



OFFICE OF THE NEW YORK CITY
COMPTROLLER

Corporate Governance & Responsible Investment

**Vote FOR the New York City
Retirement Systems'
Clean Energy Investment Ratio
Shareholder Proposals
at This Year's Bank Annual Meetings**

This is not a solicitation of authority to vote your proxy. Please do not send us your proxy card as it will not be accepted.

An aerial view of the New York City skyline, featuring prominent skyscrapers like the Chrysler Building and the Empire State Building. The image is overlaid with a semi-transparent blue filter. A central white-bordered box with rounded corners contains the text "The Proposals" in a bold, white, sans-serif font.

The Proposals

Request: Disclose clean energy financing ratio & methodology

Resolved:

Shareholders request that **Goldman Sachs** (“Company”) disclose annually its Clean Energy Supply Financing Ratio (“Ratio”), defined as its total financing through equity and debt underwriting, and project finance, in low-carbon energy supply as a proportion of that in fossil-fuel energy supply. The disclosure, prepared at reasonable expense and excluding confidential information, shall describe the Company’s methodology, including what it classifies as “low carbon” or “fossil fuel.”

Clean Energy Financing Ratio = Financing of low-carbon energy supply relative to financing of fossil-fuel energy supply.

- Financing defined to include equity and debt underwriting, and project finance, consistent with BNEF methodology
- See Appendix A for definition of energy supply

Proposal’s supporting statement also recommends, at management’s discretion, Goldman Sachs:

- Set timebound ratio targets aligned with its net zero commitments
- Consult BloombergNEF’s (BNEF) “Financing the Transition: Energy Supply Investment and Bank Financing Activity”¹ report when setting Ratio targets and defining “low carbon” and “fossil fuel” financing
- Work to establish standardized industrywide methodologies
- Address/Include lending



6 focus companies

1. Royal Bank of Canada
 2. Bank of America
 3. Goldman Sachs
 4. Morgan Stanley
 5. JP Morgan – Withdrawn based on ratio disclosure commitment
 6. Citigroup – Withdrawn based on ratio disclosure commitment
- ✓ Among the largest energy supply lenders and underwriters
 - ✓ Net Zero Banking Alliance (NZBA) members and have thus committed to:
 - Achieve net zero greenhouse gas (GHG) emissions for financing activities by 2050
 - Set Intensity and/or absolute targets
 - Annually disclose absolute financed emissions



10 reasons to vote FOR the Proposal

1. As linchpins of the global economic system, large banks broadly exposed to financial stability risks posed by climate change
2. Enhances investors' ability to assess the bank's transition risks and opportunities, progress towards its net zero commitments and the pace and scale of its energy transition
3. Proposal seeks disclosure – it is not prescriptive as to methodology or definitions
4. Energy transition is a significant profit-generating opportunity that has been turbocharged in the U.S. by Inflation Reduction Act
5. Each bank has made robust commitments to sustainable finance, but investors need enhanced disclosure to track actual clean energy financing
6. Provides investors with a reliable, decision-useful clean energy financing ratio from the bank itself, not third-party estimates
7. Complements and supplements bank's climate-related financial disclosures
8. Provides opportunity to demonstrate leadership in financing the energy transition
9. Citigroup's and JPMorgan's commitment to ratio disclosure demonstrates feasibility
10. Voluntary disclosure benefits investors in the near term and does not preclude standardization of ratio methodology



An aerial view of a city skyline, likely New York City, with a blue overlay. The Chrysler Building is prominent on the left. A central dark blue rounded rectangle contains the text "The Risks" in white. The background shows a dense urban landscape with various skyscrapers and a river in the distance.

The Risks

Largest banks broadly exposed to climate and transition risk

Numerous (≥ 11) global government regulators and organizations identify climate change as emerging and increasing threat to financial stability (see Appendix B)

Forecasted financial impacts are extensive

- Marsh McLennan estimates that climate change will put 2% of global financial assets at risk by 2100, and up to 10% by 2100 in a worst-case scenario²
- The U.S. economy could lose 1% - 4% of GDP annually by the end of the century through effects to mortality, labor and the energy sector alone under a high emissions scenario³ (Energy Policy Institute at the University of Chicago)

“Climate risk is highly concentrated in the largest U.S. financial institutions, which are major financiers of the industries driving climate change through either lending, underwriting, investing, or some combination of these activities.”⁴

“Transition risk is about mismatches in resources.

