

ICBC



RENEWABLE ENERGY INVESTMENTS

DOES THE PRACTICE LIVE UP TO THE PROMISE?

Ward Warmerdam
November 2022



TABLE OF CONTENTS

02

Introduction

03

Executive
Summary

05

1- Research
methodology

09

2- General
findings

13

3- Industrial
and Commercial
Bank of China
(ICBC)
findings

16

Conclusion

17

Recommendations



INTRODUCTION

In September 2021, China committed to stop financing coal-fired power plants abroad, and to increase its support for developing countries to expand renewable energy capacity.¹ Against this backdrop, this briefing paper presents findings on the trends in fossil fuel and renewable energy financing by China's largest bank, and the largest multinational bank in the world – the Industrial and Commercial Bank of China (ICBC). The research also places these trends within the broader picture of renewable energy and fossil fuel financing trends in other global financial institutions.

¹ Shi, Y. (2021, September 22), "China to stop building new coal power projects overseas", China Dialogue, online: <https://chinadialogue.net/en/energy/china-to-stop-building-new-coal-power-projects-overseas/>, viewed in October 2022.

EXECUTIVE SUMMARY

The Industrial and Commercial Bank of China (ICBC) is the world's largest multinational bank and is a major influencer in global energy financing. A member of various international alliances for responsible investing, the bank prides itself on being China's leader in 'green finance' and on reporting its corporate sustainability measures. However, in contrast to its domestic and international commitments, the ICBC is also the world's largest financier of coal.

The following report evaluates measures ICBC has taken between the period January 2016 to July 2022 to increase its renewable energy financing.

Out of all the financial institutions studied, ICBC currently provides the highest proportion of financing to renewable energy.

However, in the last three to four 3-4 years ICBC seems to have increased its fossil fuel attributable credit to the selected companies while credit to renewable energy appears relatively stable, indeed potentially even declining.

If ICBC is to lead its international peers in terms of proportions of renewable energy financing, and make good on its promises to be China's 'green' bank, the bank must increase its financing of renewable energy.

THE MAIN FINDINGS OF THE REPORT ARE AS FOLLOWS:

- 1-** Financial institutions provided USD 3.46 trillion in loans and underwriting services to companies involved in fossil fuels and renewable energy. Of this amount, 92% (USD 3.2 trillion) was provided to companies engaged in fossil fuels, and 8% (USD 247 billion) was provided to companies engaged in renewable energy.
- 2-** Levels of financing for renewable energy have only increased slightly since 2015's Paris Agreement: from 6% in 2016 to 11% in 2021.
- 3-** The Bank of China and the ICBC rank among the top 15 creditors of the energy companies studied. They provided USD 71 billion and USD 70 billion respectively in fossil fuels, renewable energy loans, and underwriting services in the period of study.
- 4-** 24% (USD 17 billion) of ICBC's financing was attributable to renewable energy, the highest out of the 15 creditors studied, and Bank of China has the second-highest proportion of renewable energy financing at 10%. Only 2% of the top three US banks' financing went to renewable energy.
- 5-** Three-quarters (USD 53 billion) of ICBC's energy financing went to fossil fuels, and one quarter (USD 17 billion) to renewable energy.
- 6-** In the last 3-4 years, ICBC has increased its fossil fuel-attributable credit to the selected companies, while credit to renewable energy appears to be stable or declining (see Figure 6).
- 7-** In the first seven months of 2022, ICBC has already provided almost USD 10 billion in loans attributable to fossil fuels, and only USD 2.3 billion to renewable energy.
- 8-** While there was a peak of 35% renewable energy financing from ICBC in 2017, levels have remained in the 23-28% range since, with a decline to 18% in the first seven months of 2022.

1

RESEARCH
METHODOLOGY

1.1 SELECTED ENERGY SOURCES AND COMPANIES

According to the United Nations Framework Convention on Climate Change (UNFCCC), in 2016 81% of all greenhouse gas (GHG) emissions (excluding land use, land-use change and forestry, LULUCF)² were attributable to energy.

Within this sector, emissions originated from...³

36%
power generation

26%
transport

14%
manufacturing industries
and construction

12%
other
sectors

10%
fugitive emissions
(i.e. unintentionally emitted
GHG, for examples through
leaks from pipelines)
from the production of fuels

2%
unspecified
sources

As of 2016, electricity and heat generation accounted for 36% of total GHG emissions in the energy sector, and 29% of total GHG emissions (excluding LULUCF) for countries party to the UNFCCC. As such, power generation constitutes the core sector of this research. This study focuses on sectors that can be considered as inputs for power generation and/or for energy used in transport, manufacturing industries and construction, and fugitive emissions from the production of fuels. Together, these sectors are responsible for more than 60% of GHG emissions attributable to energy use and 49% of total global GHG emissions.⁴

² LULUCF refers to GHG emissions from land -use, land- use change and forestry. More information on the definition and inclusion of LULUCF in GHG emission calculations can be found here: https://unfccc.int/land_use_and_climate_change/lulucf/items/1084.php, viewed in February 2021.

