Banking on Climate Change

SUMMARY BRIEFING FOR INVESTORS, BANKS, AND REGULATORS IN JAPAN

INTRODUCTION

This is a summary briefing of the 2018 edition of *Banking on Climate Change*, the ninth annual fossil fuel finance report card, which grades 36 commercial banks from Australia, Canada, China, Europe, Japan, and the United States on their policy commitments regarding extreme fossil fuel financing and calculates their financing for these fuels from 2015 to 2017. Extreme fossil fuels are some of the most carbon-intensive and financially risky fuels and include **coal mining, coal power, extreme oil (tar sands, Arctic, and ultra-deepwater oil),** and **liquefied natural gas (LNG) export from North America**. This summary is supplemented by analysis of bank alignment with the Recommendations of the G20 Task Force on Climate-Related Financial Disclosure (TCFD) and Japanese bank financing of coal-fired power plant development globally. The full report also details the risks of financing any expansion of the fossil fuel industry, assesses the shortcomings of the Equator Principles with respect to protection of human rights in the case of project finance, and provides case studies on each of the extreme fossil fuel sub-sectors. The full report can be found at <u>www.RAN.org/reportcard</u>.

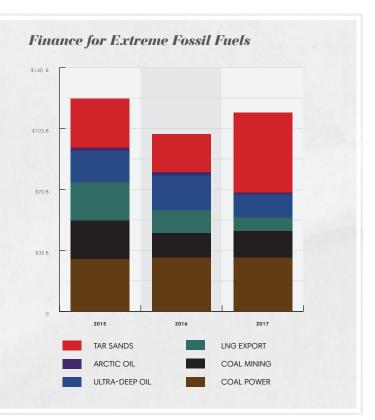
KEY FINDINGS

2017 was a year of backsliding. Financing for extreme fossil fuels overall went from \$126 billion in 2015, to \$104 billion in 2016, following adoption of the Paris Climate Agreement, then up to \$115 billion in 2017. Assessment of bank policies shows that no banks have yet truly aligned their business plans with the Paris Climate Agreement, whose goals to limit temperature rise "well below 2 degrees Celsius" require banks to cease financing expansion of the fossil fuel sector and the full extraction of reserves from fields and mines that are already operating.

» Mitsubishi UFJ (MUFG) leads Japanese bank financing of extreme fossil fuels, globally ranked #11, followed by Mizuho (#17), and Sumitomo Mitsui Financial Group (SMFG) (#23).

» Tar sands financing is the single biggest driver of the overall increase in extreme fossil fuel financing, growing by 111 percent from 2016 to 2017. Tar sands financing totaled \$98 billion, led by Royal Bank of Canada (RBC), Toronto Dominion (TD), and JPMorgan Chase. MUFG, Mizuho, and SMFG are financing all three major tar sands pipeline companies: Kinder Morgan, Enbridge and TransCanada.

» Coal power financing has stagnated, but remains one of the more highly funded sectors at \$94 billion from 2015 to 2017. Chinese banks, led by **Industrial and Commercial Bank of China (ICBC)** and **China Construction Bank**, and **MUFG** are the biggest backers of coal power. **Mizuho** is ranked #9, while **SMFG** increased its financing by 79% from 2016 to 2017.



METHODOLOGY

The report card calculates three years of bank lending and underwriting to the top 30 companies by reserves, capacity or production in each of the extreme fossil fuel subsectors, in addition to six tar sands pipeline companies. Financing amounts are weighted based on the fossil fuel company's activities in a given subsector.

Fossil Fuel Bank Policy Ratings:

"A" RANGE	Bank prohibits finance for all projects and companies operating in the sector, with public reporting on implementation.
"B" RANGE	Bank prohibits and/or phases out finance for some companies in the sector.
"C" RANGE	Bank prohibits finance for some or all projects in the sector.
"D" RANGE	Bank conducts due diligence in the sector.
"F" RANGE	Bank has no public policy.

