB signatory
SOUTH KOREA	SHINHAN	Zero Carbon Drive: net zero by 2050	Zero Carbon Drive: cut emissions 38.6% by 2030; committed to set SBT	None	None	PCAF member, not yet disclosed; committed to measurement and disclosure as prerequisite to setting SBT	PRB signatory
INDIA	STATE BANK OF INDIA	None	None	None	None	None	
CHINA	AGRICULTURAL BANK OF CHINA	None	None	None	None	None	
CHINA	BANK OF CHINA	None	None	None	None	None	
CHINA	BANK OF COMMUNICATIONS	None	None	None	None	None	
CHINA	CHINA CITIC BANK	None	None	None	None	None	
CHINA	CHINA CONSTRUCTION BANK	None	None	None	None	None	
CHINA	CHINA EVERBRIGHT BANK	None	None	None	None	None	
CHINA	CHINA MERCHANTS BANK	None	None	None	None	None	
CHINA	CHINA MINSHENG BANK	None	None	None	None	None	
CHINA	ICBC	None	None	None	None	None	PRB signatory
CHINA	INDUSTRIAL BANK	None	None	None	None	None	PRB signatory
CHINA	PING AN	None	None	None	None	None	
CHINA	POSTAL SAVINGS BANK OF CHINA	None	None	None	None	None	
CHINA	SHANGHAI PUDONG DEVELOPMENT BANK	None	None	None	None	None	

* Sector-based intensity and/or financing reduction targets emerging out of a financed emissions or alignment analysis.

** Banks that have qualified for a strong phase-out for coal mining and power (based on scope and thresholds) are noted in this category.

*** JPMorgan Chase has committed to set emission targets for its financing in key sectors, and to "explor[e] ways to most effectively address all emissions, including Scope 3 emissions," without committing to zero out the climate impact of its financing.[217]

CCCA = Collective Commitment to Climate Action
PACTA = Paris Agreement Capital Transition Assessment
PCAF = Parntership for Carbon Accounting Financials
PRB = Principles for Responsible Banking
SBT = Science-Based Target

HUMAN RIGHTS

CREATIVE EMISSIONS REDUCTIONS

As this report has shown, a growing number of banks have pledged to align their operations with the Paris Agreement's goals of keeping warming well below a 2°C global increase in temperature and as close to 1.5°C as possible — or, at the very least, many banks say that they support these goals. As described in the previous section, for some, this has resulted in "net zero by 2050" financed emissions commitments. Until proven otherwise, the fossil fuel financing figures in this report sow doubt that these commitments will actually result in real emissions reductions. One key issue is to the extent to which banks rely on carbon credits and offsets to meet their goals.[218]

This creative accounting of greenhouse gas emissions has a history at least as long as that of international agreements to combat climate change. It starts with the 1997 Kyoto Protocol, the world's first international plan for limiting climate change, which many observers have judged to be an abject failure.[219] There are many studies pointing to the fact that although the Kyoto Protocol attempted to limit greenhouse gas emissions, it also allowed carbon credits and offsets to be used in lieu of absolute emissions reductions.[220]

Under the Kyoto Protocol's Clean Development Mechanism (CDM), carbon offsets are generated from industrialized countries' investments in emissions reduction projects in non-industrialized countries. These offsets, each supposedly equaling one ton of CO_2, can be traded, sold, or used by industrialized countries to meet their emissions reduction targets under the Kyoto Protocol.[221] The CDM has not promoted sustainable development (as required by the Kyoto Protocol), but has been used only as a cheap way of avoiding actual emissions reductions. As such, it has also contributed to major human rights violations and, some say, a "new carbon colonialism."[222]

The European Union's Kyoto Protocol trading scheme, the emissions trading system (EU-ETS), has also struggled to demonstrate real emissions reductions. In its first eight years, the EU's emissions targets were too low and the system generated a massive surplus of carbon credits, glutting the market, with little to no incentive to reduce emissions any further.[223]

Despite the failures of the Kyoto Protocol and its carbon trading schemes in actually reducing greenhouse gas emissions, the parties to the United Nations Framework Convention on Climate Change (UNFCCC) came up with the Paris Agreement, codifying many of its same approaches in the successor to the failed Kyoto Protocol. The goals of the Paris Agreement to keep global warming to well below 2°C and as close to 1.5°C as possible are laudable and represent an important milestone for global climate action, but nonetheless, a major difference between the Kyoto Protocol and the Paris Agreement is that instead of legally binding emissions reductions, emissions reductions commitments under the Paris Agreement are voluntary.[224]

To many observers, the most concerning aspect of the Paris Agreement is Article 6, a major but so far unresolved provision, which aims to set up a new global carbon market system, consisting primarily of carbon credits and offsets that can be applied to meet a country's emissions reduction pledge.[225] Article 6 also allows the use of non-market-based approaches such as technology transfer and capacity-building measures.

These systems of carbon credits and offsets have never been proven to reduce overall emissions, and thus run contrary to the very purpose of the UNFCCC, the Kyoto Protocol, and the Paris Agreement: to reduce anthropogenic greenhouse gas emissions.[226]

The Intercept reported that Shell's chief climate change adviser boasted that his company and its lobbying association were responsible in part for Article 6 of the Paris Agreement, saying: "We have had a process running for four years for the need of carbon unit trading to be part of the Paris agreement. We can take some credit for the fact that Article 6 is even there at all."[227]

Many industries, including the fossil fuel industry, claim to support the Paris Agreement and Article 6 in particular because it allows them to continue business as usual while seemingly accepting limitations on emissions. As an example of the type of project that could be sanctioned under Article 6, a CDM project in Brazil allowed steel producers to sell credits because they run their blast furnaces on charcoal instead of fossil fuels — while the eucalyptus plantations they use for charcoal lead to land grabbing, destroy biodiversity, and cause desertification, and the generation of charcoal and its use in fact lead to higher carbon emissions overall.[228]

PHOTO: Sarah LittleRedFeather / Honor the Earth

CARBON MARKET VIOLATIONS OF HUMAN RIGHTS

As the Brazilian steel example suggests, human rights violations are also commonly associated with these market-based mechanisms. Carbon credits are referred to in the Paris Agreement as internationally transferable mitigation outcomes (ITMOs), and with this vague nomenclature, the parties are free to pursue ineffective mitigation "solutions." These ITMOs can include such traps as "clean" coal or "nature-based solutions," a corporate co-opted term for credits based on land use change, which can severely threaten secure land tenure and food security for Indigenous Peoples, resulting in a severance of their relationship to their land, languages, and cultures.

There is no such thing as "clean coal" or bioenergy that is emissions-free.[229] Geo-engineering proposes solutions that threaten what remains of nature's systems and cycles, and carbon capture and storage proposes injecting carbon dioxide into the ground, threatening to poison ever-shrinking sources of groundwater.[230] These false solutions are at best a distraction from what needs to be done — real emissions reductions — and at worst pose significant risks to or violate human rights, such as food security and land use rights.[231]

UN programs to reduce emissions from deforestation known as REDD and REDD+[232] have been shown to do little to reduce emissions, in part because although forest landscapes naturally store carbon, forest emissions reductions are not permanent.[233]

Moreover, the Center for International Forestry Research found that there is a chronic failure of REDD+ social and environmental safeguards, and that REDD+ leads to the perverse incentive of violating the rights of Indigenous Peoples, most notably their right of Free, Prior and Informed Consent.[234] This flies in the face of the IPCC's recognition that Indigenous Peoples' secure land tenure and governance maintains the healthiest forests in the world without their commodification or outside interference.[235]

The market solution under Article 6 of the Paris Agreement, the Sustainable Development Mechanism, will likely lead to violations of human rights and the rights of Indigenous Peoples. The equivalent CDM, still in effect from the Kyoto Protocol, has been shown to lead to the violation of the rights of thousands. For example, the CDM has allowed carbon offsets for hydroelectric dams that displace entire communities of Indigenous and non-Indigenous rural peoples, as well as destroying whole ecosystems and biodiversity.[236] The allowance of offsets for nuclear power also violates the rights of communities that suffer severe health effects for generations from uranium milling and mining for nuclear fuel, such as the Navajo and Pueblo peoples of the Southwestern United States.[237]

Indigenous Peoples are particularly vulnerable as they are closest to the land and Mother Earth, the source of their traditional knowledge and their spiritual and material life.[238] Ironically, parties to the Paris Agreement also recognized the contribution traditional Indigenous knowledge can make, and established the Local Communities and Indigenous Peoples' Platform, a body that would share traditional knowledge and best practices with the parties.[239] Hopefully decision makers will heed the platform's recommendations, making it more than just a website, though this remains to be seen.

For hundreds of years, Indigenous Peoples have survived genocide, settler colonialism, purposeful pandemics, and forced relocation and assimilation. Their spiritual lives have been condemned as "Satanist" and evil, and their ceremony, song, and dance were (and in some places still are) outlawed.[240] In spite of this extreme oppression, many Indigenous Peoples have maintained their worldviews and relationship to Mother Earth. The 2010 World Peoples' Conference on Climate Change and the Rights of Mother Earth energized this fundamental relationship, reaffirming that Mother Earth is the source of all life and recognizing that predatory, economic colonialism was wreaking "great destruction, degradation and disruption of Mother Earth, putting life as we know it today at risk through phenomena such as climate change."[241]

Traditional Indigenous Peoples have kept their faith throughout the climate crisis, calling for healthy forests and the preservation of biodiversity and recognizing that we are another species in the web of life — a species that is itself under threat of extinction.

PHOTOS: March on Enbridge; Melvinas Priananda / TrendAsia

CONCLUSION AND DEMANDS

The window for keeping the rise in global temperature to 1.5°C is growing smaller. With most of the major fossil fuel companies still projecting significant increases in fossil fuel production in the next decade, cutting emissions to zero — now recognized as a necessity to avoid complete climate chaos — will be exceedingly difficult.[242] Even now, plans for vast expansion of fossil fuels, including coal, are being advanced in the face of a true existential threat to humanity.[243] The corruption and greed of the fossil fuel industry knows no bounds.

Just as the climate catastrophes of 2020 cannot be ignored, nor can the fact that the last decade was the hottest in history.[244] Record losses of biodiversity, droughts, the melting of polar ice, and rising seas displacing entire island populations all speak to climate chaos.[245]

There is a growing recognition, particularly among young people, that action on climate change can no longer be postponed. A recent poll taken by the UN Development Program and Oxford University found that over two-thirds of 14- to 18-year-olds across the 50 countries polled, including high-polluting countries such as the United States and Russia, see climate change as a global emergency.[246]

The new president of the United States, Joseph Biden, rejoined the Paris Agreement and took steps to address climate change within his first days in office. He suspended all fossil fuel development on public lands and waters, stopped the Keystone XL pipeline, and vowed to invest in massive renewable energy job creation in rebuilding the nation's economy.[247] International actors such as the International Monetary Fund, the World Bank, the European Commission, the European Investment Bank and the World Economic Forum are similarly calling for post-pandemic investment in job creation in renewable energy projects, and touting the view that a post-pandemic world will have an opportunity to address the gross income inequality not only among individuals but also among countries.[248]

Without a doubt, a post-pandemic world in 2021 will continue to be fraught with contradictions, corporate greed, lies, confusions, and distractions. In January 2021, three major European banks — **BNP Paribas**, **Credit Suisse**, and **ING** — announced a commitment to stop financing the trade of Amazon oil but did not address their other fossil fuel financing, such as extraction, leading Marlon Vargas, president of the Confederation of Indigenous Nationalities of the Ecuadorian Amazon to observe, "The banks that finance this destruction are complicit in what is a genocidal threat for us, and an existential threat for humanity and our planet."[249]

If humanity, along with other species, is to survive, fossil fuels must be kept in the ground and banks must redirect their financing into clean and renewable energy.[250] This must lead to real emission reductions at source, without the offsets implied in "net zero." It is long past time that banks cease their destructive financing and investments.

In the countdown to the long-awaited climate talks in Glasgow currently planned for November 2021, the need for climate action is more urgent than ever. As banks are increasingly recognized for their role in fueling climate chaos — and thus their responsibility to do something about it — they must join the drumbeat of policy commitments made in these crucial months. If not, they will continue to be complicit in the greater suffering of humanity and bring life as we know it closer to its destruction.

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:

- Prohibit all financing for all fossil fuel expansion projects and for all companies expanding fossil fuel extraction and infrastructure along the whole value chain.
- Commit to phase out all financing for fossil fuel extraction, combustion, and infrastructure, on an explicit timeline that is aligned with limiting global warming to 1.5°C, starting with coal mining and coal power, as well as financing for existing projects and companies active in tar sands oil, Arctic oil and gas, offshore oil and gas, fracked oil and gas, and LNG. As part of this commitment, require fossil fuel clients to publish plans to phase out fossil fuel activity on a 1.5°C-aligned timeline.
- Commit to measure, disclose, and set targets to zero out the absolute climate impact of their overall financing activities on a 1.5°C-aligned timeline, including short-, medium-, and long-term targets.
- 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.[251] Prohibit all financing for projects and companies that abuse human rights, including Indigenous rights.