³ United Nations Framework Convention on Climate Change (n.d.), “GHG Profiles – Annex I”, online: http://di.unfccc.int/ghg_profile_annex1, viewed in February 2021.

⁴ United Nations Framework Convention on Climate Change, “GHG Profiles – Annex I”, online: http://di.unfccc.int/ghg_profile_annex1, viewed in February 2021.

The companies reviewed, therefore, include power generation companies; fossil fuel feedstock companies, and; renewable energy input companies. The selection of fossil fuel companies is based on the largest companies on the Global Coal Exit List (GCEL) and the Global Oil & Gas Exit List (GOGEL) which are engaged in activities related to fossil fuels as shown in Table 1. The selection of “clean energy” companies is based on companies active in the production of equipment used for renewable energy (e.g. wind turbines or solar panels), or for the generation of renewable energy. Finally, a selection of the 25 largest electric utility companies globally, accounting for approximately 30% of global installed capacity,, are included. Reaching a higher proportion of total global installed capacity was beyond the scope of this research as it would have been vastly longer list of companies due to far smaller levels of installed capacity of many more localized power producers.

This selection is based on market studies, data from industry federations and other reliable sources. With the number of (international) companies selected for this study we cover around 75% of the global production volumes in the past three years for all activities related to Renewable Energy and to Fossil Fuels. It was beyond the scope of this research to cover 100% of the global energy markets, but we believe that 75% market coverage offers an accurate enough comparison between the different financial institutions. The number of companies (380) selected for this study over around 75% of global production volumes in the past three years for all activities listed in Table 1.

As a rough estimate, more than 300 companies are included in this study.

TABLE 1

Activities Related
to Renewable Energy
and Fossil Fuels

RENEWABLE ENERGY

- Geothermal energy equipment manufacturing
- Geothermal energy generation
- Green hydrogen
- Mini hydro (under 10 MW, run-of-the-river)
- Ocean energy generation
- Solar energy generation
- Solar panel manufacturing (PV and CSP)
- Wind power generation
- Wind turbine manufacturing

FOSSIL FUELS

- Coal-fired power generation
- Coal mining
- Gas-fired power generation
- Gas production and refining
- Oil-fired power generation
- Oil production and refining
- Oilfield services
- Pipelines

1.2 FINANCIAL RESEARCH

1.2.1 DATA SOURCES

This research uses Refinitiv and Bloomberg to retrieve data on syndicated loans and issuance underwriting services provided to the selected companies for the period from January 2016 to July 2022. IJGlobal was used to identify any further project finance provided to the selected companies. The combined dataset was reviewed, and all duplicate deals were removed.

1.2.2 SEGMENT ADJUSTERS

In order to attribute a value to the identified financing to fossil fuels and renewable energy respectively, segment adjusters were calculated. A number of the selected companies are active in multiple sectors, and in several cases, they have activities attributable to both fossil fuels and renewable energy. This is particularly the case for utility companies developing their renewable energy portfolios.

For each of the 380 selected companies, this research analyses which proportion of their activities can be attributed to fossil fuels, which to renewable energy, and which to other activities inside and outside the energy sector. Using these

segment adjusters makes it possible to attribute a percentage of each loan to, and each investment in, the selected companies to fossil fuels, to renewable energy and to other activities. A general corporate loan to a power company, or an investment in the shares of that same company, can be used by the power company to finance all types of activities it is involved in. For general corporate loans and investments provided to companies active in more than one segment, the segment adjusters therefore are used to attribute the financing and investment amounts to the different activities in which the energy company is involved.



Because of a lack of available data, segment adjusters were not calculated in the same way for each company. Instead, the research uses data on the annual capital expenditure (capex) per sector or segment in which the company is active. These data are also referred to as the annual addition to non-current assets per sector/segment.

For some companies, capex-data per segment is not available, or the segment classification used by the company is too broad to distinguish between the activities listed in Table 1. In these cases, the following proxies were used in order of preference:

- for electricity companies: the installed electricity generation capacity broken down by energy source;
- segment distribution of assets;
- segment distribution of costs;
- segment distribution of profits;
- an estimate based on the description of the company's activities.