FOSSIL FUEL FINANCING POLICIES: A Critical Indicator of Climate Risk Management

Japanese and Chinese banks are clear laggards in their management of climate risk from fossil fuel financing. In contrast, the French banks have recently stepped up their commitments to reduce fossil fuel exposure (see below), a change that has been attributed in part to the introduction of legislative and regulatory measures, including Article 173 in France.¹ However, the lack of comprehensive policies from all banks on extreme fossil fuels means that last year's increase in financing could continue and even accelerate in the years to come.

Leading Bank Practices

	» Prohibits project financing.	
TAR SANDS	» Excludes any companies with more than 30% of their business in tar sands.	
OIL	» States that the bank will not directly finance the proposed pipelines — Keystone XL,	
	Trans Mountain, or Line 3 — nor some significant tar sands pipeline companies.	
		"As an international
ARCTIC		bank, our role is
	» Prohibits project financing.	to help drive the
		energy transition
LNG		
	» Prohibits financing of LNG terminals that predominantly liquefy and export gas from shale.	and contribute to the
		decarbonisation of
	» Prohibits financing for some companies significantly active in this sector.	the economy"
rédit Agricole o	n coal:	
		- Jean-Laurent Bonnafé,
	» Prohibits direct financing for coal mines.	
COAL MINING	» Excludes lending and underwriting for companies with more than 50% of their	CEO of BNP PARIBAS,
	revenue from coal mining.	October 2017 ²
	» Prohibits direct financing for coal plants	
COAL POWFR	» Excludes lending and underwriting for companies with more than 50% of their	
	business from coal power that are not diversifying.	

FOSSIL FUEL FINANCING: A Critical Indicator of Exposure to Climate Risk

It is environmentally, reputationally, and often financially risky for banks to back extreme fossil fuel projects and companies. The TCFD recommendations acknowledge these risks and encourage the financial sector to assess and disclose climate-related risks and opportunities, as well as climate governance and strategy and the metrics used to assess the impact of climate-related risks.³ However, recent analysis of the banking sector's alignment with TCFD has shown that many large banks, especially in Asia, are failing to properly assess or manage climate risks in their portfolio.⁴ Fossil fuel financing can also give rise to reputational risk and human rights risks, as demonstrated by the controversial Dakota Access Pipeline (DAPL), which led cities to divest US \$4.3 billion in funds from involved banks.⁵ **MUFG** and **Mizuho** were among the lead arrangers for the DAPL project loan, and **SMFG** was a lender. All three banks currently face similar risks from their financing of the three major proposed tar sands pipelines — Enbridge's Line 3, Kinder Morgan's Trans Mountain, and TransCanada's Keystone XL (KXL) — which threaten grave damage to the climate, ecosystems, and local communities, and are facing determined Indigenous-led resistance. **Mizuho, MUFG** and **SMFG** finance Enbridge and TransCanada, and fund the Trans Mountain project directly.⁶ The full report card includes a case study on Line 3, which threatens irrevocable and devastating cultural damage to the Ojibwe people, would violate their Treaty rights, and is strongly opposed by the five directly impacted Ojibwe tribes along the proposed route in Minnesota.

Key ESG Risks in Extreme Fossil Fuel Sub-sectors

Coal Mining

- » Significant health, safety, and environmental impacts
- » In structural decline due to decreasing renewables prices and surge in national, state and municipal commitments to go coal-free
- Case Study: Adani's proposed Carmichael coal mine (see full report)

Coal Power

- » Responsible for 45% of global energy-related CO2 emissions.⁷
- » Significant source of SO2, NOx and particle pollution, causing premature deaths.⁸
- » Among the most water-intensive fuels.⁹
- » Case Study: Marubeni's coal plant expansion (see back page)

Tar Sands

- » Among the most carbon-intensive types of oil
- » 150+ First Nations and Tribes from across Canada and the US oppose tar sands expansion.¹⁰
- » Destroys Alberta's Boreal forest, one of the last wild forests left in the world