PHOTO: Marcio Jose Bastos Silva / shutterstock; Rawpixel.com / shutterstock

APPENDICES

BANKS INCLUDED

This analysis covers the world's 60 biggest relevant banks by assets, according to the S&P Global Market Intelligence ranking from April 2020.[252] Banks with less than $500 million in league credit for economy-wide financing from 2016-2020 were deemed irrelevant to this analysis and thus excluded. This resulted in the exclusion of three Japanese banks: Japan Post Bank (11th largest by assets), Norinchukin Bank (28th largest by assets), and Resona Holdings (56th largest by assets).

BANK	ABBREVIATED NAME USED IN THIS REPORT	COUNTRY OF HEADQUARTERS	RANK BY TOTAL ASSETS
INDUSTRIAL AND COMMERCIAL BANK OF CHINA	ICBC	CHINA	1
CHINA CONSTRUCTION BANK		CHINA	2
AGRICULTURAL BANK OF CHINA		CHINA	3
BANK OF CHINA		CHINA	4
MITSUBISHI UFJ FINANCIAL GROUP	MUFG	JAPAN	5
HSBC		UNITED KINGDOM	6
JPMORGAN CHASE		UNITED STATES	7
BANK OF AMERICA		UNITED STATES	8
BNP PARIBAS		FRANCE	9
CRÉDIT AGRICOLE		FRANCE	10
SUMITOMO MITSUI FINANCIAL GROUP (SMFG)	SMBC GROUP	JAPAN	12
CITIGROUP	CITI	UNITED STATES	13
WELLS FARGO		UNITED STATES	14
MIZUHO		JAPAN	15
SANTANDER		SPAIN	16
SOCIÉTÉ GÉNÉRALE		FRANCE	17
BARCLAYS		UNITED KINGDOM	18
GROUPE BPCE/NATIXIS	BPCE/NATIXIS	FRANCE	19
POSTAL SAVINGS BANK OF CHINA		CHINA	20
DEUTSCHE BANK		GERMANY	21
BANK OF COMMUNICATIONS		CHINA	22
ROYAL BANK OF CANADA	RBC	CANADA	23
LLOYDS BANKING GROUP	LLOYDS	UNITED KINGDOM	24
TORONTO-DOMINION BANK	TD	CANADA	25
CHINA MERCHANTS BANK		CHINA	26
INTESA SANPAOLO		ITALY	27
ING		NETHERLANDS	29
GOLDMAN SACHS		UNITED STATES	30
INDUSTRIAL BANK		CHINA	31
CRÉDIT MUTUEL		FRANCE	32
UBS		SWITZERLAND	33
UNICREDIT		ITALY	34
CHINA MINSHENG BANK		CHINA	35
NATWEST (FORMERLY ROYAL BANK OF SCOTLAND)		UNITED KINGDOM	36
SHANGHAI PUDONG DEVELOPMENT BANK		CHINA	37
CHINA CITIC BANK		CHINA	38
MORGAN STANLEY		UNITED STATES	39
SCOTIABANK		CANADA	40
CREDIT SUISSE		SWITZERLAND	41
BANCO BILBAO VIZCAYA ARGENTARIA	BBVA	SPAIN	42
STANDARD CHARTERED		UNITED KINGDOM	43
COMMONWEALTH BANK OF AUSTRALIA	COMMONWEALTH BANK	AUSTRALIA	44
CHINA EVERBRIGHT BANK		CHINA	45
BANK OF MONTREAL		CANADA	46
RABOBANK		NETHERLANDS	47
AUSTRALIA & NEW ZEALAND BANKING GROUP	ANZ	AUSTRALIA	48
DZ BANK		GERMANY	49
NORDEA BANK	NORDEA	FINLAND	50
WESTPAC BANKING CORPORATION	WESTPAC	AUSTRALIA	51
NATIONAL AUSTRALIA BANK	NAB	AUSTRALIA	52
PING AN INSURANCE GROUP*	PING AN	CHINA	53
DANSKE BANK		DENMARK	54
STATE BANK OF INDIA		INDIA	55
SUMITOMO MITSUI TRUST HOLDINGS	SUMI TRUST	JAPAN	57
CANADIAN IMPERIAL BANK OF COMMERCE	CIBC	CANADA	58
U.S. BANCORP	U.S. BANK	UNITED STATES	59
SBERBANK	SBERBANK	RUSSIA	60
SHINHAN FINANCIAL GROUP	SHINHAN	SOUTH KOREA	61
COMMERZBANK		GERMANY	62
TRUIST FINANCIAL (FORMERLY BB&T AND SUNTRUST)	TRUIST	UNITED STATES	63

*Due to data availability constraints, Ping An is the only one of the Chinese banks that is included at the group level: Ping An Insurance (Group) Company of China, Ltd., which includes subsidiaries Ping An Bank and Ping An Securities.

TOP FOSSIL FUEL EXPANSION COMPANIES

TOP UPSTREAM OIL & GAS COMPANIES	MILLION METRIC TONS OF CO_2
GAZPROM	**13,953**
EXXONMOBIL	**11,801**
NATIONAL IRANIAN OIL COMPANY	**10,986**
SAUDI ARAMCO	**9,593**
PETROBRAS	**7,269**
QATAR PETROLEUM	**6,689**
CHEVRON	**6,465**
ROYAL DUTCH SHELL	**6,453**
OCCIDENTAL PETROLEUM	**5,798**
CHINA NATIONAL PETROLEUM CORPORATION (CNPC) / PETROCHINA	**5,719**
TOTAL	**4,786**
BP	**4,342**
TURKMENGAS	**4,028**
ABU DHABI NATIONAL OIL COMPANY	**4,007**
EOG RESOURCES	**3,567**
CHINA NATIONAL OFFSHORE OIL CORPORATION (CNOOC)	**3,370**
ENI	**3,288**
EQUINOR	**3,077**
ROSNEFT	**2,747**
EQT CORPORATION	**2,666**
KUWAIT PETROLEUM CORPORATION	**2,632**
CONOCOPHILLIPS	**2,511**
SOUTHWESTERN ENERGY	**2,420**
PEMEX	**2,385**
CONCHO RESOURCES	**2,269**
OVINTIV	**2,220**
DEVON ENERGY	**2,205**
CHESAPEAKE ENERGY	**2,168**
COMSTOCK RESOURCES	**2,052**
NOBLE ENERGY	**2,010**
PIONEER NATURAL RESOURCES	**1,995**
CANADIAN NATURAL RESOURCES (CNRL)	**1,978**

TOP UPSTREAM OIL & GAS COMPANIES	MILLION METRIC TONS OF CO_2
CIMAREX ENERGY	**1,953**
SINOPEC (CHINA PETROLEUM & CHEMICAL CORPORATION)	**1,951**
PETROLIAM NASIONAL BERHAD (PETRONAS)	**1,942**
HESS CORPORATION	**1,890**
RANGE RESOURCES	**1,794**
ANTERO RESOURCES	**1,754**
TOURMALINE OIL	**1,700**
CNX RESOURCES	**1,596**
REPSOL	**1,575**
PDVSA	**1,533**
BASRA OIL COMPANY	**1,533**
LUKOIL	**1,532**
NATIONAL FUEL GAS	**1,473**
DIAMONDBACK ENERGY	**1,462**
NORTH OIL COMPANY	**1,367**
WPX ENERGY	**1,291**
NOVATEK	**1,234**
APACHE CORPORATION	**1,214**
VINE OIL & GAS	**1,205**
INPEX	**1,199**
ROCKCLIFF ENERGY	**1,196**
PARSLEY ENERGY	**1,194**
MURPHY OIL	**1,120**
CENOVUS ENERGY	**1,106**
MARATHON OIL	**1,102**
STATE OIL COMPANY OF THE AZERBAIJAN REPUBLIC (SOCAR)	**1,032**
OIL & NATURAL GAS CORPORATION (ONGC)	**954**
WOODSIDE PETROLEUM	**932**

Expansion is defined as projected production to 2050 from projects that had not received a final investment decision (FID) as of end of September 2020. For fracked oil and gas, it is projected production to 2050 from wells that had not been drilled as of end of September 2020.

Emissions are calculated by Oil Change International based on projected production figures from Rystad Energy AS and emissions factors from 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Emissions are from combustion of oil and gas only and do not include methane or other production and processing emissions.[253]

KEY OIL AND GAS MIDSTREAM EXPANSION COMPANIES	
CHENIERE ENERGY	NEXTDECADE
ENBRIDGE	PEMBINA PIPELINE
ENERGY TRANSFER	PHILLIPS 66
ENTERPRISE PRODUCTS	PLAINS ALL AMERICAN PIPELINE
EQM MIDSTREAM PARTNERS	TRANS ADRIATIC PIPELINE (TAP)
KINDER MORGAN	TC ENERGY
MAGELLAN MIDSTREAM PARTNERS	TRANSPORTADORA DE GAS DEL SUR (TGS)
MARATHON PETROLEUM CORPORATION	

List compiled from reporting on key oil and gas midstream expansion projects and the companies behind them.

KEY COAL MINING EXPANSION COMPANIES	
COAL INDIA	SIBERIAN COAL ENERGY COMPANY (SUEK)
CHINA ENERGY INVESTMENT CORPORATION	BUMI RESOURCES
(CHN ENERGY)	ARCH RESOURCES
YANKUANG GROUP	POLSKA GRUPA ENERGETYCZNA (PGE)
SHAANXI COAL AND CHEMICAL INDUSTRY	EXXARO RESOURCES
GLENCORE	BANPU

Data from urgewald's Global Coal Exit List.[254]

KEY COAL POWER EXPANSION COMPANIES	COAL POWER EXPANSION PLANS (ATTRIBUTABLE MEGAWATTS)
CHINA ENERGY INVESTMENT CORPORATION (CHN ENERGY)	**42,613**
CHINA DATANG	**33,695**
CHINA HUANENG GROUP	**28,680**
NTPC	**13,616**
POWER FINANCE CORPORATION	**12,000**
PERUSAHAAN LISTRIK NEGARA (PLN / PERSERO)	**10,535**
ELEKTRIK ÜRETIM A.Ş. GENEL MÜDÜRLÜŞÜ (EUAS)	**8,340**
KOREA ELECTRIC POWER CORPORATION (KEPCO)	**7,245**
IL&FS ENERGY DEVELOPMENT COMPANY (IEDCL)	**6,600**
ESKOM	**6,400**
GCM RESOURCES	**6,000**
VIETNAM ELECTRICITY CORPORATION (EVN)	**5,134**
BANGLADESH POWER DEVELOPMENT BOARD	**4,370**
ELECTRICITY GENERATING AUTHORITY OF THAILAND (EGAT)	**3,983**
VIETNAM OIL AND GAS GROUP (PETROVIETNAM)	**3,600**

Data from urgewald's Global Coal Exit List.[255]

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)	7,350.45	2,857.67
2	SUNCOR ENERGY	7,607.72	1,401.64
3	EXXONMOBIL	5,457.85	1,070.96
4	CENOVUS ENERGY	4,150.15	1,520.03
5	HUSKY ENERGY	1,308.29	966.36
6	MEG ENERGY	1,207.30	1,014.01
7	IMPERIAL OIL	1,766.24	399.58
8	CHINA NATIONAL OFFSHORE OIL CORPORATION (CNOOC)	1,729.03	349.41
9	TOTAL	1,299.49	276.65
10	CHINA NATIONAL PETROLEUM CORPORATION (CNPC) / PETROCHINA	362.79	618.78
11	CONOCOPHILLIPS	674.79	242.50
12	BP	281.56	459.58
13	ATHABASCA OIL CORPORATION	307.38	415.31
14	CHEVRON	569.02	83.74
15	TECK RESOURCES	541.59	29.61
16	OSUM	250.28	266.58
17	CONNACHER OIL AND GAS	416.72	70.33
18	ROYAL DUTCH SHELL	284.51	41.87
19	INTERNATIONAL PETROLEUM CORPORATION (IPC)	2.89	291.26
20	SINOPEC (CHINA PETROLEUM & CHEMICAL CORPORATION)	247.67	32.21
21	SUNSHINE OILSANDS	88.70	143.99
22	JAPAN PETROLEUM EXPLORATION COMPANY (JAPEX)	172.79	35.95
23	STRATHCONA RESOURCES	106.66	97.97
24	KOREA NATIONAL OIL CORPORATION	132.75	64.54
25	PARAMOUNT RESOURCES	-	117.18
26	GRIZZLY OIL SANDS	-	79.26
27	PTT EXPLORATION AND PRODUCTION	-	65.34
28	VALUE CREATION	-	45.28
29	PROSPER PETROLEUM	-	30.56
30	EVEREST CANADIAN RESOURCES	-	28.51
	ENBRIDGE	KEY PIPELINE COMPANY	
	KINDER MORGAN	KEY PIPELINE COMPANY	
	PLAINS ALL AMERICAN PIPELINE	KEY PIPELINE COMPANY	
	TC ENERGY	KEY PIPELINE COMPANY	
	TRANS MOUNTAIN CORPORATION	KEY PIPELINE COMPANY	

TAR SANDS POLICY SCORING CRITERIA

POINT VALUE	EXPANSION
	Tar sands projects
3	» **Strong exclusion** - Prohibits financing for new and expanded tar sands projects, including transportation infrastructure.
2	» **Moderate exclusion** - Prohibits financing for some tar sands projects, including some extraction projects and some transportation infrastructure (for instance, where the prohibition applies only to pipelines exclusively dedicated to tar sands).
1	» **Weak exclusion** - Prohibits financing for tar sands extraction projects only.
0	» **None**
	Companies expanding tar sands
4	» **Strong exclusion** - Prohibits financing for all companies with tar sands expansion plans.
2	» **Weak exclusion** - Prohibits financing for some companies with tar sands expansion plans.
0	» **None**

POINT VALUE	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. Phase-out commitments must cover the entire sector, or at least all companies with >5% exposure.
1.5	» **Reduction** - Commits to reduce financing for or credit exposure to some 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 that have up to 20% of their reserves in tar sands, or earn up to 5% of their revenue from tar sands, including infrastructure companies.
4	» **Moderate exclusion threshold** - Prohibits financing for companies that have 20-40% of their reserves in tar sands.
2	» **Weak exclusion threshold** - Prohibits financing for companies that have >40% of their reserves in tar sands, or for companies at a lower threshold but where tar sands infrastructure is not considered in the percentage.
0.5	» **Enhanced due diligence** - Conducts enhanced due diligence for transactions related to tar sands. The enhanced due diligence commitment must be specific to tar sands.
0	» **None**

Data from Rystad Energy AS, with reserves data as of October 2020. Provided by Oil Change International.