The segment distribution of capex, assets, costs and/or revenues was primarily identified through annual reports, company filings and investor presentations. Segment adjusters were calculated separately for each of the years 2016-2021 (2022 figures are based on 2021 until more recent data is available from annual reports in 2023).

For identified project finance, this research sought more details of the project in order to attribute all project financing to either renewable energy, fossil fuels, or others out of scope.

The financing and investment data identified for each company was then combined with the relevant segment adjusters. For example, if a deal was found where Oil Company A received a general corporate loan from Bank B for US\$ 100 million in 2019. During this financial year, 95% of Oil Company A's capex went to oil, 3% to wind power, and 2% to activities which are not relevant to our analysis. \$ 95 million was therefore attributed to fossil fuels, USD 3 million to renewable energy, and \$ 2 million was not included in the analysis.

After making these calculations for all financings and investments found, the total amounts financed and invested by each bank, insurer or pension fund were calculated, for both renewable energy activities and fossil fuel activities.

2

GENERAL FINDINGS

This research finds that financial institutions provided **\$3.46 trillion** in loans and underwriting services to the selected companies between January 2016 and July 2022.

92% (\$3.2 trillion)

was provided to companies engaged in **fossil fuels**

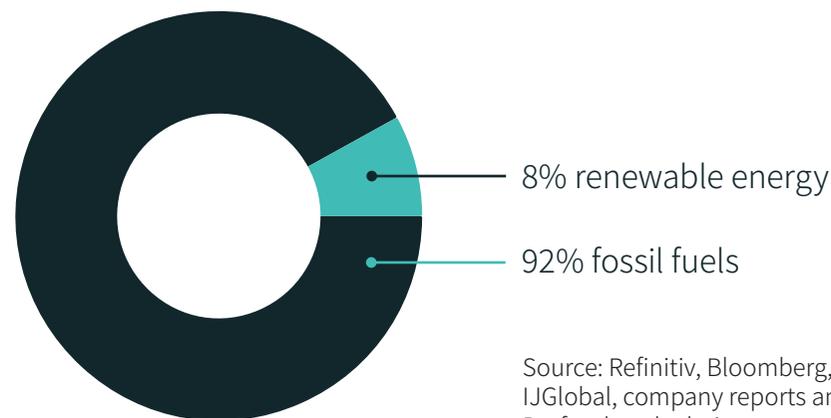
8% (\$247 billion)

provided to companies engaged in **renewable energy**

(see Figure 1)

FIGURE 1

Loans & underwriting per energy type
(2016-2022 July)



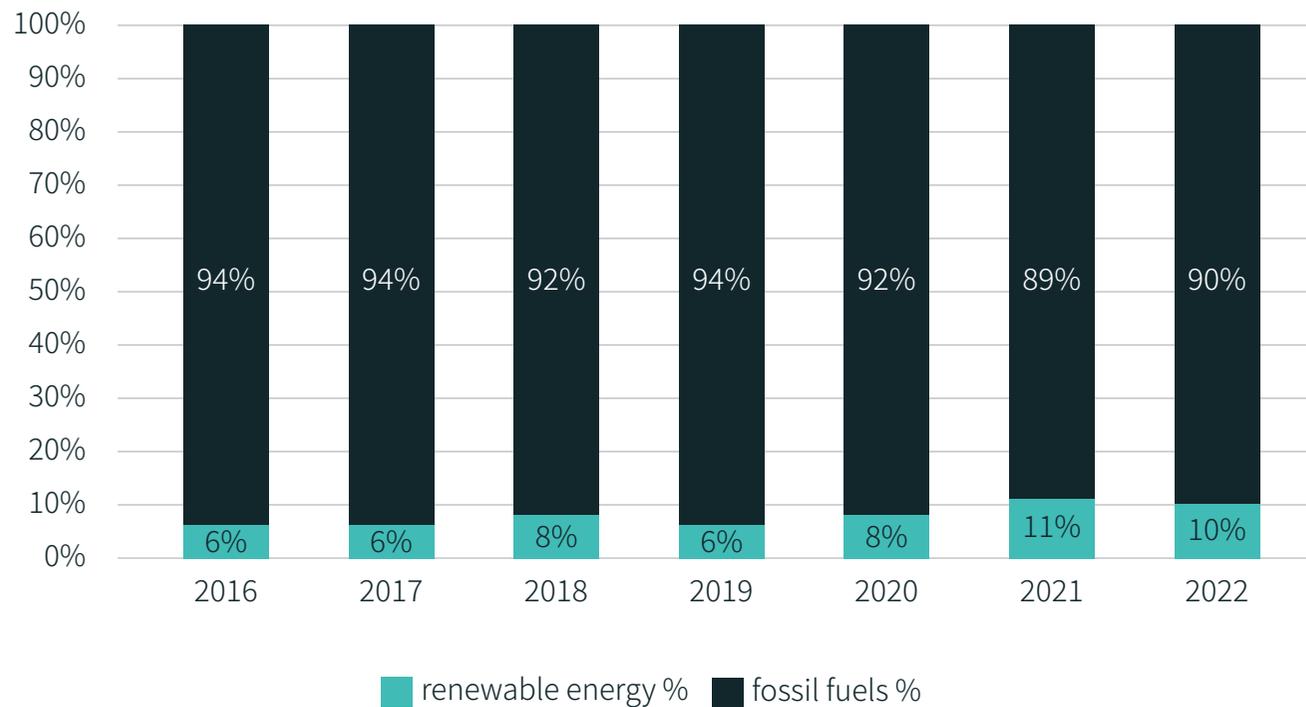
Source: Refinitiv, Bloomberg, IJGlobal, company reports and Profundo calculations.