Indeed, the energy market's underlying issue is a mismatch in investments. Capex in fossil fuels has slowed to levels consistent with a net-zero future, but investment in renewables has lagged.”⁵ (Blackrock Investment Institute)



An aerial view of the New York City skyline, featuring prominent skyscrapers like the Chrysler Building and the Empire State Building. The image is overlaid with a semi-transparent blue filter. A dark blue rounded rectangle with a white border is centered in the lower half of the image, containing the text "The Science" in white. The background shows a dense urban landscape with a river and bridges in the distance.

The Science

Clean energy financing must TRIPLE by 2030

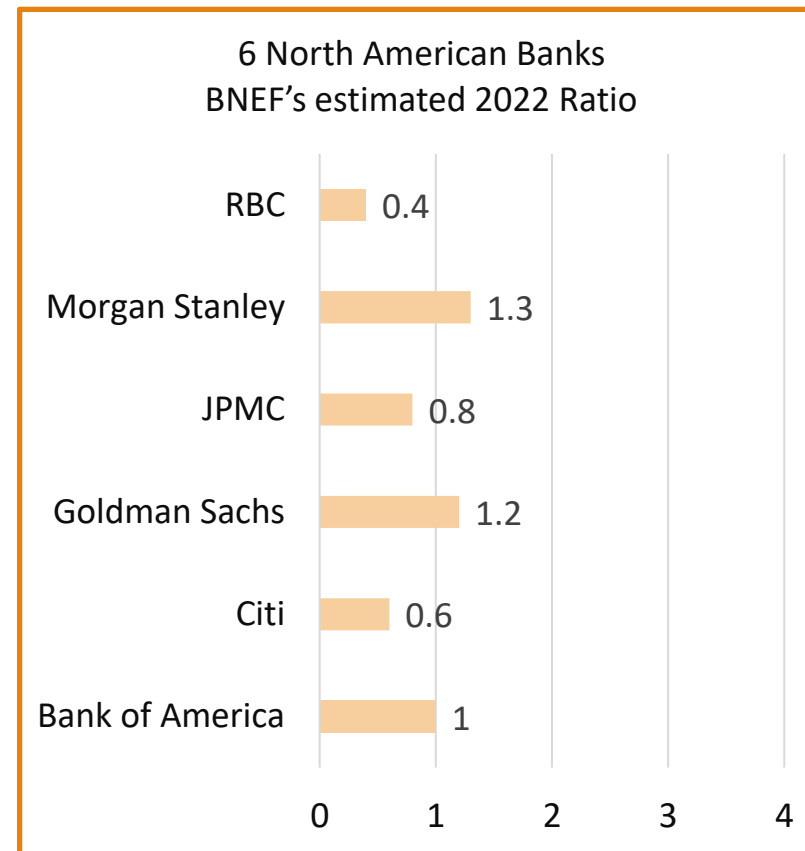
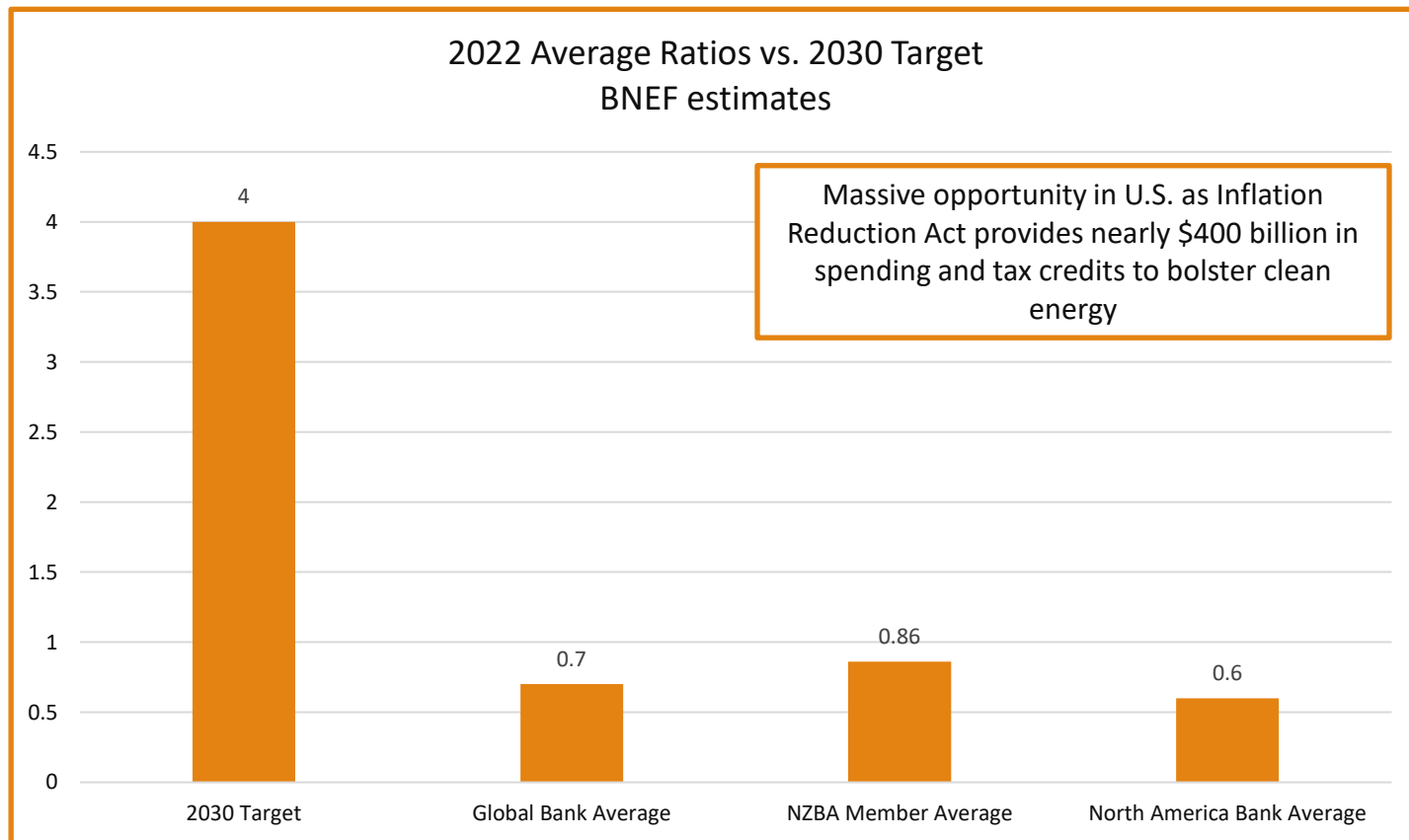
- Reaching net zero greenhouse gas (GHG) emissions by 2050 is necessary to avoid most devastating consequences of climate change (IPCC)⁶
- IEA projects that reaching net zero by 2050 will require a tripling in global annual clean energy investment by 2030⁷
- The pace at which low-carbon energy supply is scaled up will dictate the rate at which fossil fuels are phased down
- Ratio integrates trends in both clean and fossil fuel financing
- BNEF concluded that its Ratio estimate must reach 4:1 by 2030 to achieve net zero emissions by 2050⁸
 - Aligned with most referenced 1.5C-aligned pathways, including the IEA Net Zero Emissions 2050 that informed Goldman Sachs' target setting
 - BNEF report commissioned by Glasgow Financial Alliance for Net Zero (GFANZ)