*Projected expansion refers to projected production to 2050 from projects that were yet to reach FID as of the end of September 2020.

TOP ARCTIC OIL & GAS COMPANIES

RANK	COMPANY	ARCTIC RESERVES CURRENTLY UNDER PRODUCTION (MILLIONS OF BARRELS OF OIL EQUIVALENT)	PROJECTED ARCTIC EXPANSION* (MILLIONS OF BARRELS OF OIL EQUIVALENT)
1	GAZPROM	90,561.98	36,274.51
2	NOVATEK	11,582.85	6,923.48
3	ROSNEFT	8,400.07	1,384.11
4	LUKOIL	3,578.56	1,642.46
5	WINTERSHALL DEA	2,665.11	711.27
6	CONOCOPHILLIPS	1,903.06	1,043.90
7	TOTAL	1,820.50	553.16
8	OMV	1,439.21	746.47
9	CHINA NATIONAL PETROLEUM CORPORATION (CNPC) / PETROCHINA	1,529.68	508.02
10	EQUINOR	1,082.11	755.02
11	HILCORP ENERGY	902.71	149.88
12	CHINA NATIONAL OFFSHORE OIL CORPORATION (CNOOC)	528.23	476.38
13	EXXONMOBIL	952.06	48.75
14	PETORO	524.17	366.54
15	RUSGAZDOBYCHA	375.96	435.34
16	JAPAN OIL, GAS AND METALS NATIONAL CORPORATION (JOGMEC)	396.17	357.28
17	OIL & NATURAL GAS CORPORATION (ONGC)	694.11	-
18	VAAR ENERGI	275.71	247.57
19	SILK ROAD FUND	495.72	15.66
20	ZARUBEZHNEFT (NESTRO)	463.75	5.77
21	OIL SEARCH	-	424.69
22	REPSOL	0.01	409.96
23	PETROVIETNAM	320.11	33.35
24	ENI	199.71	107.35
25	NORILSK MINING	299.71	-
26	MITSUI	132.06	119.09
27	BASHNEFT	186.19	47.99
28	SINOPEC (CHINA PETROLEUM & CHEMICAL CORPORATION)	225.32	-
29	INDIAN OIL	214.91	-
30	OIL INDIA	214.91	-

Data from Rystad Energy AS, with reserves data as of October 2020. Provided by Oil Change International.

*Projected expansion refers to projected production to 2050 from projects that were yet to reach FID as of the end of September 2020.

ARCTIC OIL & GAS POLICY SCORING CRITERIA

POINT VALUE	EXPANSION
	Arctic oil and gas projects
3	» **Strong exclusion** - Prohibits financing for Arctic oil and gas production projects, onshore and offshore, including infrastructure projects.
2	» **Moderate exclusion** – Prohibits all financing for Arctic oil and gas production projects onshore and offshore.
1	» **Weak exclusion** – Prohibits some financing for Arctic oil and gas projects, or prohibits all financing for projects only in a certain area (such as prohibition limited to offshore areas only, or limited to projects in the Arctic refuge).
0	» **None**
	Companies expanding Arctic oil and gas
4	» **Strong exclusion** - Prohibits financing for all companies with Arctic oil and gas expansion plans.
2	» **Weak exclusion** - Prohibits financing for some companies with Arctic oil and gas expansion plans.
0	» **None**

POINT VALUE	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. Phase-out commitments must cover the entire sector, or at least all companies with >5% exposure.
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 that have up to 20% of their reserves in Arctic oil and gas, or earn up to 5% of their revenue from Arctic oil and gas.
4	» **Moderate exclusion threshold** - Prohibits financing for companies that have 20-50% of their reserves in Arctic oil and gas.
2	» **Weak exclusion threshold** - Prohibits financing for companies that have >50% of their reserves in Arctic oil and gas.
0.5	» **Enhanced due diligence** - Conducts enhanced due diligence for transactions related to Arctic oil and gas. The enhanced due diligence commitment must be specific to Arctic oil and gas.
0	» **None**

TOP OFFSHORE OIL & GAS COMPANIES

RANK	COMPANY	OFFSHORE RESERVES CURRENTLY UNDER PRODUCTION (MILLIONS OF BARRELS OF OIL EQUIVALENT)	PROJECTED OFFSHORE EXPANSION* (MILLIONS OF BARRELS OF OIL EQUIVALENT)
1	SAUDI ARAMCO	93,795.06	13,805.95
2	NATIONAL IRANIAN OIL COMPANY	59,717.41	16,341.72
3	QATAR PETROLEUM	28,261.60	20,576.32
4	EXXONMOBIL	21,389.15	10,184.09
5	PETROBRAS	13,044.69	18,447.10
6	ROYAL DUTCH SHELL	14,348.01	9,786.98
7	TOTAL	13,314.37	9,568.16
8	ABU DHABI NATIONAL OIL COMPANY	16,389.69	6,103.93
9	GAZPROM	3,613.28	14,728.78
10	BP	10,337.08	7,155.49
11	EQUINOR	9,500.82	5,595.68
12	ENI	7,536.16	6,570.52
13	PEMEX	7,779.11	5,716.30
14	CHINA NATIONAL OFFSHORE OIL CORPORATION (CNOOC)	6,610.01	6,167.39
15	CHEVRON	8,094.51	4,153.94
16	PETRONAS	6,284.98	4,101.99
17	OIL & NATURAL GAS CORPORATION (ONGC)	5,475.05	3,234.47
18	PETORO	6,487.06	1,399.81
19	INPEX	4,583.47	3,072.35
20	STATE OIL COMPANY OF THE AZERBAIJAN REPUBLIC (SOCAR)	3,231.03	2,257.63
21	CHINA NATIONAL PETROLEUM CORPORATION (CNPC) / PETROCHINA	1,736.65	2,632.68
22	HESS CORPORATION	1,177.66	2,818.89
23	WOODSIDE PETROLEUM	1,159.95	2,545.23
24	MITSUI	1,989.45	1,622.39
25	KUWAIT PETROLEUM CORPORATION	2,548.82	1,034.49
26	PTT EXPLORATION AND PRODUCTION	1,943.58	1,639.63
27	MUBADALA DEVELOPMENT COMPANY	3,333.57	172.93
28	NIGERIAN NATIONAL PETROLEUM CORPORATION	2,423.21	887.97
29	PERTAMINA	1,543.20	1,677.69
30	CONOCOPHILLIPS	2,178.84	518.94

Data from Rystad Energy AS, with reserves data as of October 2020. Provided by Oil Change International.

*Projected expansion refers to projected production to 2050 from projects that were yet to reach FID as of the end of September 2020.

OFFSHORE OIL & GAS POLICY SCORING CRITERIA

POINT VALUE	EXPANSION
	Offshore oil and gas projects
3	» **Strong exclusion** - Prohibits financing for all offshore oil and gas projects, including associated infrastructure.
1	» **Weak exclusion** - Prohibits financing for some offshore oil and gas projects.
0	» **None**
	Companies expanding offshore oil and gas
4	» **Strong exclusion** - Prohibits all financing for all companies with offshore oil and gas expansion plans.
2	» **Weak exclusion** - Prohibits financing for some companies with offshore oil and gas expansion plans.
0	» **None**

POINT VALUE	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. Phase-out commitments must cover the entire sector, or at least all companies with >5% exposure.
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 financing for all companies with offshore oil and gas operations.
5	» Strong exclusion threshold – Prohibits financing for companies that have <50% of their reserves in offshore oil and gas operations.
2	» **Weak exclusion threshold** – Prohibits financing for companies that have >50% of their reserves in offshore oil and gas, or where thresholds are defined with notable loopholes.
0.5	» **Enhanced due diligence** – Conducts enhanced due diligence for transactions related to offshore oil and gas. The enhanced due diligence commitment must be specific to offshore oil and gas.
0	» **None**

TOP FRACKED OIL & GAS COMPANIES

RANK	COMPANY	SHALE RESERVES CURRENTLY UNDER PRODUCTION (MILLIONS OF BARRELS OF OIL EQUIVALENT)	PROJECTED SHALE EXPANSION* (MILLIONS OF BARRELS OF OIL EQUIVALENT)
1	EXXONMOBIL	3,529.97	18,148.77
2	OCCIDENTAL PETROLEUM	2,296.48	14,328.35
3	CHEVRON	2,136.63	12,713.96
4	EOG RESOURCES	1,924.36	9,672.63
5	EQT CORPORATION	3,048.64	7,589.98
6	SOUTHWESTERN ENERGY	1,319.95	7,497.63
7	OVINTIV	1,947.79	6,187.41
8	CHESAPEAKE ENERGY	1,736.95	5,943.22
9	ANTERO RESOURCES	1,974.51	5,451.50
10	CHINA NATIONAL PETROLEUM CORPORATION (CNPC) / PETROCHINA	738.91	6,586.88
11	DEVON ENERGY	956.19	6,127.33
12	RANGE RESOURCES	1,483.53	5,565.39
13	CONCHO RESOURCES	911.90	5,666.05
14	CIMAREX ENERGY	817.74	5,698.01
15	COMSTOCK RESOURCES	662.55	5,807.23
16	PIONEER NATURAL RESOURCES	1,059.69	5,299.62
17	SHELL	968.40	5,086.27
18	CONOCOPHILLIPS	1,070.85	4,868.91
19	TOURMALINE OIL	776.18	4,897.02
20	CNX RESOURCES	856.13	4,682.85
21	NOBLE ENERGY	818.54	4,716.20
22	NATIONAL FUEL GAS	773.27	4,110.41
23	DIAMONDBACK ENERGY	897.19	3,886.67
24	BP	1,097.07	3,466.96
25	PARSLEY ENERGY	602.66	3,741.88
26	WPX ENERGY	564.92	3,461.16
27	ROCKCLIFF ENERGY	359.22	3,520.47
28	MARATHON OIL	842.59	2,884.64
29	VINE OIL & GAS	322.76	3,361.56
30	CABOT OIL AND GAS	1,213.71	2,457.50

Data from Rystad Energy AS, with reserves data as of October 2020. Provided by Oil Change International.

*Projected expansion refers to projected production to 2050 from wells that had not yet been drilled as of the end of September 2020.