The proportion of financing attributable to renewable energy has only increased slightly since COP21 in Paris, in 2015 (see Figure 2), from 6% in 2016 to 11% in 2021.

FIGURE 2

Proportions of loans & underwriting per energy type and year (2016-2022 July)



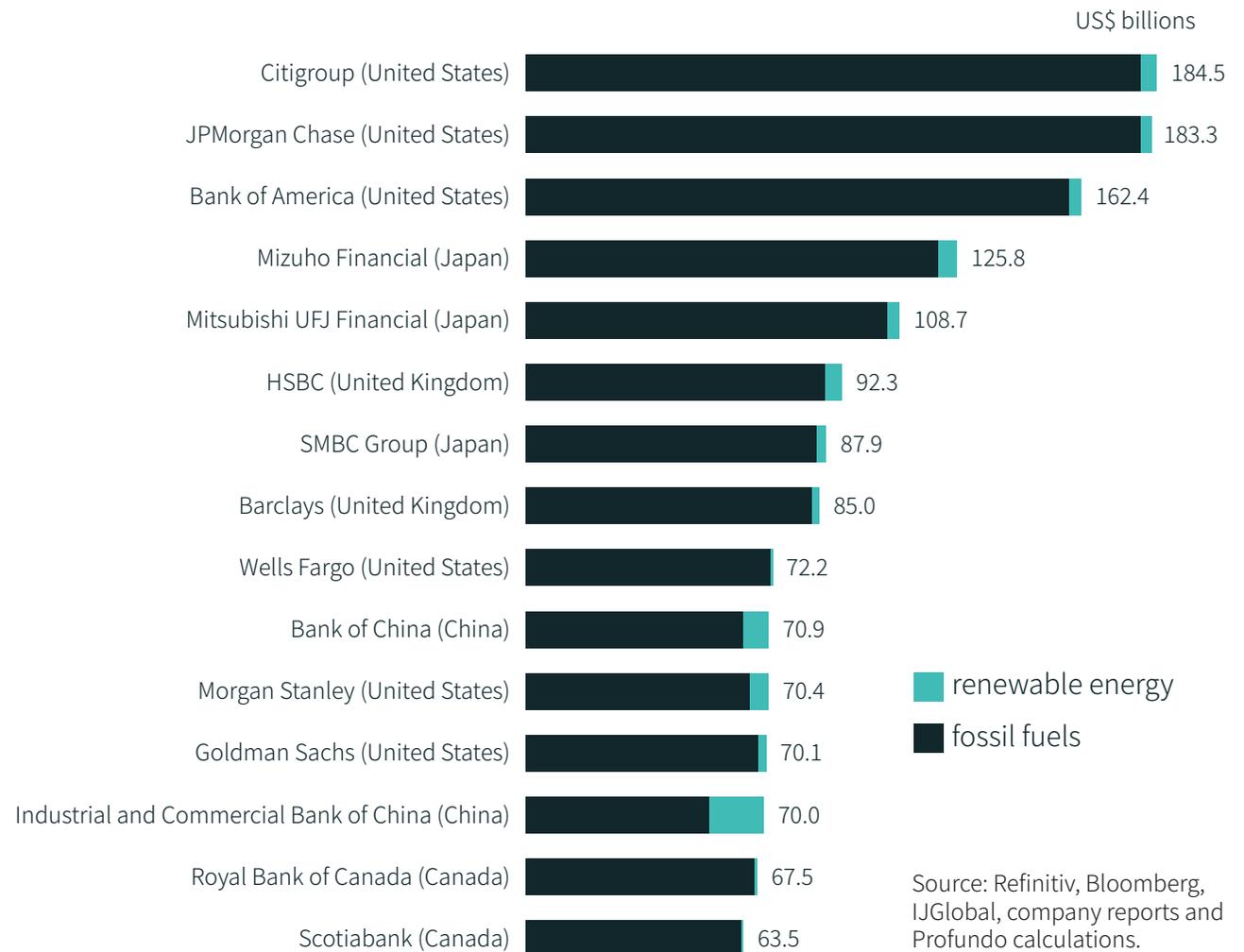
Source: Refinitiv, Bloomberg, IJGlobal, company reports and Profundo calculations.