Arctic Oil

- » Threatens Alaska Native rights and Indigenous sovereignty
- » Risk of unmanageable oil spill threatens the Alaska National Wildlife Refuge, one of the world's most pristine and beautiful ecosystems
- Case Study: Expansion of oil and gas extraction in Alaska (see full report)

Ultra-deepwater Oil

- » Necessitates extreme infrastructure with significant risk of oil spill
- » Threatens vulnerable ocean ecosystems

LNG Export

- » At least twice as carbon-intensive as natural gas, and potentially more carbon-intensive than coal due to methane leakage
- » Drives fracking and pipeline buildout upstream
- » Fracked-gas extraction and export infrastructure threaten health and safety of local communities
- » Case Study: Pembina Pipeline's Jordan Cove LNG terminal & Pacific Connector Gas Pipeline (see full report)

RECOMMENDATIONS

Banks Should:

- » Align their policies and practices with the Paris Climate Agreement goals, by ending all financing for extreme fossil fuels and for expansion of the fossil fuel industry.
- » Ensure financing fully respects all human rights, particularly the rights of Indigenous Peoples.
- » Report on their actual exposure to climate-related risks in all non-financial sectors identified by the TCFD, how these are managed and how this will affect their own portfolios.

HOW THE BANKS STACK UP: Extreme Fossil Fuel Finance (2015-2017) and Select Bank Grades