FRACKED OIL & GAS POLICY SCORING CRITERIA

POINT VALUE	EXPANSION
	Fracked oil and gas projects
3	» **Strong exclusion** - Prohibits all financing for new and expanded fracked oil and gas projects, including infrastructure.
2	» **Moderate exclusion** – Prohibits financing for some fracked oil and gas projects, including some extraction projects and some transportation infrastructure (for instance, where the prohibition applies only to pipelines exclusively dedicated to fracked oil and gas)
1	
0	» **Weak exclusion** - Prohibits some financing for some fracked oil and gas projects.
	» **No policy**
	Companies expanding fracked oil and gas
4	
2	» **Strong exclusion** - Prohibits all financing for all companies with fracked oil and gas expansion plans.
0	» **Weak exclusion** - Prohibits financing for some companies with fracked oil and gas expansion plans.
	» **None**

POINT VALUE	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. Phase-out commitments must cover the entire sector, or at least all companies with >5% exposure.
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 financing for all companies with fracked oil and gas operations. 6
5	» Strong exclusion threshold – Prohibits financing for companies with significant fracked oil and gas extraction and infrastructure operations.
4	» **Moderate exclusion threshold** – Prohibits financing for companies that have <50% of their reserves in fracked oil and gas, including some infrastructure companies.
2	» **Weak exclusion threshold** – Prohibits financing for companies that have >50% of their reserves in fracked oil and gas, including some infrastructure companies.
0.5	» **Enhanced due diligence** – Conducts enhanced due diligence for transactions related to fracked oil and gas. The enhanced due diligence commitment must be specific 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)	137.38	18.71
2	QATAR PETROLEUM	62.88	59.92
3	ROYAL DUTCH SHELL	50.33	23.02
4	SEMPRA ENERGY	12.02	46.18
5	CHINA NATIONAL PETROLEUM CORPORATION (CNPC) / PETROCHINA	23.12	31.13
6	TOKYO ELECTRIC POWER COMPANY (TEPCO)	53.76	-
7	VENTURE GLOBAL LNG	-	53.30
8	CHENIERE ENERGY	31.50	18.50
9	CHINA NATIONAL OFFSHORE OIL CORPORATION (CNOOC)	32.38	16.56
10	GOLAR LNG	35.13	13.57
11	ENAGAS	42.55	5.51
12	NEXTDECADE	-	46.50
13	NOVATEK	8.60	37.89
14	EXCELERATE ENERGY	37.40	8.30
15	SINOPEC (CHINA PETROLEUM & CHEMICAL CORPORATION)	20.25	23.80
16	PETRONAS	35.67	8.25
17	EXXONMOBIL	25.20	17.44
18	TOTAL	20.58	18.35
19	OMAN OIL COMPANY	1.27	36.00
20	TOKYO GAS	34.83	1.80
21	BP	13.13	19.33
22	HÖEGH LNG	17.68	14.30
23	PETRONET LNG	22.50	8.87
24	CHEVRON	17.79	11.46
25	TELLURIAN	-	27.60
26	SONATRACH	25.56	-
27	OSAKA GAS	23.01	0.97
28	KUWAIT PETROLEUM CORPORATION	1.19	22.00
29	WOODSIDE PETROLEUM	7.84	14.84
30	H-ENERGY	-	20.50

Data as of October 2020, based on Bloomberg New Energy Finance data.[256]

*Proposed capacity includes projects in planning or pre-filing stages, under regulatory review, or under construction.

LNG POLICY SCORING CRITERIA

POINT VALUE	EXPANSION
	LNG projects
3	» **Strong exclusion -** Prohibits all financing for all LNG projects.
1	» **Weak exclusion** - Prohibits financing for some LNG projects.
0	» **None**
	Companies expanding LNG
4	» **Strong exclusion** - Prohibits financing for all companies with LNG expansion plans.
2	» **Weak exclusion** - Prohibits financing for some companies with LNG expansion plans.
0	» **None**

POINT VALUE	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. Phase-out commitments must cover the entire sector, or at least all companies with >5% exposure.
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.
2	» **Weak exclusion threshold** - Prohibits financing for companies with significant LNG operations where thresholds are defined with notable loopholes.
0.5	» **Enhanced due diligence** - Conducts enhanced due diligence for transactions related to LNG. The enhanced due diligence commitment must be specific to LNG.
0	» **None**

OTHER OIL & GAS POLICY SCORING CRITERIA

POINT VALUE	EXPANSION
	Other oil and gas projects
5	» **Strong exclusion** - Prohibits financing for all other oil and gas projects.
1.5	» **Weak exclusion** - Prohibits financing for some other oil and gas projects, namely conventional oil and gas projects.
0	» **None**
	Companies expanding other oil and gas
7	» **Strong exclusion** - Prohibits financing for all companies with other oil and gas expansion plans.
3	» **Weak exclusion** - Prohibits financing for some companies with other oil and gas expansion plans.
0	» **None**

POINT VALUE	PHASE-OUT / EXCLUSION
	Other oil and gas companies: phase-out
8	» **Strong phase-out** - Commits to phase out all financing for companies with other oil and gas operations on a 1.5°C-aligned timeline.
6	» **Weak phase-out** - Commits to phase out some financing for companies with other oil and gas operations. Phase-out commitments must cover the entire sector, or at least all companies with >5% exposure.
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
10	» **Full exclusion** - Prohibits financing for all companies with other oil and gas operations.
7	» **Strong exclusion threshold** - Prohibits financing for companies with significant other oil and gas operations.
3	» **Weak exclusion threshold** - Prohibits financing for companies with majority other oil and gas operations.
0.5	» **Enhanced due diligence / Equator Principles commitment** – Conducts enhanced due diligence for transactions related to other oil and gas, or has a general environmental and social due diligence policy, or is a signatory to the Equator Principles.
0	» **None**

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TOP COAL MINING COMPANIES

RANK	COMPANY	ANNUAL COAL PRODUCTION (MILLION METRIC TONS)	EXPANSION PLANS?
1	COAL INDIA	572.8	YES
2	CHINA ENERGY INVESTMENT CORPORATION (CHN ENERGY)	510.0	YES
3	YANKUANG GROUP	161.5	YES
4	SHAANXI COAL AND CHEMICAL INDUSTRY	160.2	YES
5	SHANDONG ENERGY GROUP	145.4	YES
6	PEABODY ENERGY CORP	142.1	
7	DATONG COAL MINE GROUP	137.2	YES
8	CHINA NATIONAL COAL GROUP (CHINACOAL)	126.0	YES
9	GLENCORE	123.9	YES
10	SIBERIAN COAL ENERGY COMPANY (SUEK)	106.2	YES
11	BUMI RESOURCES	86.3	YES
12	SHANXI LU'AN MINING INDUSTRY GROUP	85.5	YES
13	JINNENG GROUP	84.5	YES
14	STATE POWER INVESTMENT CORPORATION (SPIC)	81.9	
15	INNER MONGOLIA HUINENG COAL AND ELECTRICITY GROUP	80.0	YES
16	YANGQUAN COAL INDUSTRY GROUP	75.7	YES
17	HENAN ENERGY AND CHEMICAL INDUSTRY GROUP	73.7	YES
18	HUAIHE ENERGY HOLDING GROUP	73.0	
19	ARCH RESOURCES	72.8	YES
20	CHINA HUANENG GROUP	70.9	YES
21	LIAONING ENERGY INDUSTRY HOLDING GROUP	65.3	
22	RWE	64.8	
23	SINGARENI COLLIERIES COMPANY LIMITED (SCCL)	64.0	
24	MURRAY ENERGY	61.8	
25	INNER MONGOLIA YITAI GROUP	60.6	YES
26	SHANXI JINCHENG ANTHRACITE MINING GROUP	59.1	YES
27	HEILONGJIANG LONGMAY MINING HOLDING GROUP	56.2	
28	JIZHONG ENERGY GROUP	54.9	YES
29	ADARO ENERGY	54.4	YES
30	SHANXI COKING COAL GROUP	54.3	YES

Data from urgewald's Global Coal Exit List.[257]

COAL MINING POLICY SCORING CRITERIA

POINT VALUE	EXPANSION
	Coal mining projects
6	» **Strong exclusion** - Prohibits financing for all coal mining projects, including both new mines and expansions of existing mines.
4	» **Moderate exclusion** - Prohibits financing for all new coal mining projects.
2	» **Weak exclusion** - Prohibits some financing for some coal mining projects, such as for greenfield projects only, [258] beyond mountaintop removal (MTR) mines.
0.5	» **MTR mine exclusion** - Prohibits financing for MTR mines.
0	» **None**
	Companies expanding coal mining
8	» **Strong exclusion** - Prohibits financing for all companies with coal mining expansion plans.
4	» **Weak exclusion** - Prohibits financing for some companies with coal mining expansion plans.
0	» **None**

POINT VALUE	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.
4	» **Weak phase-out** - Commits to phase out some financing for companies with coal mining operations, without a stated deadline or with significant other loopholes. Phase-out commitments must cover the entire sector, or at least all companies with >5% exposure.
3	» **Financing reduction** - Commits to reduce financing to 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 financing for all companies with coal mining operations.
8	» **Strong exclusion threshold** - Prohibits financing for companies with <30% of their business activity in coal mining.
5	» **Moderate exclusion threshold** – Prohibits financing for companies with 30-50% of their business activity in coal mining, or prohibits financing at a lower threshold but with significant loopholes.
3	» **Weak exclusion threshold** – Prohibits financing for companies with >50% of their business activity in coal mining, or companies with any MTR operations, or limits coal mining exclusion to new clients.
0.5	» **Enhanced due diligence** – Conducts enhanced due diligence for transactions related to coal mining, or excludes companies with majority MTR operations. The enhanced due diligence commitment must be specific to coal mining or mining at large.
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)	>155,070	197,683
2	CHINA HUANENG GROUP	>100,000	128,680
3	CHINA DATANG	94,450	128,145
4	CHINA HUADIAN	>91,548	106,982
5	NTPC	51,904	65,520
6	STATE POWER INVESTMENT CORPORATION (SPIC)	>35,741	47,510
7	ESKOM	40,170	46,570
8	KOREA ELECTRIC POWER CORPORATION (KEPCO)	34,311	41,556
9	CHINA RESOURCES POWER HOLDINGS	30,790	37,290
10	PERUSAHAAN LISTRIK NEGARA (PLN / PERSERO)	20,750	31,285
11	GUANGDONG ENERGY GROUP	23,270	30,770
12	ZHEJIANG PROVINCIAL ENERGY GROUP	28,048	30,562
13	VIETNAM ELECTRICITY CORPORATION (EVN)	18,516	23,650
14	BEIJING ENERGY HOLDING	11,430	20,882
15	SHAANXI INVESTMENT GROUP	10,185	19,545
16	DUKE ENERGY	16,998	16,998
17	STATE DEVELOPMENT AND INVESTMENT CORPORATION (SDIC)	15,781	16,455
18	ADANI	12,410	15,800
19	SIBERIAN COAL ENERGY COMPANY (SUEK)	14,415	14,415
20	RWE	14,232	14,232
21	DATONG COAL MINE GROUP	>9,110	13,909
22	HEBEI CONSTRUCTION AND INVESTMENT GROUP	11,077	13,837
23	POLSKA GRUPA ENERGETYCZNA (PGE)	13,171	13,661
24	AMERICAN ELECTRIC POWER (AEP)	13,230	13,230
25	CHINA NATIONAL COAL GROUP (CHINACOAL)	10,000	12,218
26	MAHARASHTRA STATE POWER GENERATION COMPANY (MAHAGENCO)	10,170	12,150
27	POWER FINANCE CORPORATION	-	12,000
28	CLP HOLDINGS	11,996	11,996
29	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED (RVUNL)	7,170	11,790
30	ELECTRIC POWER DEVELOPMENT COMPANY (J-POWER)	8,928	11,611

Data from urgewald's Global Coal Exit List.[259]

COAL POWER POLICY SCORING CRITERIA

POINT VALUE	EXPANSION
	Coal power projects
6	» **Strong exclusion -** Prohibits financing for all coal power projects, including both new plants and expansions of existing plants.
4	» **Moderate exclusion** - Prohibits financing for new coal power projects.
2	» **Weak exclusion** - Prohibits financing for some coal power projects.
0	» **None**
	Companies expanding coal power
8	» **Strong exclusion** - Prohibits financing for all companies with coal power expansion plans.
4	» **Weak exclusion** - Prohibits financing for some companies with coal power expansion plans.
0	» **None**

POINT VALUE	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.
4	» **Weak phase-out** - Commits to phase out some financing for companies with coal power operations, without a stated deadline or with other significant loopholes. Phase-out commitments must cover the entire sector, or at least all companies with >5% exposure.
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 <20% of their business activity in coal power.
5	» **Moderate exclusion threshold** – Prohibits financing for companies with 21-50% of their business activity in coal power, or prohibits financing at a lower threshold but with significant loopholes.
3	» **Weak exclusion threshold** – Prohibits financing for companies with >50% of their business activity in coal power, or limits coal power exclusion to new clients.
0.5	» **Enhanced due diligence** – Conducts enhanced due diligence for transactions related to coal power. The enhanced due diligence commitment must be specific to coal power or electricity generation at large.
0	» **None**

OTHER COAL POLICY SCORING CRITERIA

POINT VALUE	EXPANSION
	Other coal projects
3	» **Strong exclusion -** Prohibits financing for all coal infrastructure projects.
1	» **Weak exclusion** - Prohibits financing for some coal infrastructure projects.
0	» **None**
	Companies expanding other coal
4	» **Strong exclusion** - Prohibits financing for all companies with coal infrastructure expansion plans.
2	» **Weak exclusion** - Prohibits financing for some companies with coal infrastructure expansion plans.
0	» **None.**

POINT VALUE	PHASE-OUT / EXCLUSION
	Other coal companies: phase-out
4	» **Strong phase-out** - Commits to phase out all financing for companies with coal infrastructure operations on a 1.5°C-aligned timeline.
2	» **Weak phase-out** - Commits to phase out some financing for companies with coal infrastructure operations. Phase-out commitments must cover the entire sector, or at least all companies with >5% exposure.
1	» **Reduction** - Commits to reduce financing for or credit exposure to companies with coal infrastructure operations.
0	» **None**
	Other coal companies: exclusion
5	» **Full exclusion** - Prohibits all financing for all companies with coal infrastructure operations.
4	» **Strong exclusion threshold** - Prohibits financing for companies with significant coal infrastructure operations.
2	» **Weak exclusion threshold** - Prohibits financing for companies with majority coal infrastructure operations.
0.5	» **Enhanced due diligence** - Conducts enhanced due diligence for transactions related to coal infrastructure.
0	» **None**

PHOTOS: Melvinas Priananda / TrendAsia; Tiara Pertiwi / TrendAsia

ENDNOTES

1 For this and all figures following in the executive summary, see the league tables that follow throughout this report, and www.bankingonclimatechaos.org for the full datasets.