This research found that the top creditors of the selected companies were three banks headquartered in the United States. Citigroup ranked first, providing \$184.5 billion in loans and underwriting services in the period from January 2016 to July 2022. It was followed by JPMorgan Chase (\$183.3) and Bank of America (\$162.4 billion). The Bank of China and the Industrial and Commercial Bank of China (ICBC) also rank among the top 15 creditors of the selected companies. Bank of China provided \$71 billion and ICBC \$70 billion in fossil fuels and, renewable energy loans and underwriting services in the period of study.

(see Figure 3).

FIGURE 3

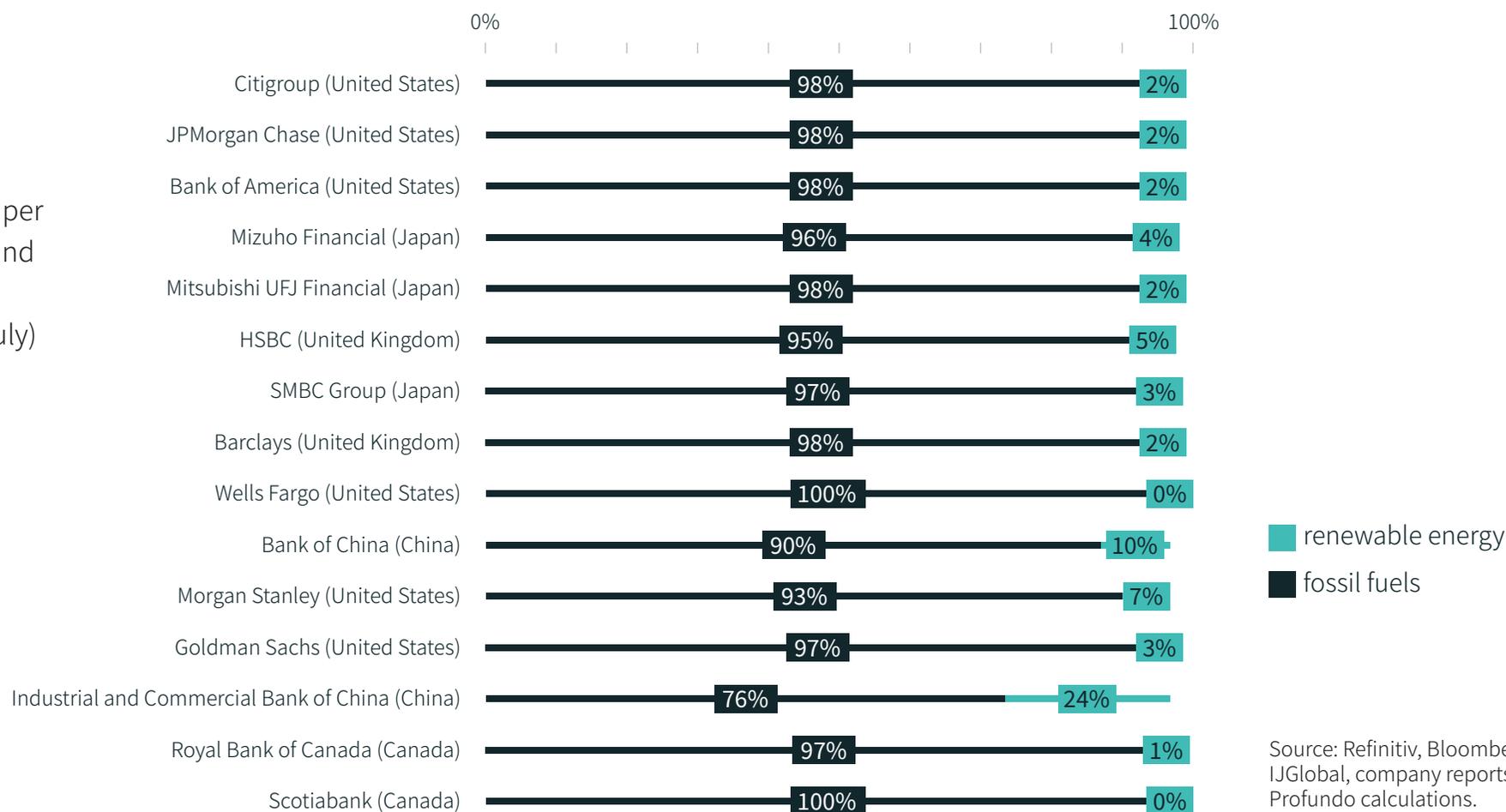
Loans & underwriting per financier and energy type (2016-2022 July, US\$ billion)