An aerial view of a city skyline, likely New York City, with a blue overlay. The Chrysler Building is prominent on the left. A central text box contains the title "The Opportunity".

The Opportunity

Banks' ratio gaps signal value creation opportunity



BCG sees \$7 trillion in banks' value creation from energy transition

To Seize a \$7 Trillion Opportunity, Banks Need Bolder Strategies for Serving Customers and Society

January 2024
By Saurabh D. Pathi, Kilian Berz, Andreas Biffar, Aparajit Sudhakar, Kathrin Haubner, Allard Creighton, Sam Stewart, Sténe Riemer, Yogesh Mishra, Andy Maguire, Axel Weber, and Mark Wiseman



“Banks are not likely to return to the profitability levels and valuations that existed prior to the global financial crisis. Yet they have the opportunity to earn more than their cost of equity on a sustainable basis and increase valuations.

We estimate that at least \$7 trillion in value can be created. This corresponds to roughly doubling current valuations in the coming five years by taking a fair share of expected growth and improving price-to-book ratios.

It is critical for banks to set their sights on this target. The goal is not only to create shareholder value but also to meet their obligations to drive economic growth and finance the climate transition. These aspirations can be reached if banks take a step back, get to the bottom of their performance issues, and set a bold agenda. This agenda needs to promote growth, significantly improve productivity, and make them more appealing to investors to enable additional capital infusion.”