2 Robert McSweeny and Ayesha Tandon, "Global Carbon Project: Coronavirus Causes 'Record Fall' in Fossil-fuel Emissions in 2020," Carbon Brief, 11 December 2020.

3 For this and all figures following in the introduction, see the league tables that follow throughout this report, and www.bankingonclimatechaos.org for the full datasets.

4 Robert McSweeny and Ayesha Tandon, "Global Carbon Project: Coronavirus Causes 'Record Fall' in Fossil-fuel Emissions in 2020," Carbon Brief, 11 December 2020.

5 "World Energy Outlook 2020," International Energy Agency, October 2020.

6 Robert McSweeny and Ayesha Tandon, "Global Carbon Project: Coronavirus Causes 'Record Fall' in Fossil-fuel Emissions in 2020," Carbon Brief, 11 December 2020.

7 See, e.g., David J. Lynch, "With Fed's Encouragement, Corporations Accelerate Debt Binge in Hopes of Riding Out Pandemic," *Washington Post*, 13 May 2020.

8 "Factbox: Pandemic Brings Forward Predictions for Peak Oil Demand," Reuters, 27 November 2020; "Coal," BP.

9 The UN Environment Program's (UNEP) Production Gap Report 2020 says production must decline by 6% per year from 2020–2030. "The Production Gap Report: 2020 Special Report," Stockholm Environment Institute, International Institute for Sustainable Development, Overseas Development Institute, Third Generation Environmentalism (E3G), and UNEP, 2020.

10 See, e.g.: "Sustainable Finance: BNP Paribas, Accelerating a More Sustainable Economy," BNP Paribas, accessed January 2021; "Where You Put Your Money Matters," Bank of the West, 1 May 2020.

11 Indeed, BNP Paribas has boasted of this financing activity; see, e.g., Owen Walker, Stephen Morris and David Keohane, "Can BNP Paribas Beat the Investment Banking Jinx?," *Financial Times*, 1 July 2020.

12 For this and all figures following in the executive summary, see the league tables that follow throughout this report, and www.bankingonclimatechaos.org for the full datasets.

13 Jeff Lewis and Rod Nickel, "Long-Suffering Canadian Oilpatch Faces 'Biggest Existential Crisis' Yet," Reuters, 10 May 2020.

14 Melody Schreiber and Yereth Rosen, "Alaska Senators Blast Banks for 'Discrimination' as They Halt Arctic Oil and Gas Investments," Arctic Today, 28 April 2020.

15 See, e.g., "Fracking Fiasco: The Banks That Fueled the U.S. Shale Bust," Rainforest Action Network and Oil Change International, 24 September 2020.

16 "Over 100 and Counting: Financial Institutions are Restricting Thermal Coal Funding," Institute for Energy Economics & Financial Analysis.

17 For all policy scores cited in this section, see the following policy score tables throughout the report, as well as bankingonclimatechaos.org for more detailed data.

18 The percentage of adjusted coal mining or coal power league credit that is project-related from 2016-2020.

19 See, e.g., Patrick Julius, "The Scissors of Supply and Demand," Human Economics, 3 October 2015.

20 Alastair Marsh, "RBS Plans to Cut Fossil Fuel Loans, Be Climate Positive by 2025," Bloomberg Green, 14 February 2020; Kalyeena Makortoff, "Barclays Sets Net Zero Carbon Target for 2050 After Investor Pressure," *The Guardian*, 30 March 2020.

21 "Principles for Paris-Aligned Financial Institutions: Climate Impact, Fossil Fuels and Deforestation," Rainforest Action Network, 16 September 2020.

22 "Summary for Policymakers," in "Global Warming of 1.5°C: An IPCC Special Report on the Impacts of Global Warming of 1.5°C Above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty," edited by Valérie Masson-Delmotte et al., International Panel on Climate Change (IPCC), 2018.

23 See, e.g., David J. Lynch, "With Fed's Encouragement, Corporations Accelerate Debt Binge in Hopes of Riding Out Pandemic," *Washington Post*, 13 May 2020.

24 Pippa Stevens, "Coronavirus response can 'reshape the future of energy,' IEA says in annual report," CNBC, 13 October 2020.

25 Company sector category defined by company's primary categorization in the Bloomberg Industry Classification Standard.

26 Of course, these are far from being the only problematic sectors funded by big banks, many of whom continue to support other particularly problematic areas of the fossil fuel sector such as oil development in the Amazon, as well as other controversial industries such as large hydropower projects, conflict palm oil and other deforestation-risk commodities, private prisons and immigration detention centers, and more.

27 2,300 refers to the number of particular subsidiary companies that received financing led by the banks included.

28 See ran.org/bankingonclimatechaos2021 for a methodology document that lists all the Bloomberg Industry Classification Standards included; "Global Coal Exit List," urgewald e.V., November 2020; see the appendices to this report for a list of all oil and gas companies that Rystad data have identified for inclusion.

29 Rystad Energy AS is an independent oil and gas consulting services and business intelligence data firm, see rystadenergy.com; Company reporting was used to update the list of key oil and gas midstream companies included.

30 "Global Coal Exit List," urgewald e.V., November 2020.

31 Rystad Energy's UCube database is an exploration and production upstream database with reserves, production profiles, and economical figures for all fields, discoveries, and exploration licenses globally. See "UCube," Rystad Energy, and "Oil Pipelines," Oil Sands Magazine. In addition to the companies listed at that site, Kinder Morgan is also included because through September 2018 it was the owner of the Trans Mountain Pipeline. "Kinder Morgan Canada Limited - Trans Mountain Pipeline and Expansion Project Transaction Closes," Trans Mountain, 31 August 2018.

32 Ibid; Arctic is defined as all onshore and offshore reserves north of the 66th parallel north.

33 Ibid.

34 Ibid; company reporting was used to review fracked oil and gas infrastructure projects in order to select 10 of the companies behind the most projects.

35 Analysis of top companies based on project-level data from: "LNG Export and Import Projects - 3Q 2020," BloombergNEF, 22 October 2020.

36 While all other subsectors rank and include companies by some metric that takes into account both current and planned activities, the Global Coal Exit List does not have sufficient quantitative information on coal mining companies' expansion plans to take this into account. Instead, this analysis covers the biggest 30 coal mining companies by production.

37 "Global Coal Exit List," urgewald e.V., November 2020.

38 Ibid.

39 The Bloomberg Terminal is a ubiquitous provider of financial data available by subscription. Financial research was done using the Bloomberg Terminal's league table function, which aggregates "creditable" transactions and assigns each leading bank (in an arranger or agent role) a portion of the value of the deal, according to the Bloomberg L.P. League Table Standards and Guidelines. This means the financing credit allotted to a particular leading bank may be higher than its actual contribution, and the credit allotted to a lower ranking bank may be lower than its actual contribution.

40 IJGlobal is a project finance and infrastructure journal and data provider; see ijglobal.com.

41 Note that this method effectively undercounts figures in the league table for fossil fuel expansion, as the adjuster is based on current operations, while these companies are highlighted because of their large fossil fuel expansion plans that have yet to be developed. For companies in the top expanders list and their subsidiaries, annual adjusters were used in the overall fossil fuel league table. For all other companies, one adjuster was calculated and applied to all five years of data.

42 If the company was involved in other sectors in addition to oil and gas, the proportion of reserves was applied to the company's reported oil and gas business segment(s)'s capital expenditure.

43 Where a company was involved in activities other than energy generation and distribution, the coal-fired capacity percentage was applied to the electricity generation or power segment of the company as a percentage of total assets.

44 "Uptick in Amazon Fire Activity in 2019," NASA Earth Observatory, 19 August 2019; "Yes, Climate Change Is Driving Wildfires," UN Environment Programme, 2 October 2020.

45 "Wildfires and Climate Change," Center for Climate and Energy Solutions, accessed January 2021; Jessica Merzdorf, "A Drier Future Sets the Stage for More Wildfires," NASA Global Climate Change, 9 July 2019; "Climate Change Increasing Risks of Lightning-Ignited Fires," ScienceDaily, 31 May 2018.

46 Akshat Rathi and Jake Rudnitsky, "Arctic Heatwave Is Reigniting Siberian Tinderbox," Bloomberg Green, 27 May 2020.

47 Justine Calma, "What You Need to Know About the Australia Bushfires," The Verge, 13 February 2020.

48 Kendra Pierre-Louis and John Schwartz, "Why Does California Have So Many Wildfires?" *The New York Times*, 3 December 2020.

49 Adam Vaughan, "Major Fires Hit the Amazon and the Arctic for the Second Year in a Row," *New Scientist*, 26 June 2020.

50 Christian Poirier, "Australia and the Amazon: Two Terrible Tragedies With One Key Difference," Amazon Watch, 16 January 2020.

51 Andrea Thompson, "Photos Show Massive Wildfires Devastating Oregon and California," *Scientific American*, 14 September 2020.

52 "Australia: Bushfire Victims File OECD Complaint Against ANZ Bank for Financing Fossil Fuel Projects," Business & Human Rights Resource Centre, 30 January 2020.

53 David Tong, "Big Oil Reality Check," Oil Change International, 23 September 2020.

54 "Fossil Fuel Giants Still Aiming Wide of 2°C Mark, Investors Say," Transition Pathway Initiative, 7 October 2020.

55 For this and the rest of this section, see: David Tong, "Big Oil Reality Check," Oil Change International, 23 September 2020.

56 "Overview," East African Crude Oil Pipeline, accessed January 2021.

57 Ibid.

58 350.org Africa et al., Letter to Patrick Mweheire, Sim Tshabalala and Makoto Takashima, 28 May 2019, p. 2.

59 Producers need a way to transport oil from the oil fiends to the port of Tanga, and there is currently no readily available alternative to EACOP. See, e.g., Gilbert Makore and Fatma Lucy Nyambura, "Connecting the Dots With the East Africa Crude Oil Pipeline," Extractive Industries Transparency Initiative, 25 November 2020.

60 "Tilenga Project: Environmental and Social Impact Assessment, Vol. 1," National Environment Management Authority, May 2018; "Murchison Falls National Park, Uganda," Global Conservation, accessed January 2021.

61 Andrew Bogrand et al., "Empty Promises Down the Line? A Human Rights Impact Assessment of the East African Crude Oil Pipeline," Oxfam International, September 2020, pp. 34, 58–60, 77.

62 Ibid, pp. 6–7, 31, 34–43.

63 Ed Reed, "Uganda-Tanzania Pipeline Construction Planned for 2021," Energy Voice, 5 December 2020.

64 Elias Biryabarema, "Stanbic Sees June 2019 Close for $2.5 bln Debt Deal for Uganda's Oil Pipeline," Reuters, 21 November 2018.

65 "Tanzania: Pipe Dreams - Inside the Uganda - Tanzania Oil Pipeline Talks," allAfrica, 18 March 2019.

66 Elias Biryabarema, "Stanbic Sees June 2019 Close for $2.5 bln Debt Deal for Uganda's Oil Pipeline," Reuters, 21 November 2018.

67 "The Plant," NLNG, accessed January 2021; "Our Host," NLNG, accessed January 2021.

68 "Shareholders," NLNG, accessed January 2021.

69 "The Plant," NLNG, accessed January 2021.

70 "Background," NLNG, accessed January 2021.

71 Oluyemi Ayorinde Akintoye, Abiodun Komomo Eyong, Peter Agada, Opaminola Nicholas Digha, and Okibe James Okibe, "Socio-Economic Implication of Nigeria Liquefied Natural Gas (NLNG) Project in Bonny Local Government Area, Rivers State, Nigeria," *Journal of Geoscience and Environment Protection*, 4(5), 63–79, January 2016.

72 Edward T. Bristol-Alagbariya, "Finima Resettlement for the Nigeria LNG Project," IAIA Special Symposium on "Resettlement & Livelihoods": Concurrent Session on "Emerging Standards, Practices & Frameworks," Manila, Philippines, 20–27 February 2017, pp. 8, 10, 12; Renux, "NLNG Has Failed Finima People … We Challenge Company to Projects' Audit," NGNewsHub, 18 January 2021.

73 "Environmental, Social, and Health Impact Assessment (ESHIA) for the Train 7 Project," NLNG, August 2019.

74 "A Just Energy Transition for Africa? Mapping the Impacts of ECAs Active in the Energy Sector in Ghana, Nigeria, Togo and Uganda," Both ENDS, November 2020.

75 Odo Chistopher Emeka, Jude Ikewuchi, and Ogechukwu Ezim, "Effects of Prolonged Exposure to Gas Flare on Renal Functions Status of Adult Humans In Finima, Bonny Island," *International Journal of Advanced Research and Publications*, 3(7), 67–72, July 2019.

76 See, e.g., "Troubled In All Sides, Bonny Youths Protest Against NLGN," OrientEnergyReview, 19 September 2017; Renux, "NLNG Has Failed Finima People … We Challenge Company to Projects' Audit," NGNewsHub, 18 January 2021.