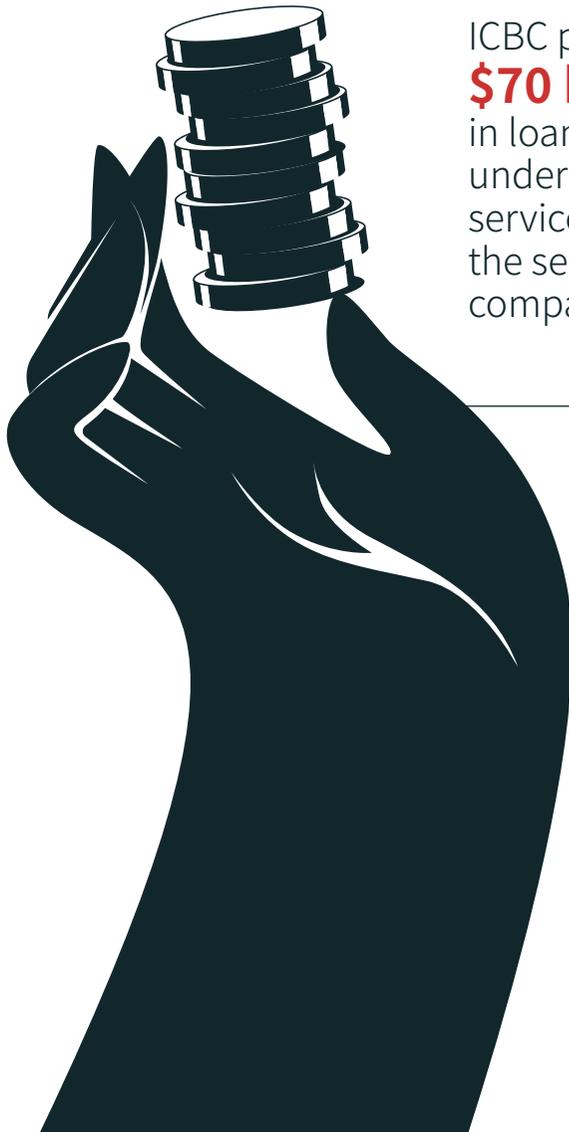
Closer analysis of the proportions of financing per energy type do show some noteworthy differences (see Figure 4). Both Chinese banks in the top 15 have the highest proportions of financing attributable to renewable energy. The Bank of China has 10% and ICBC 24%. By comparison, the top three US banks only have 2% of identified financing to the selected companies in the period of study attributable to renewable energy.

FIGURE 4

Proportions of loans & underwriting per energy type and financier (2016-2022 July)



Source: Refinitiv, Bloomberg, IJGlobal, company reports and Profundo calculations.



In the period from January 2016 to July 2022

ICBC provided **\$70 billion** in loans and underwriting services to the selected companies.



three quarters fossil fuels (\$53 billion)

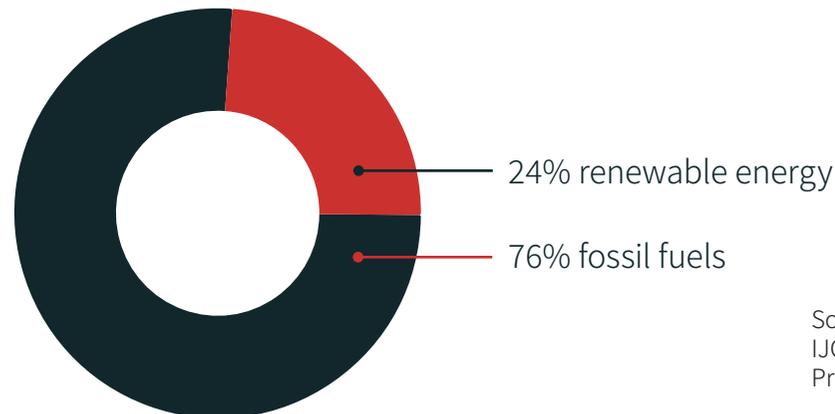


one quarters renewable energy (\$17 billion)

(see Figure 5)

FIGURE 5

ICBC: Loans & underwriting per energy type (2016-2022 July)



Source: Refinitiv, Bloomberg, IJGlobal, company reports and Profundo calculations.