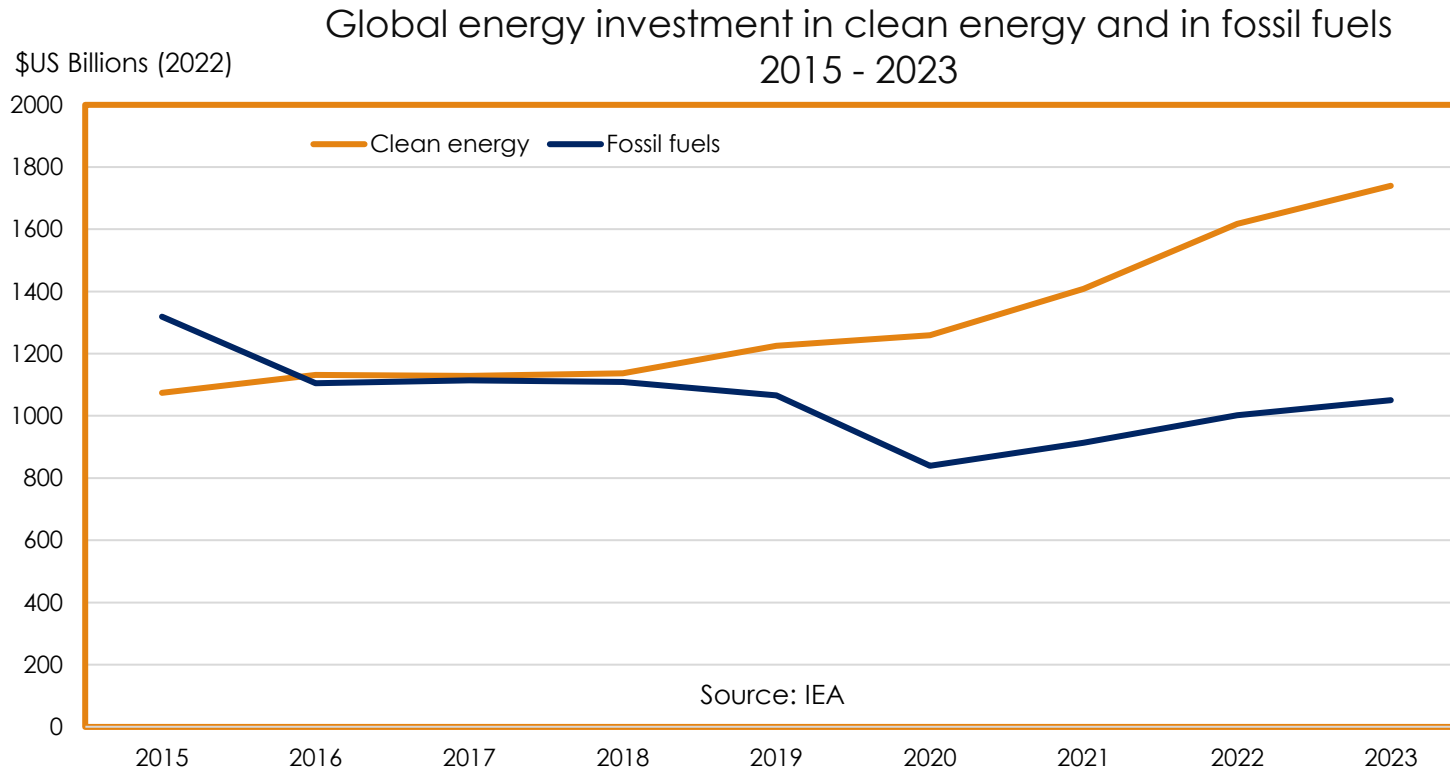
Boston Consulting Group (BCG), January 2024⁹



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Energy transition is underway – Banks expected to play key role