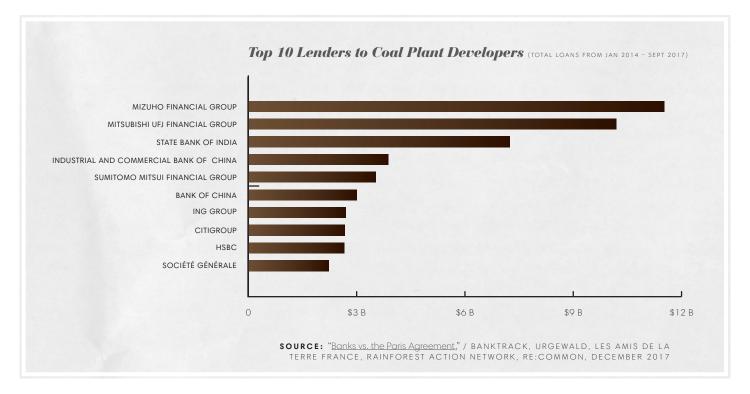
BANK	TOTAL EXTREME FOSSIL FUEL FINANCING	2017 vs 2016	COAL MINING	COAL POWER	TAR SANDS	ARCTIC OIL	ULTRA- DEEPWATER	LNG EXPORT	OVERALL GRADE (6 SECTORS)	COAL MINING	COAL POWER	TAR SANDS
JAPAN												
MUFG	\$11.170 B		\$192 M	\$4.471 B	\$1.583 B	\$46 M	\$1.770 B	\$3.108 B	F	F	F	F
MIZUHO	\$8.837 B		\$191M	\$3.310 B	\$1.020 B	\$104 M	\$1.845 B	\$2.368 B	D-	D-	D-	D-
SMFG	\$4.851 B		\$79 M	\$906 M	\$501 M	\$39 M	\$840 M	\$2.487 B	D-	D-	D-	D-
CHINA												
AGRICULTURAL BANK OF CHINA	\$14.183 B	▼	\$5.671 B	\$7.435 B	\$681 M	-	\$396 M	-	F	F	F	F
BANK OF CHINA	\$20.310 B		\$9.464 B	\$9.064 B	\$565 M	\$110 M	\$1.088 B	\$20 M	F	F	F	F
CHINA CONSTRUCTION BANK	\$26.616 B		\$12.608 B	\$13.264 B	\$465 M	-	\$280 M	-	F	F	F	F
ICBC	\$25.158 B		\$8.215 B	\$13.463 B	\$657 M	<\$0.1M	\$1.668 B	\$1.154 B		F	F	F
EUROPE												
BARCLAYS	\$10.927 B		\$371 M	\$3.875 B	\$3.004 B	\$306 M	\$2.444 B	\$928 M	D+	B-	С	D+
BNP PARIBAS	\$7.043 B		\$441 M	\$2.025 B	\$995 M	\$528 M	\$1.991 B	\$1.063 B	C+	В	B-	В
BPCE/NATIXIS	\$1.183 B		-	\$454 M	\$22 M	\$64 M	\$272 M	\$371 M	C-	В	B-	B-
CRÉDIT AGRICOLE	\$4.577 B		\$429 M	\$1.520 B	\$322 M	\$133 M	\$1.116 B	\$1.058 B	с	В	B-	C+
CREDIT SUISSE	\$7.825 B		\$1.334 B	\$2.500 B	\$854 M	\$36 M	\$576 M	\$2.525 B	D+	C+	С	D
DEUTSCHE BANK	\$9.974 B		\$2.581 B	\$1.549 B	\$1.451 B	\$448 M	\$3.206 B	\$739 M	D+	B-	C+	D
HSBC	\$14.322 B		\$483 M	\$2.141 B	\$3.907 B	\$280 M	\$4.827 B	\$2.683 B	D+	C+	С	D+
ING	\$3.442 B		\$252 M	\$576 M	\$25 M	\$230 M	\$479 M	\$1.881 B	с	В	В	B-
RBS	\$1.122 B		\$141 M	\$535 M	\$47 M	\$7 M	\$305 M	\$88 M	D+	C-	C-	D
SANTANDER	\$4.241 B		\$98 M	\$658 M	\$54 M	\$33 M	\$2.623 B	\$775 M	D	D	C-	D
SOCIÉTÉ GÉNÉRALE	\$7.211 B		\$573 M	\$672 M	\$566 M	\$286 M	\$1.913 B	\$3.201 B	с	B-	B-	C+
STANDARD CHARTERED	\$3.125 B		\$147 M	\$823 M	\$79 M	\$0.5 M	\$839 M	\$1.236 B	C-	C-	C-	D-
UBS	\$4.477 B		\$375 M	\$2.667 B	\$222 M	\$18 M	\$694 M	\$502 M	D	C+	С	D+
UNICREDIT	\$1.917 B		\$459 M	\$556 M	\$29 M	\$136 M	\$613 M	\$125 M	D-	D	D+	D-
UNITED STATES												
BANK OF AMERICA	\$13.617 B		\$447 M	\$2.788 B	\$3.014 B	\$182 M	\$4.542 B	\$2.644 B	D	B-	D-	D
CITI	\$14.008 B		\$1.313 B	\$3.631 B	\$2.908 B	\$241 M	\$4.479 B	\$1.436 B	C-	B-	C-	D+
GOLDMAN SACHS	\$8.987 B	A	\$3.003 B	\$1.730 B	\$737 M	\$61 M	\$1.425 B	\$2.031 B	D+	C-	С	D+
JPMORGAN CHASE	\$26.118 B	A	\$1.212 B	\$3.930 B	\$10.889 B	\$299 M	\$6.870 B	\$2.918 B	D+	B-	С	D+
MORGAN STANLEY	\$10.080 B		\$291 M	\$1.795 B	\$1.240 B	\$139 M	\$3.236 B	\$3.379 B	C-	B-	С	D+
WELLS FARGO	\$4.651 B	A	-	\$3.094 B	\$1.221 B	\$55 M	\$275 M	\$7 M	D+	B-	D	D+
										-		
CANADA												
BANK OF MONTREAL	\$8.381 B	•	\$244 M	-	\$7.749 B	\$199 M	-	\$189 M	D-	D-	D-	D-
CIBC	\$8.772 B	A	\$35 M	-	\$8.113 B	\$397 M	\$38 M	\$189 M	D-	D-	D-	D-
RBC	\$26.485 B	A	\$254 M	\$1.830 B	\$21.700 B	\$338 M	\$292 M	\$2.071 B	D	D-	D-	D+
SCOTIABANK	\$9.957 B	A	\$130 M	\$1.411 B	\$6.014 B	\$198 M	\$316 M	\$1.887 B	D-	D-	D-	D-
TD	\$17.522 B	A	\$125 M	\$427 M	\$16.835 B	\$118 M	-	\$17 M	D+	C+	D	D
AUSTRALIA												
ANZ	\$1.044 B		\$88 M	\$405 M	\$50 M	\$8 M	\$93 M	\$400 M	D	D	C-	D
COMMONWEALTH BANK	\$1.513 B		\$101 M	\$165 M	\$15 M	\$160 M	\$112 M	\$960 M	D-	D	D	D-
NAB	\$811 M		\$491 M	\$107 M	-	-	\$71 M	\$142 M	D	В	D-	D-
WESTPAC	\$815 M	A	\$110 M	\$108 M	\$15 M	-	\$133 M	\$450 M	D	C-	C-	D-
TOTAL	\$345.271	B	\$51.946 B	\$93.882 B	\$97.551 B	\$5.198 B	\$51.665 B	\$45.029 B		1		