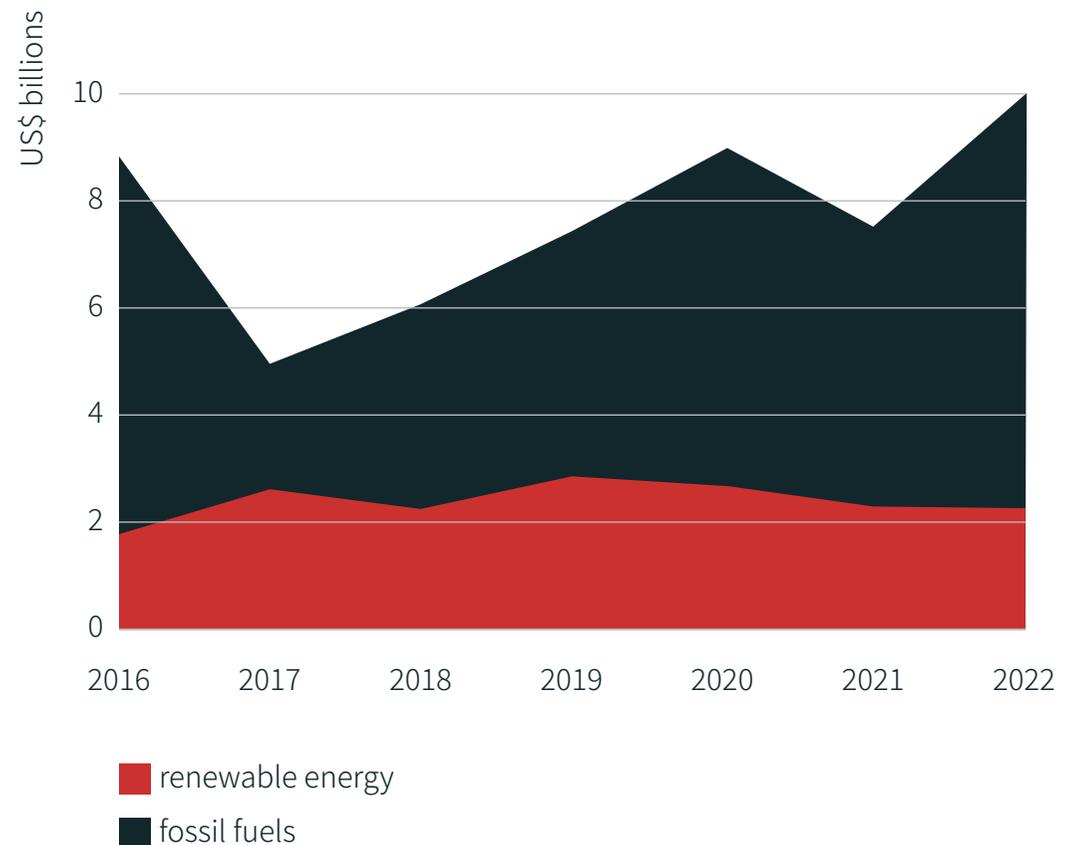


Looking at loans and underwriting services per year shows that, in the last 3-4 years, ICBC seems to have increased its fossil fuel attributable credit to the selected companies, while credit to renewable energy appears relatively stable, indeed potentially even declining (see Figure 6).

In the first 7 months of 2022, ICBC has already provided almost \$10 billion in loans attributable to fossil fuels, and only \$2.3 billion to renewable energy.

FIGURE 6

ICBC: Loans & underwriting per year and energy type
(2016-2022 July, US\$ billions)