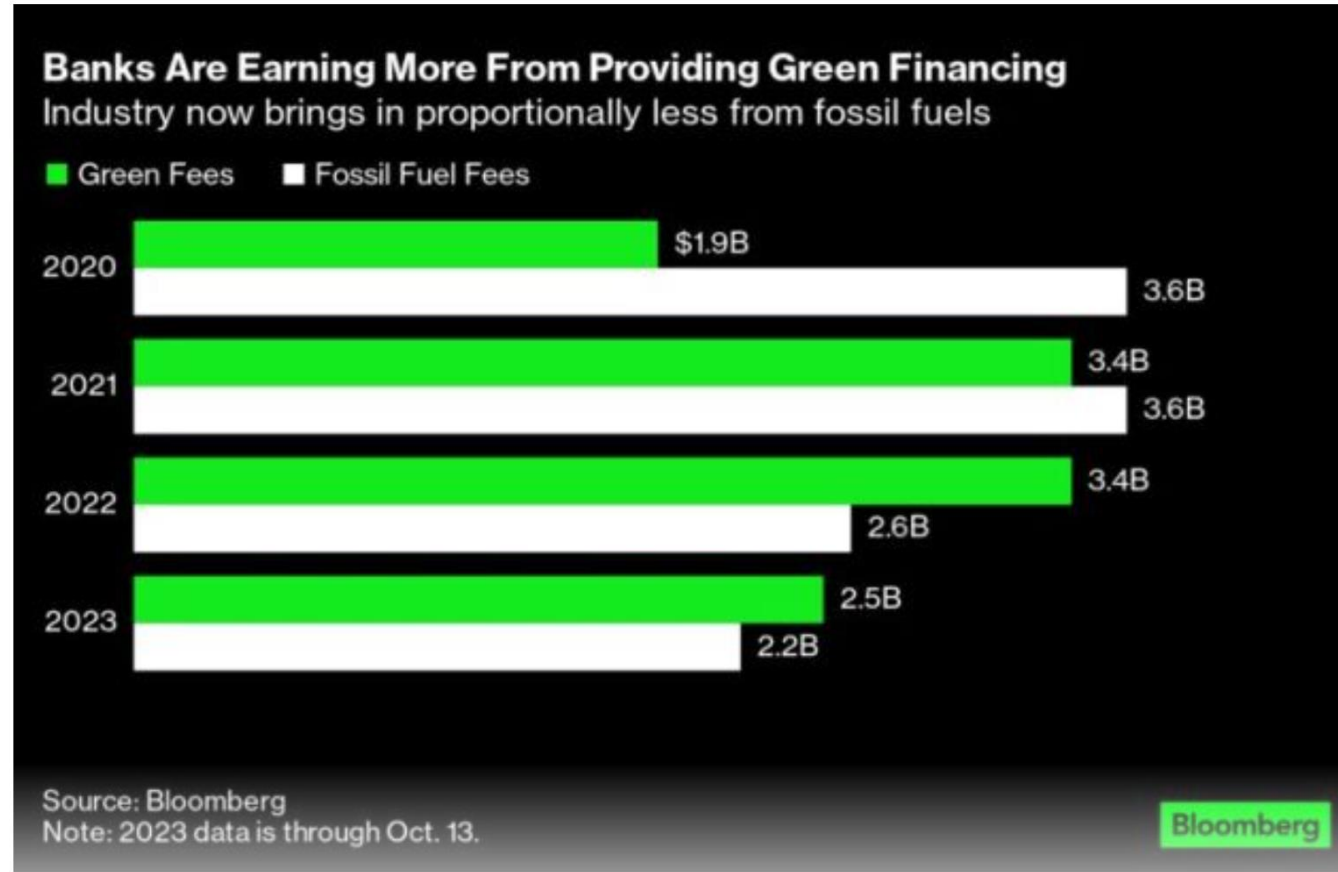


“The transition is happening, and companies and investors need to have a view on how it’s evolving. Companies must decide how to revamp their business models, where to invest and what operations to phase out.”¹⁰
(BlackRock Investment Institute, 2022)

“Governments will place high expectations on banks to be role models and catalysts for change on climate transition.”¹¹
(Boston Consulting Group, January 2024)



Banks earn more from financing clean energy



An aerial view of a city skyline, likely New York City, with a blue overlay. The Chrysler Building is prominent on the left. A central text box contains the text "Complimentary Disclosure".

Complimentary Disclosure

Benefits of Clean Energy Financing Ratio disclosure

- Complements and supplements current disclosures, especially financed emissions
 - Relies on internal dollar-based data rather than emissions that may present data availability and reliability challenges
 - Financed emissions disclosure and targets are essential, but often rely on voluntary client disclosure (e.g. for private companies and non-accelerated filers in U.S.)
 - Highlights real economy impacts of banks' energy supply financing
- Focuses on pace and scale of investment in climate solutions
- Provides disclosure specific to relative financing of clean and fossil fuel energy supply, where decision-useful disclosure is currently limited
- Addresses debt & equity underwriting, which NZBA identifies as the most relevant off-balance sheet activity for banks to address for facilitating GHG emissions reductions and mitigating climate impact¹²
 - Underwriting, not direct lending, accounts for the bulk of banking sector's energy-related financing¹³
 - Underwriting not captured by European Union disclosure rules (Green Asset Ratio)



Royal Bank of Canada Shareholder Proposal 1

Upcoming Annual Meeting: April 11, 2024

Ratio enables investors to assess pace and scale of investment in clean energy relative to fossil fuels.