77 Ibibia Lucky Worika, "Deprivation, Despoilation and Destitution: Whither Environment and Human Rights in Nigeria's Niger Delta?" *ILSA Journal of International & Comparative Law*, 8(1), 1–30, 2001, p. 8; A. Maja-Pierce, Civil Liberties Organisation (Lagos), "Blood Trail: Repression and Resistance in Niger Delta," pp. 46–47, 2002).

78 Data from IJGlobal, accessed 29 January 2021.

79 Jeffrey Jones, "The Teck Megaproject is Dead, But There's Still Hope in the Oil Sands," *The Globe and Mail*, 28 February 2020; Rod Nickel and Steve Scherer, "Canada's Trans Mountain Pipeline Sees Fortunes Shine After KXL's Demise," Reuters, 24 January 2021.

80 Joseph R. Biden, Jr., "Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis," The White House, 20 January 2021; Nia Williams, "Canada's Oil Sands Hit Record High Production - Gov't Data," Nasdaq, 6 January 2021.

81 "Who's Banking Line 3 and Keystone XL: Tar Sands Pipelines Being Rammed Through in a Pandemic," Rainforest Action Network, December 2020.

82 "Line 3 Replacement Program (Canada)," Enbridge, accessed January 2021.

83 Mike Hughlett, "Army Corps of Engineers Issues Enbridge Permit for $2.6B Pipeline Across Northern Minnesota," *Star Tribune*, 24 November 2020; Dan Kraker, "Ojibwe Bands Ask for Halt on Line 3 Construction," Minnesota Public Radio, 30 December 2020.

84 Sebastien Malo, "Minn. Governor Appeals Enbridge's Line 3 Citing Decreasing Oil Demand," Reuters, 19 August 2020; Brooks Johnson and Mike Hughlett, "OSHA Still Investigating Death of Man at Enbridge Work Site," *Star Tribune*, 30 December 2020.

85 Bloomberg Finance L.P., accessed March 2021.

86 See e.g. Sheila Regan, "'It's Cultural Genocide': Inside the Fight to Stop a Pipeline on Tribal Lands," *The Guardian*, 19 February 2021.

87 See bankingonclimatechaos.org for details on banks' Arctic oil and gas policies.

87 "Arctic National Wildlife Refuge," Audubon Alaska, accessed January 2021.

89 "The Arctic National Wildlife Refuge: Protecting Life on the Coastal Plain," Natural Resources Defense Council, 2005.

90 "The Coastal Plain – The Sacred Place Where Life Begins," Gwich'in Steering Committee, accessed January 2021.

91 Matthew Ballew, Anthony Leiserowitz, Seth Rosenthal, John Kotcher, and Edward Maibach, "Americans Oppose Drilling in the Arctic National Wildlife Refuge," Yale Program on Climate Change Communication, 26 September 2019.

92 Tegan Hanlon and Nat Herz, "Major Oil Companies Take a Pass On Controversial Lease Sale in Arctic Refuge," National Public Radio, 6 January 2021.

93 Adam Federman, "How Science Got Trampled in the Rush to Drill in the Arctic," *Politico*, 26 July 2019.

94 "Corporate Commitment to Protect the Arctic Refuge," Gwich'in Steering Committee, 17 February 2021.

95 Andy McGlashen, "The Arctic Refuge Lease Sale Was a Flop," Audubon, 7 January 2021.

96 Sara Kiley Watson, "Future Offshore Drilling Could Wreak Havoc on Deep Sea Ecosystems," Popular Science, 26 April 2018; see the following case studies.

97 "Barents Sea," Norwegian Polar Institute, accessed January 2021.

98 Eric Niiler, "The Arctic Is Warming Much Faster Than the Rest of Earth," Wired, 4 December 2019.

99 Scott Waldman, "The U.S. Is Not Ready to Clean Up an Arctic Oil Spill," *Scientific American*, 19 July 2017.

100 Thomas Nilsen, "Norway Proposes to Open 125 New Oil Exploration Blocks in the Barents Sea," *The Barents Observer*, 24 June 2020.

101 Nermina Kulovic, "Equinor Gearing Up for Fresh Barents Sea Well," Offshore Energy, 30 November 2020.

102 "Norwegian Supreme Court: Okay to Explore for New Oil. Producing It Is Another Matter," Center for International Environmental Law, 22 December 2020.

103 "New Climate Ambitions for Equinor's International Oil and Gas Portfolio," Equinor, 2020, p. 3.

104 Data from IJGlobal, accessed January 2021.

105 "Eni Starts Gas Production From OCTP Project, Deep Offshore Ghana," Eni, 4 July 2018.

106 "OCTP: Oil and Gas Off the Coast of Ghana," Eni, accessed January 2021; "GE Oil & Gas Announces $850M Order with Eni and Partners for Offshore Cape Three Points Block, Ghana," GE, accessed March 2021.

107 Ibid.

108 "A Just Energy Transition for Africa? Mapping the Impacts of ECAs Active in the Energy Sector in Ghana, Nigeria, Togo and Uganda," Both ENDS, November 2020, p. 20.

109 Ibid. p. 19.

ENDNOTES

110 Ibid pp. 23, 25.

111 Data from IJGlobal, accessed January 2021.

112 "Fracking Fiasco: The Banks That Fueled the U.S. Shale Bust," Rainforest Action Network and Oil Change International, 24 September 2020.

113 Jonathan Watts, "Coronavirus Pandemic Threatens Controversial Fracking Project in Argentina," The Guardian, 29 April 2020.

114 Jacey Bingler et al., "Five Years Lost: How Finance Is Blowing the Paris Carbon Budget," Urgewald et al., December 2020, pp. 34–35.

114 Ibid, p. 35.

116 Jonathan Watts, "Coronavirus Pandemic Threatens Controversial Fracking Project in Argentina," *The Guardian*, 29 April 2020.

117 From January 2016–August 2020. Jacey Bingler et al., "Five Years Lost: How Finance Is Blowing the Paris Carbon Budget," Urgewald et al., December 2020, p. 36.

118 Jonathan Watts, "Coronavirus Pandemic Threatens Controversial Fracking Project in Argentina," *The Guardian*, 29 April 2020.

119 "Overview," Mountain Valley Pipeline Project, accessed February 2021; "Overview," MVP Southgate, accessed February 2021.

120 Jonathan Sokolow, "Despite Company Claims, Only a Fraction of the Mountain Valley Pipeline Is Complete in Virginia," Virginia Mercury, 10 August 2020; Hamp Smith, "Gas Pipeline Costs Run Higher, Again," BTU Analytics, 1 February 2019.

121 Kyle Gracey et al., "New Money Behind the Mountain Valley Pipeline: Eight U.S. Banks Dominate the Top 10 Backers," Oil Change International, 12 November 2020.

122 Lorne Stockman et al., "Art of the Self-Deal: How Regulatory Failure Lets Gas Pipeline Companies Fabricate Need and Fleece Ratepayers," Oil Change International, Public Citizen, and Sierra Club, 19 September 2017; Amy Mall, "5 Key Reasons to Stop the Mountain Valley Pipeline," Natural Resources Defense Council, 10 September 2020.

123 Eddie Callahan, "MVP's Stream, Wetland Crossing Permits Put on Hold by Court," WDBJ, 9 November 2020.

124 Kyle Gracey et al., "New Money Behind the Mountain Valley Pipeline: Eight U.S. Banks Dominate the Top 10 Backers," Oil Change International, 12 November 2020.

125 DivestMVP, "Tell Banks: Divest From the Fracked Gas Mountain Valley Pipeline," February 2021.

126 "Construction Update," Coastal GasLink, 19 November 2020; "About," LNG Canada, accessed December 2020.

127 Augusta Davis, "Unceded Land: The Case for Wet'suwet'en Sovereignty," Cultural Survival, 28 February 2020; Amber Bracken and Leyland Cecco, "Canada: Protests Go Mainstream as Support for Wet'suwet'en Pipeline Fight Widens," *The Guardian*, 14 February 2020.

128 "COVID-19 Outbreak Declared at Coastal GasLink Accommodation Sites in Northern B.C.," CBC News, 20 December 2020.

129 C$6.4 billion; "TC Energy Completes Partial Monetization and Project Financing Transactions for Coastal GasLink," TC Energy, 25 May 2020; Bloomberg Finance L.P., accessed March 2021.

130 Bloomberg Finance L.P., accessed March 2021; Augusta Davis, "Unceded Land: The Case for Wet'suwet'en Sovereignty," Cultural Survival, 28 February 2020.

131 C$159.2 million; Bloomberg Finance L.P., accessed March 2021.

132 Ibid.

133 Christina Swanson and Amanda Levin, "Sailing to Nowhere: Liquefied Natural Gas Is Not an Effective Climate Strategy," National Resources Defence Council, December 2020.

134 Jacey Bingler et al., "Five Years Lost: How Finance Is Blowing the Paris Carbon Budget," Urgewald et al., December 2020, pp. 28–31.

135 Christina Swanson and Amanda Levin, "Sailing to Nowhere: Liquefied Natural Gas Is Not an Effective Climate Strategy," National Resources Defence Council, December 2020; Amanda Levin, "Opinion: Liquefied Natural Gas Is a Bridge to Nowhere," *Houston Chronicle*, 13 January 2021.

136 See, e.g., "21 Protesters Arrested After Taking Over Oregon Governor's Office to Oppose Jordan Cove Project," OPB, 21 November 2019; Amber Bracken and Leyland Cecco, "Canada: Protests Go Mainstream as Support for Wet'suwet'en Pipeline Fight Widens," *The Guardian*, 14 February 2020.

137 "Sempra Energy Announces FID for Landmark Energía Costa Azul LNG Export Project," Sempra Energy, 17 November 2020.

138 Harry Weber and Ross Wyeno, "US LNG Exporters Keep Utilization Near Capacity as Asian Prices Test New Heights," S&P Global, 11 January 2021.

139 Christopher Lenton, "Energía Costa Azul Sanctioned, Looks to Become Mexico's First LNG Export Project," Natural Gas Intelligence, 17 November 2020.

140 Steven Horn, "Sempra Energy Plans to Export Fracked Gas on the West Coast — via Mexico," DeSmog, 7 August 2018.

141 IJGlobal, accessed February 2021.

142 Steve Horn, "Mexico's Standing Rock? Sempra, TransCanada Face Indigenous Pipeline Resistance South of Border," DeSmog, 2 January 2018.

143 Joby Warrick, "California Gas Leak Was the Worst Man-Made Greenhouse-Gas Disaster in U.S. History, Study Says," *The Washington Post*, 25 February 2016.

144 "Rovuma LNG Project in Mozambique Awards Onshore EPC Contract," ExxonMobil, accessed January 2021; "About the Mozambique Liquefied Natural Gas Project," Mozambique LNG, accessed January 2021; "Mozambique: Coral South FLNG Project on Schedule – AIM Report," Club of Mozambique, 5 June 2020.

145 "Environmental and Social Impact Assessment (ESIA) Summary," African Development Bank Group, April 2019, p. 41.

146 Sophie Nieman, "Explosive Mix," New Internationalist, 23 December 2020.

147 "Gas in Mozambique: A Windfall for the Industry, a Curse for the Country: France Thrusts Mozambique Into the Fossil Fuel Trap: Executive Summary," Les Amis de la Terre France, Justiça Ambiental (JA!/Friends of the Earth Mozambique), and Friends of the Earth International, June 2020.

148 Information provided by Justiça Ambiental/Friends of the Earth Mozambique from interviews with community members; their last meeting in the area was in November 2020. See also Sophie Nieman, "Explosive Mix," New Internationalist, 23 December 2020.

149 "Joint UN Statement on Humanitarian Crisis and Escalating Violence in Northern Mozambique," United Nations Population Fund, East and Southern Africa, 20 January 2021; "Mozambique: Video Showing Killing of Naked Woman Further Proof of Human Rights Violations by State Armed Forces," Amnesty International, 15 September 2020; Christophe Le Bec, "Mozambique: How Total Plans to Protects Its $15bn Major Gas Project," The Africa Report, 7 January 2021.

150 Sihle Qekeleshe, "FID On Mozambique's Rovuma LNG Project Delayed Until 2021," Africa Oil & Power, 8 June 2020.

151 IJGlobal, accessed February 2021.

152 "Access to Electricity (% of Population) - Mozambique," The World Bank, accessed January 2021; "Mozambique," UNESCO Institute of Statistics, accessed January 2021.

153 Leigh Elston and Megan Darby, "Gas Curse: Mozambique's Multi-Billion Dollar Gamble on LNG," Climate Home News, 7 October 2020.

154 Naaman Zhou, "Crooked Not Courageous: Adani Renames Australian Group Bravus, Mistaking It for 'Brave,'" *The Guardian*, 5 November 2020; "Adani's New Plan, November 2018 Update," Market Forces 5 November 2018.

155 "Why We Will #StopAdani," Stop Adani, accessed January 2021.

156 "Our Fight: Stop Adani Destroying Our Land," Wangan & Jagalingou Family Council, accessed January 2021.

157 "Bankrupting of First Nations leader: Adani Sets Brutal New Standard of Corporate Behaviour," Wangan and Jagalingou Family Council, 16 August 2019; Ben Smee, "Adani Land-use Agreement: Court Dismisses Indigenous Group's Appeal," *The Guardian*, 11 July 2019.