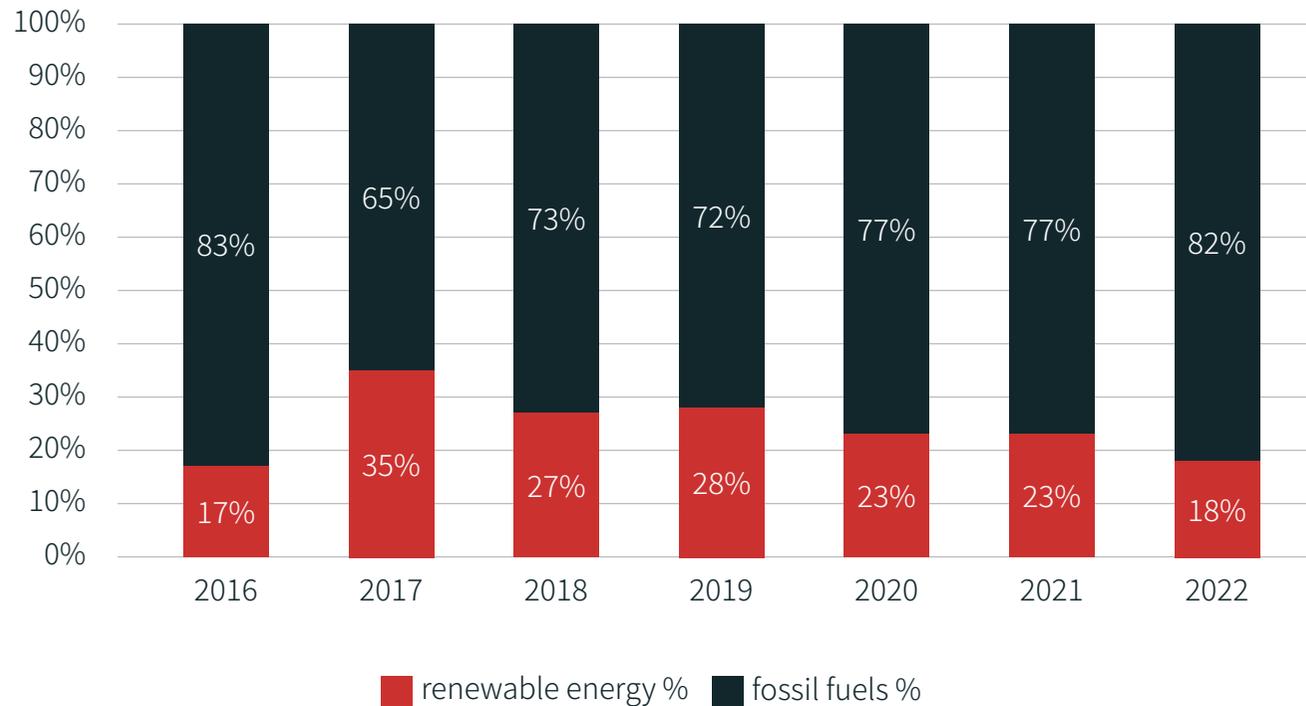


Source: Refinitiv, Bloomberg, IJGlobal, company reports and Profundo calculations.

A closer looking at the proportions of loans and underwriting services attributable to renewable energy and fossil fuels further reveals this trend (see Figure 7). While there was a peak of 35% renewable energy financing in 2017, levels have remained in the 23-28% range since, with a decline to 18% in the first 7 months of 2022.

FIGURE 7

ICBC: Proportions of loans & underwriting per energy type and year (2016-2022 July)



Source: Refinitiv, Bloomberg, IJGlobal, company reports and Profundo calculations.

CONCLUSION

This research finds that financial institutions provided \$ 3.46 trillion in loans and underwriting services to the selected companies in the period January 2016 to July 2022. 92% of this (\$ 3.2 trillion) was provided to companies engaged in fossil fuels, with 8% (\$ 247 billion) was provided to companies engaged in renewable energy. For most international financial institutions only 2-5% of this financing was attributable to renewable energy. However, for Chinese banks the Bank of China and ICBC, the proportions of renewable energy financing were 10% and 24% respectively.

ICBC provided \$ 70 billion in loans and underwriting services to the selected companies in the period January 2016 to July 2022. Three-quarters for this was attributable to fossil fuels (USD 53 billion) and one quarter to renewable energy (\$ 17 billion). In the last three to four years ICBC seems to have increased its fossil fuel attributable credit to the selected companies while credit to renewable energy appears relatively stable, indeed potentially even declining. If ICBC is to lead its international peers in terms of proportions of renewable energy financing it should increase its financing of renewable energy. If ICBC is to address the needs of the times, it should drastically reduce its financing of fossil fuels.



RECOMMENDATIONS

Out of all the financial institutions studied, ICBC currently provides the highest proportion of financing to renewable energy.

However, in the last three to four 3-4 years ICBC seems to have increased its fossil fuel attributable credit to the selected companies while credit to renewable energy appears relatively stable, indeed potentially even declining.

If ICBC is to lead its international peers in terms of proportions of renewable energy financing, and make good on its promises to be China's 'green' bank, it should increase its financing of renewable energy.