Fossil Fuel Strategy

- Third-parties estimated that RBC has financed approximately \$250 billion to fossil fuels since the Paris Agreement, fourth largest in the world¹⁴
- 2022 BNEF estimated ratio of 0.4:1 is the lowest of the focus bank

Low-Carbon Financing Commitment

- Committed in 2021 to \$500 billion to “sustainable finance” by 2025, includes investments in low-carbon technology and projects¹⁵
- Announced in March 2024 new goals to increase renewables lending by 3X and to allocate \$1 billion to support the development and scaling of innovative climate solutions by 2030¹⁶

Disclosure

- Reported \$103 billion in “Sustainable Finance in 2023, approximately 8% of which deployed towards “renewable energy”
- Recently announced Transition Readiness Framework does not address relative amounts of clean energy and fossil fuel finance



Goldman Sachs Proposal 8

Upcoming Annual Meeting: April 24, 2024

Ratio enables investors to assess pace and scale of investment in clean energy relative to fossil fuels.

Fossil Fuel Strategy

- Third-parties estimate that Goldman Sachs has financed approximately \$143 billion to fossil fuels since the Paris Agreement, based on Bloomberg league tables (include but not limited to company disclosures)¹⁷
- Fossil fuel financing declined to \$9 billion in 2022 from \$21 billion in 2021
- 2022 BNEF estimated ratio of 1.2, one of the highest among focus banks

Low-Carbon Financing Commitment

- 10-year \$750 billion “sustainable financing, investing and advisory activity” target separated into two categories without targets: 1) climate transition and 2) inclusive growth¹⁸

Disclosure

- Financed emissions targets for power and energy sectors-- which are based on emissions intensity, not absolute emissions -- do not allow investors to assess actual emissions reductions
- 2023 TCFD Report discloses \$215 billion achieved toward “Climate Transition” commitment, includes clean energy, but lacks specificity with respect to low carbon energy supply¹⁹
- Contrary to implication in opposition statement, Green Asset Ratio does not render requested Ratio unnecessary (see slide 16)



Bank of America Proposal 7

Upcoming Annual Meeting: April 24, 2024

Ratio enables investors to assess pace and scale of investment in clean energy relative to fossil fuels.

Fossil Fuel Strategy

- Third-parties estimate that Bank of America has financed approximately \$280 billion to fossil fuels since the Paris Agreement, fourth largest in the world²⁰
- Reversal of bank's policy to not finance new coal mines, coal-fired power plants, and arctic drilling indicates potential change in strategy and risk exposure, warranting further disclosure

Low-Carbon Financing Commitment

- \$1.5 trillion "sustainable finance" goal across the firm by 2030 in alignment with the UN SDGs, of which \$1 trillion dedicated to "Environmental Transition"

Disclosure

- Financed emissions targets -- which are based on emissions intensity, not absolute emissions -- do not allow investors to assess actual emissions reductions
- Deployed \$410 billion in "sustainable finance" in 2022, of which \$235 billion was deployed to the "Environmental Transition," which encompasses "low-carbon energy, energy efficiency, and sustainable transportation...water conservation, land use and waste"²¹
- Reported investment in Environmental Transition lacks specificity with respect to energy supply financing



Morgan Stanley Proposal

Ratio enables investors to assess pace and scale of investment in clean energy relative to fossil fuels.

Fossil Fuel Strategy

- Third-parties estimate that Morgan Stanley has financed approximately \$153 billion to fossil fuels since the Paris Agreement, based on Bloomberg league tables (include but not limited to company's SEC disclosures)²²
- Disclosure-only proposal does not request change in strategy, affect management's discretion, nor conflict with financed emissions disclosures, contrary to implication in opposition statement

Low-Carbon Financing Commitment

- Announced \$1 trillion, 10-year commitment to "sustainable finance," which includes \$750 billion towards "low-carbon and green solutions," which includes clean energy, adaptation, clean mobility, and other environmental solutions

Disclosure

- Financed emissions targets -- which are based on emissions intensity not also absolute emissions -- and do not allow investors to assess actual emissions reductions
- Reported \$550 billion deployed to "low-carbon and green solutions" lacks specificity with respect to energy supply²³
- Client Strategy Assessment Framework will not address energy supply financing activity



Appendix A

What is energy supply?