CASE STUDY: Japanese Bank Financing of Coal Plant Developers

Since the Fukushima nuclear power plant disaster in 2011, Japan's turn towards coal power has been striking, both domestically and overseas. **Mizuho, MUFG,** and **SMFG** have been significant financiers of Japan's coal expansion, and the largest beneficiary of their financing has been the diversified Japanese trading company Marubeni Corporation.

In 2010, coal power accounted for 27 percent of Japan's domestic electricity generation, jumping to 34 percent in 2014, post-Fukushima. Japan currently has 42 coal plants in the domestic pipeline — which potentially involve nearly 21 gigawatts (GW) of capacity. Japan's support for overseas thermal coal generation has been led by state agencies such as the Japan Bank for International Cooperation (JBIC) and Nippon Export and Investment Insurance, and is planning to support a staggering 32 GW of coal projects overseas, mainly in Southeast Asia.

Mizuho, MUFG, and SMFG, are joining the rush to build new coal plants and are respectively the first, second, and fifth biggest lenders to coal plant developers globally.



One company seeking to benefit is Marubeni, the world's 26th largest coal plant developer. The company is intent on building out 13,000 megawatts (MW) of new coal plants in nine countries, despite only deriving 10 percent of its current power production from coal power. Often, JBIC spearheads the financing and thereby attracts participation and interest from a wide range of global commercial banks. These projects include:

- » As consortium leader, the 1,000 MW Cirebon 2 project in Indonesia: Disbursement of loans totaling over \$1.7 billion commenced in November 2017 from financiers including JBIC, MUFG, Mizuho, SMFG, and ING. This has taken place despite continuing legal challenges and uncertainty concerning the contested environmental permitting for the plant.
- In partnership with KEPCO, the 1200 MW Nghi Son 2 project in Vietnam: The company was reportedly seeking to secure financing by the end of March 2018 from banks including JBIC, Mizuho, MUFG, SMFG, and Standard Chartered.¹¹ Nghi Son 2 would generate twice as much CO₂ per unit of power generated as the average coal plant in Vietnam at a level that will significantly exceed the emissions intensity limit above which Standard Chartered rules out financing for new coal-fired power plants.

Mizuho and MUFG have been the biggest lenders to Marubeni by far since 2014. Marubeni's largest shareholders include the Government Pension Investment Fund of Japan, BlackRock, and Mizuho. Banks and investors with exposure to Marubeni should be concerned about the stranded asset risk of Marubeni's coal expansion plans. Institutional investors active in calling for portfolio decarbonization in line with the Paris Agreement could encourage Marubeni to focus on the renewable energy side of its business and get out of coal.

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United States 425 Bush Street, Suite 300 | San Francisco, CA 94108 | RAN.org Cirebon coal-fired power plant in West Java Province, Indonesia. PHOTO: FRIENDS OF THE EARTH JAPAN



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