158 "The Adani List: Companies That Could Make or Break the Carmichael Coal Project," Market Forces, accessed February 2021.

159 Todd Gillespie and Suvashree Ghosh, "Blackrock, Storebrand Pressure Indian Bank Over Coal Mining Loan," Bloomberg Green, 4 December 2020.

160 Ibid; "Amundi Gives Bond Warming to State Bank of India Over Adani's Australian Coal Mine," CNBC, 1 December 2020.

161 "Adani Ports and Special Economic Zone Limited: Integrated Annual Report 2019–20," Adani Ports and Logistics, 2020, p. 112; "New Rail Company Recruiting for Bowen Haulage Business," Industry Queensland, 18 August 2020; "Investor Briefing: Adani Ports and Special Economic Zone (NSE/BSE: ADANI PORTS)," Market Forces, 20 October 2020, pp. 3–4.

162 Ulf Erlandsson, "Global Investors and the Carmichael Mega-Mine," The Anthropocene Fixed Income Institute, September 2020, pp. 7–8.

163 Bloomberg Finance L.P., accessed January 2021. According to Bloomberg, Deutsche Bank is also credited with participation in a July 2020 bond issuance for Adani Ports, but some reporting indicates that Deutsche Bank may have declined involvement: Mohit Bhalla, "Adani Ports Bonds Issue: DB Backed Out on Green Concerns," *The Economic Times*, 28 January 2021.

164 "The Adani List: Companies That Could Make or Break the Carmichael Coal Project," Market Forces, accessed February 2021; "Bank of America Corporation Environmental and Social Risk Policy Framework," Bank of America, February 2021.

165 Gunjeet Sra, "Coal Mining and Community Activism in India," The Ecologist, 21 January 2020.

166 "Perspective Document on Coal Mining in Hasdeo Arand Region," Janabhivyakti, December 2014.

167 Ibid, p. 3

168 Bloomberg Finance L.P., accessed February 2021.

169 "The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006," published in *The Gazette of India*, 29 December 2006, pp. 5–6; "Perspective Document on Coal Mining in Hasdeo Arand Region," Janabhivyakti, December 2014; Jayashree Nandi, "Chhattisgarh Mining Projects Violating Forest Act: Activists," *Hindustan Times*, 28 February 2020; "Not Just a Coal Block - Gram Sabha Resolutions," People's Archive of Rural India, 3 January 2015.

170 "Perspective Document on Coal Mining in Hasdeo Arand Region," Janabhivyakti, December 2014, p. 21.

171 Vaishnavi Suresh, "Decades of Mining Has Ravaged Chhattisgarh's Korba Region. Could Its Hasdeo Arand Forests Be Next?" Scroll, 21 August 2020.

172 Ritesh Mishra, "No Coal Mining in Hasdeo Arand': Coal Ministry Accepts Chhattisgarh Govt Proposal," *Hindustan Times*, 1 August 2020.

173 Gunjeet Sra, "Coal Mining and Community Activism in India," The Ecologist, 21 January 2020; Vaishnavi Suresh, "Decades of Mining Has Ravaged Chhattisgarh's Korba Region. Could Its Hasdeo Arand Forests Be Next?" Scroll, 21 August 2020.

174 "Global Coal Exit List," urgewald e.V., November 2020.

175 "Situation Report #5 Floods South Kalimantan Floods," Human Initiative, 26 January 2021.

176 Hans Nicholas Jong, "Plantations, Mines Didn't Worsen Flood, Indonesia Says. The Data Begs to Differ," Mongabay, 22 January 2021; "Terkait Banjir, Ini 5 Perusahaan Tambang Terbesar di Kalsel," KOMPASTV, 19 January 2021; Hans Nicholas Jong, "Indonesian Police May Probe Coal Miners Over Deforestation-Linked Floods," Mongabay, 18 February 2021.

177 Fedina S. Sundaryani, "Adaro to Diversify Business in Long Term," *The Jakarta Post*, 27 April 2017; "Annual Report 2019," PT Adaro Energy Tbk, 2020.

178 "Annual Report 2019," PT Adaro Energy Tbk, 2020, pp. 35 and 110; Lucy EJ Woods, "As Construction Begins on Jaya's Batang Coal Plant, A Divided Community Faces Environmental Problems," Mongabay, 24 January 2017.

179 Bloomberg Finance L.P., accessed January 2021.

180 Farid Firdaus, "Refinancing' Utang, Adaro Jajaki Pinjaman US$ 400 Juta," Investor Daily Indonesia, 5 February 2021.

181 Shashank Bengal, "China, Japan and South Korea, While Vowing to Go Green at Home, Promote Coal Abroad," *Los Angeles Times*, 13 May 2019.

182 Andreas Anhäuser, Minwoo Son, Aidan Farrow, and Lauri Myllyvirta, "Health Impacts of Units 9-10 of the Jawa Coal-Fired Power Plant in Banten, Indonesia," Greenpeace, November 2019.

183 Yuddy Cahya Budiman and Willy Kurniawan, "Indonesian Coal Plant Taints South Korea's Green Pledge," Reuters, 16 July 2020.

184 "Indonesia's State Utility Cuts 2020 Revenue Target by Nearly 15% on Coronavirus Woes," Reuters, 22 April 2020.

185 Wilda Asmarini, "Indonesia's PLN 'Burdened' by Electricity Oversupply- Official," Reuters, 5 March 2020.

186 "'Really Losing Face': Pressure Builds on Kepco to Drop Plans for Potentially Loss-Making Coal Plants," Global Construction Review, 24 June 2020; Heesu Lee and Stephen Stapczynski, "Korea's Kepco Moves Ahead With Controversial Coal Investment," Bloomberg Green, 30 June 2020.

187 "Get Out of Jawa 9 and 10!" Market Forces, accessed January 2021.

188 "Matarbari Coal Power Plants: Japanese Companies Threaten Communities and Climate in Bangladesh," Market Forces, September 2020; IJGlobal, accessed January 2021.

189 Pinaki Roy, "Future Not Coal Power," *The Daily Star*, November 19, 2020.

190 "The Tourist Capital of Bangladesh Endangered by Plans to Build the Largest Coal Power Hub in the World: Report of a Fact-Finding Mission on Possible Risks of Having Coal-Based Power Plants in Cox's Bazar," Bangladesh Poribesh Andolon and Waterkeepers Bangladesh, November 2019, pp. 21–28; Hasan Mehedi, "Initial Observation of BWGED on Matarbari Coal Power Plant," Bangladesh Working Group on External Debt, 7 August 2018.

191 "Cox's Bazar: Maheshkhali - Water Logging," reliefweb, 11 July 2018.

192 Lauri Myllyvirta, "Air Quality, Health and Toxics Impacts of the Proposed Coal Power Cluster in Chattogram, Bangladesh," Centre for Research on Energy and Clean Air, September 2020, p. 11.

193 "Matarbari Coal Power Plants: Japanese Companies Threaten Communities and Climate in Bangladesh," Market Forces, September 2020; IJGlobal, accessed January 2021.

194 "EMBA Hunutlu Power Station," Global Energy Monitor Wiki, last updated 4 December 2020.

195 "Toolkit: Coal Power Generation and Health in Iskenderun Bay, Turkey," Health and Environment Alliance (HEAL), February 2016, p. 45.

196 Lauri Myllyvirta, "Air Quality and Health Impacts of the Proposed EMBA Hunutlu Coal Power Project," Centre for Research on Energy and Clean Air, June 2020, p. 1.

197 "Clean Air for Adana," The Clean Air for Adana Campaign, accessed January 2021; "Europe Beyond Coal Database," Europe Beyond Coal, accessed January 2021.

198 Lauri Myllyvirta, "Air Quality and Health Impacts of the Proposed EMBA Hunutlu Coal Power Project," Centre for Research on Energy and Clean Air, June 2020.

199 "Emba Hunutlu Coal Power Plant," BankTrack, last updated 12 January 2021.

200 "Emba Hunutlu Coal Power Plant, Turkey: Financiers," BankTrack, last updated 12 January 2021.

201 "China's Banks Asked to Stop Funding Turkey's Coal Industry," Bloomberg Green, 10 June 2020.

202 Bloomberg News, "Turkish Coal Plant Foes Call on Chinese Banks to Halt Financing," *Bloomberg Green*, 10 June 2020.

203 "Turkey: More Than 20 NGOs Call on Chinese Banks to Stop Funding Coal-Fired Power Plant," Business & Human Rights Resource Centre, 14 June 2020.

204 The Bankers for Net Zero commitment framework includes a version of the call for time-bound fossil zero: "#StateTheDate for the end to all financing of all fossil fuels and deforestation-linked lending." Ben Bracciano, "Statement from the Bankers for NetZero Initiative: UK Net Zero Banking Sector Commitment for COP26," Fair Business Banking, 26 January 2021.

205 See forestsandfinance.org.

206 Chris Mooney and Joby Warrick, "How Tiny Islands Drove Huge Ambition at the Paris Climate Talks," *The Washington Post*, 12 December 2015.

207 This is the pathway that does not rely on the large-scale use of speculative negative emission technologies. "Summary for Policymakers," in "Global Warming of 1.5°C: An IPCC Special Report on the Impacts of Global Warming of 1.5°C Above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty," edited by Valérie Masson-Delmotte et al., IPCC, 2018, p. 14.

208 "Paris Agreement," United Nations, 2015, p. 3.

209 Reinforced by the Task Force on Climate-Related Financial Disclosures's initial focus exclusively on climate risk.

210 Doreen Stabinsky, "Chasing Carbon Unicorns: The Deception of Carbon Markets and 'Net Zero,'" Friends of the Earth International et al., February 2021.

211 Romain Ioualalen and Paul Schreiber, "NGFS Scenarios: Guiding Finance Towards Climate Ambition or Climate Failure?" Oil Change International and Reclaim Finance, February 2021.

212 See forestsandfinance.org.

213 HSBC announces resolution on climate change," HSBC, 11 March 2021.

214 "Barclays Position on Climate Change," Barclays, April 2020, p. 2.

215 "About," Partnership for Carbon Accounting Financials, accessed February 2021.

216 "UN Climate Report a 'Red Alert' for the Planet: Guterres," UN News, 26 February 2021.

217 "Media Briefer: Response to JPMorgan Chase's Paris Alignment Commitment October 2020," Rainforest Action Network, October 2020.

218 See, e.g., "Morgan Stanley Sets Net Zero Financed Emissions Target Without Key Details," Stop the Money Pipeline, 21 September 2020..

219 See, e.g., Colin Hunt, "Kyoto Protocol Fails: Get Ready for a Hotter World," The Conversation, 15 Novevmber 2012.

220 "Failures of Kyoto Will Repeat With the Paris Climate Agreement," US Senate Committee on Environment and Public Parks, 21 April 2016; Stavros G. Poulopoulos, "Kyoto Protocol Atmospheric Environment, Global Warming and Climate Change," ScienceDirect, 2016.

ENDNOTES

221 "The Clean Development Mechanism," United Nations Climate Change, accessed January 2021.

222 Birthe Vichit Petersen and Kamille Bollerup, "The Clean Development Mechanism and Its Failure in Delivering Sustainable Development," *The Interdisciplinary Journal of International Studies*, 8(1), 74–87, 2012.

223 See, e.g., Friends of the Earth Europe, "The EU Emissions Trading System: Failing to Deliver," undated; "What's Needed to Fix the EU's Carbon Market Recommendations for the Market Stability Reserve and Future ETS Reform Proposals," Carbon Market Watch, July 2014.

224 "Paris Agreement," United Nations, 2015, pp. 7–8; "The EU Emissions Trading System: Failing to Deliver," Friends of the Earth Europe, October 2010; "What's Needed to Fix the EU's Carbon Market: Recommendations for the Market Stability Reserve and Future ETS Reform Proposals," Carbon Market Watch, July 2014.

225 Chloé Farand, "What is Article 6? The Issue Climate Negotiators Cannot Agree," Climate Home News, 12 February 2019.

226 See e.g. "Failures of Kyoto Will Repeat With the Paris Climate Agreement," US Senate Committee on Environment and Public Parks, 21 April 2016; Stavros G. Poulopoulos, "Kyoto Protocol Atmospheric Environment, Global Warming and Climate Change," ScienceDirect, 2016; "The EU Emissions Trading System: Failing to Deliver," Friends of the Earth Europe, October 2010.

227 Kate Aronoff, "Shell Oil Executive Boasts That His Company Influenced the Paris Agreement," The Intercept, 8 December 2018.

228 "CORSIA Carbon Offsets Case Study: Vallourec: Junk Offset Credits Through Charcoal Production for the Iron and Steel Sector in Brazil," Global Forest Coalition, December 2020.

229 "Myth 2: Coal Is Clean," End Coal, accessed January 2021; Carroll Muffett and Steven Feit, "Fuel to the Fire: How Geoengineering Threatens to Entrench Fossil Fuels and Accelerate the Climate Crisis," Center for International Environmental Law, 2019, p. 31.

230 Carroll Muffett and Steven Feit, "Fuel to the Fire: How Geoengineering Threatens to Entrench Fossil Fuels and Accelerate the Climate Crisis," Center for International Environmental Law, 2019; "Ground Water and Ecosystems Restoration Research: Geologic Sequestration of Carbon," U.S. Environmental Protection Agency, last updated 10 August 2015.

231 "Position: Carbon Capture, Storage and Utilisation," Climate Action Network International, January 2021.

232 REDD+ stands for "reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries" and was negotiated under the UNFCCC in 2005.

233 "Circular Economy or Vicious Cycle? How Corporate Capture of Policy Making and Perverse Incentives Are Driving Deforestation," Global Forest Coalition, December 2020; Lisa Song, "An Even More Inconvenient Truth: Why Carbon Credits for Forest Preservation May Be Worse Than Nothing," ProPublica, 22 May 2019.

234 Juan Pablo Sarmiento Barletti and Anne M. Larson, "Rights Abuse Allegations in the Context of REDD+ Readiness and Implementation: A Preliminary Review and Proposal for Moving Forward," Center for International Forestry Research, October 2017.

235 "Special Report on Climate Change and Land: Summary for Policymakers," IPCC, 2019.

236 "Campaign Update: Clean Development Mechanism," Center for International Environmental Law, January 2015; "Trading in Fake Carbon Credits: Problems with the Clean Development Mechanism," Friends of the Earth, October 2008.

237 Steve Dancy, "Environmental Justice for the Navajo: Uranium Mining in the Southwest," University of Michigan, last updated 17 June 2004.

238 David R. Boyd, "Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment," UN Doc A/74/161, United Nations General Assembly, 15 July 2019.

239 "The Local Communities and Indigenous Peoples' Platform Becomes Operational at COP 23," UNFCCC, accessed January 2021.

240 See, e.g., Roxanne Dunbar Ortiz, *An Indigenous Peoples' History of the United States*, Beacon Press, 2014.

241 "Rights of Mother Earth," World Peoples' Conference on Climate Change and the Rights of Mother Earth, 26 April 2010.

242 David Tong, "Big Oil Reality Check: Assessing Oil and Gas Company Climate Plans," Oil Change International, September 2020, p. 3.

243 See, e.g., Christine Shearer, "New Report – Boom and Bust 2020: Tracking the Global Coal Plant Pipeline," End Coal, 25 March 2020.

244 "2019 Was 2nd-Hottest Year on Record for Earth Say NOAA, NASA," National Oceanic and Atmospheric Administration, 15 January 2020.

245 "UN Report: Nature's Dangerous Decline 'Unprecedented'; Species Extinction Rates 'Accelerating,'" UN Sustainable Development Goals, 6 May 2019; Nisha Gaind and Emma Stoye, "How Climate Change Is Melting, Drying and Flooding Earth — in Pictures," *Nature*, 26 September 2019; Jon Letman, "Rising Seas Give Island Nation a Stark Choice: Relocate or Elevate," *National Geographic*, 19 November 2018.

246 Robert Hart, "Most People See Climate as a 'Global Emergency' and Support Urgent Action, UN Survey Finds," Forbes, 27 January 27 2021.

247 David H. Quigley et al., "United States: A Bridge Over the Rising Seas: Biden's 'Climate Day' Order Promises Green Infrastructure," Mondaq, 8 February 2021; Amanda Hernández, "Undoing Trump's Policies and Other Things Biden Did His First Week as President," USA Today, 29 January 2021.

248 Martin Sandbu, "The Post-Pandemic Brave New World," International Monetary Fund, Winter 2020.

249 Ben Piven, "Ecuadoran Amazon: Three European Banks Stop Funding Trade of Oil," Amazon Watch, 25 January 2021.

250 Antoine Gara, "Hedge Fund Superstar Pierre Andurand Sets His Sights on Clean Energy After 154% Gain," Forbes, 2 February 2021.

251 "United Nations Declaration on the Rights of Indigenous Peoples," United Nations, 07-58681, March 2008.

252 Zarmina Ali, "The World's 100 Largest Banks, 2020," S&P Global, 7 April 2020.

253 Rystad Energy AS is an independent oil and gas consulting services and business intelligence data firm. See rystadenergy.com; IPCC, "2006 IPCC Guidelines for National Greenhouse Gas Inventories," Prepared by the National Greenhouse Gas Inventories Programme, edited by H.S. Eggleston et al., 2006.

254 "Global Coal Exit List," urgewald e.V., November 2020.

255 "Global Coal Exit List," urgewald e.V., November 2020.

256 "LNG Export and Import Projects - 3Q 2020," BloombergNEF, 22 October 2020.

257 "Global Coal Exit List," urgewald e.V., November 2020.

258 Project exclusions limited to greenfield projects only are considered weaker because there is not necessarily a standard definition of what type of site would be considered greenfield vs. brownfield.

259 "Global Coal Exit List," urgewald e.V., November 2020.

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ENDORSEMENTS

This report is endorsed by **312** *organizations from* **50** *countries around the world:*

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350 Brooklyn
350 Central Mass
350 Charlotte
350 Colorado
350 Conejo / San Fernando Valley
350 Eugene
350 Everett
350 Hawaii
350 Humboldt
350 Japan
350 Kishwaukee
350 Madison
350 Maine
350 Montgomery County Maryland
350 New Hampshire
350 New Jersey - Rockland
350 New Orleans
350 NYC
350 Ottawa
350 PDX
350 Pensacola
350 Sacramento
350 SalemOr
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7 Directions of Service
Abibinsroma Foundation
Action Center on Race and the Economy
ActionAid Denmark
Advocates4Earth
aHang: progressive campaign platform
Aksi Ekologi dan Emansipasi Rakyat (AEER)
Aktionsgruppe Indianer & Menschenrechte e.V.
Alaska Wilderness League
Amazon Frontlines
Amazon Watch
American Jewish World Service
Arbeitsgruppe Schweiz Kolumbien ask! (Swiss Working Group on Colombia)
ARTivism Virginia
Asian Energy Network
Asian Pacific Environmental Network (APEN)
Association Climat Genève
Association of Ethical Shareholders Germany
Atlantic Coast Conference Climate Justice Coalition
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Beneficial State Foundation
Berks Gas Truth
Better Future Project
Better Path Coalition
Block Baltic Pipe
Braided River
Bread For All
Breathe Easy Susquehanna County
Bronx Climate Justice North
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Call to Action Colorado
Campagna per il Clima, Fuori dal Fossile!
Campax
Catholic Divestment Network
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CEE Bankwatch Network
Center for International Environmental Law (CIEL)
Center for Popular Democracy
Centre for Citizens Conserving (CECIC)
Centro para la Autonomía y Desarrollo de los Pueblos Indígenas
Chesapeake Climate Action Network
CHIRAPAQ
Christian Aid
Climate 2025
Climate Action Network International
Climate Action Now!
Climate Action Rhode Island / 350 RI
Climate Alliance Switzerland
Climate Change Network Nigeria
Climate Emergency Institute
Climate Finance Action
Climate First!
Climate Justice at Boston College
Climate Justice Guelph
Climate Pledge Collective
ClimateMama
Climáximo
Colorado Businesses for a Livable Climate
Columbia Gorge Climate Action Network
Comité Nacional de Lucha Contra el Cambio Climático (CNLCC)
Community Empowerment & Social Justice Network
Compressor Free Franklin
Connecticut Citizen Action Group
Crushing Colonialism
Cultural Survival
Divest Ed
Divest RVA
Earth Action, Inc.
Earth Day Initiative
Earth Ethics, Inc.
Earth Guardians
Earthlife Africa Jhb
Earthworks
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Ecologistas en Acción
EKOenergy ecolabel
Emergenza Climatica
Endangered Species Coalition
Energy Watch Group
Environics Trust
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Extinction Rebellion Ottawa
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Fair Finance Guide Sweden
Fair Finance International
Fair Finance Netherlands - Eerlijke Geldwijzer
Fair Finance Philippines
Fairbanks Climate Action Coalition
Federación Indígena Empresarial y Comunidades Locales de México, A.C.
First Peoples Worldwide
Food & Water Watch
For Our Kids
For the People
Forest Keeper
Foro Indígena Abya Yala (FIAY)
Fossil Free California
Fossil Free London
Fossil Free Sweden
FrackBustersNY
Fracking Free Clare
FracTracker Alliance
Framtiden i våre hender
Franciscan Action Network
FreshWater Accountability Project
Friday's For Future Quinte
Friends For Environmental Justice
Friends of Alaska National Wildlife Refuges
Friends of Buckingham
Friends of the Earth Japan
Friends of the Earth U.S.
Friends of the Siberian Forests
Fundación Ambiente y Recursos Naturales (FARN)
Fundacion Empresas "i"
Fundación Plurales
Fundacja "Rozwój TAK - Odkrywki NIE"
Fundourfuture.international
Future Coalition
GegenStroemung – CounterCurrent – INFOE e. V.
Gender Action
Global Anti-Aerotropolis Movement (GAAM)
Global Catholic Climate Movement
Global Choices
Global Energy Monitor
Global Forest Coalition
Green Advocates International
Green America
Green Camel Bell
Green New Deal Virginia
Green Workers Alliance
GreenFaith
Greenpeace Canada
Greenpeace Nordic
Greenpeace Switzerland
Greenpeace UK
Greenpeace USA
Gwich'in Steering Committee
Hakhu Amazon Foundation
Hanover Action: towards a sustainable community
Harbury Energy Initiative and Low Carbon Warwickshire Network
Harrington investments, Inc.
Inclusive Development International
Indigenous Climate Action
Indivisible Virginia
Informationsgruppe Lateinamerika (IGLA)
Institute for Agriculture & Trade Policy
Institute for Development Policy (INDEP)
Institute for Ecology and Action Anthropology (INFOE)
Institute for Energy Economics & Financial Analysis
Instituto para el Futuro Común Amerindio (IFCA)
InterAmerican Clean Energy Institute
International Indian Treaty Council
International Rivers
International Student Environmental Coalition
Jamaa Resource Initiatives
Just Share
Kiko Network
KS Wild
La Ruta del Clima
Last Real Indians
Leave it in the Ground Initiative (LINGO)
Legalità per il Clima
Les Amis de la Terre France / Friends of the Earth France
Loudoun Climate Project
Louisiana Bucket Brigade
Market Forces
Mazaska Talks
Meiyouwenti (CoalProblem)
Milieudefensie
Minnesota Interfaith Power and Light
Mom Loves Taiwan Association
Mothers Out Front - National Leadership Team
Mothers Out Front - Roanoke team
Mountain Lakes Preservation Alliance
National Society of Conservationists / Friends of the Earth Hungary

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Native Movement
Native Organizers Alliance
Native Sun Community Power Development
Natur og Ungdom / Young Friends of the Earth Norway
NDN Collective
New Brunswick Anti-Shale Gas Alliance
New Progressive Alliance
New Weather Institute
New York Communities for Change
Nijmegen Fossielvrij
No Hub del Gas
North American Climate, Conservation and Environment (NACCE)
North99
Notre Affaire à Tous
Nurture The Children
Ocean Conservation Research
Oceanic Preservation Society
Olympic Climate Action
Our Part Foundation; Banking for Climate transformation
OVEC-Ohio Valley Environmental Coalition
People of Asia for Climate Solutions
Peoples Climate Movement - NY
Pivot Point
Platform London
Plymouth Friends for Clean Water
Positive Money UK
Preserve Giles County
Preserve Monroe
Pro Information Pro Environment United People Network
Profundo
Progressive Democrats of America
projekt21plus
Public Citizen
Pueblo Action Alliance
Quit RBC - Extinction Rebellion Québec
Rapid Transition Alliance
RapidShift Network
Re-set: platform for socio-ecological transformation
Re:Common
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Right to the City Alliance
Rio Grande International Study Center
Rogue Climate
Sacred Earth Solar
Save Our Illinois Land
Save RGV From LNG
SHARE
ShareAction
Shift: Action
Sisters of St. Francis of Philadelphia
SoCal 350 Climate Action
Socio-Ecological Union International
Solutions For Our Climate
South Beach District 6 Democratic Club of San Francisco
Southern and Eastern Africa Trade Information and Negotiations Institute (SEATINI)
Stand.earth
Stop the Money Pipeline
Stowarzyszenie Pracownia na rzecz Wszystkich Istot
SumOfUs
Sunflower Alliance
Sunrise Project
SustainUS
Take on Wall Street
Te Whanau o te Rau Aroha
Texas Campaign for the Environment
The Climate Optimist
The Future Left
The Research Institute for Environmental Finance
The WaterWealth Project
The Years Project
THIS! Is What We Did
Transform! Italia
Transition Express Inc.
Turtle Island Restoration Network
Union of BC Indian Chiefs (UBCIC)
United Confederation of Taíno People
United Native Americans
United Student Leaders
Upper Valley Affinity Group (Vermont)
urgewald
Water Is Life Walks
Water Justice & Gender
Waterkeeper Alliance
West Coast Environmental Law Association
Winyah Rivers Alliance
WISE
Women Power Our Planet
Women's Earth and Climate Action Network (WECAN)
Women's Institute for Freedom of the Press
Youth Advocates for Climate Action Philippines (Fridays for Future Philippines)
Youth For Environment Education And Development Foundation (YFEED Foundation)
YUVA
Zero Hour

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