Production and supply

Low-carbon

Company revenue driven by low-carbon sources of energy production. This includes renewables, storage, biofuels and nuclear.

Grid technology upgrades often tend to accompany cleaner capacity and also allow the smoother integration of renewables, so transmission and distribution is considered green.

- Solar
- Wind
- Geothermal
- Hydropower
- Storage
- Marine power
- Biofuels and biomass
- Nuclear
- Electricity grid
- Hydrogen and CO2 transport/storage

Manufacturing

Company revenue driven by the development of plants/facilities manufacturing low-carbon energy equipment. This includes equipment and services, such as modules, turbines and components.

We include smart grid equipment due to the direct enablement of clean power on the grid.

- Plant development
 - Solar, biomass, wind
- Smart grid equipment
- Clean energy equipment
 - Solar cells/modules, inverters
- Wind turbines
- Geothermal equipment
- Hydro equipment
- Fuel cells
- Nuclear equipment

Fossil Fuels

Company revenue driven by fossil-fuel-based sources of energy production. This includes coal, oil and gas, and utility fossil-fuel power generation for electricity and heating/cooling. This also includes the transportation and refining businesses.

- Utilities
 - Fossil-fuel power generation
 - Heating and cooling
- Coal
 - Mining
 - Rail/freight
- Oil and gas
 - Exploration and production
 - Transport
 - Refining
 - Marketing/trading
 - Filling stations
- Equipment and infrastructure
 - Generators
 - Power generation equipment, parts and services
 - Power boilers and heat exchangers
 - Oilfield chemicals

Source: BNEF

Appendix B

Global regulators identifying climate change as financial stability threat

1. Financial Stability Board (UK)¹
2. Financial Stability Oversight Council²
3. Commodity Futures Trading Commission (CFTC)³
4. Bank for International Settlements⁴
5. European Central Bank⁵
6. Basel Committee on Banking Supervision⁶
7. Organisation for Economic Co-operation and Development (OECD)⁷
8. Network of Central Banks and Supervisors for Greening the Financial System⁸
9. Federal Reserve⁹
10. Office of the Comptroller of the Currency (OCC)¹⁰
11. Federal Deposit Insurance Corporation (FDIC)¹¹

Source Links

1. https://www.fsb.org/tork-of-the-fsb/financial-innovation-and-structural-change/climate-related-risks/https://www.ecb.europa.eu/pub/financial-stability/fsr/special/html/ecb.fsrart201905_1~47cf778cc1.en.html
2. [://home.treasury.gov/news/press-releases/jy0426](https://home.treasury.gov/news/press-releases/jy0426)
3. <https://www.cftc.gov/sites/default/files/2020-09/9-9-20%20Report%20of%20the%20Subcommittee%20on%20Climate-Related%20Market%20Risk%20-%20Managing%20Climate%20Risk%20in%20the%20U.S.%20Financial%20System%20for%20posting.pdf>
4. <https://www.bis.org/publ/othp31.pdf>
5. https://www.ecb.europa.eu/pub/financial-stability/fsr/special/html/ecb.fsrart201905_1~47cf778cc1.en.html
6. <https://www.bis.org/bcbs/publ/d517.pdf>
7. <https://www.oecd.org/finance/Financial-Markets-and-Climate-Transition-Opportunities-Challenges-and-Policy-Implications.pdf>
8. <https://oneplanetsummit.fr/en/coalitions-82/network-greening-financial-system-ngfs-179#:~:text=The%20Network%20for%20Greening%20the, stability%20of%20the%20financial%20system.>
9. <https://www.federalreserve.gov/econres/notes/feds-notes/climate-change-and-financial-stability-20210319.html>
10. <https://www.occ.treas.gov/topics/supervision-and-examination/climate/index-climate.html>
11. <https://www.fdic.gov/analysis/risk-review/2023-risk-review/2023-risk-review-full.pdf>

Endnotes

1. https://assets.bbhub.io/professional/sites/24/Financing-the-Transition_Energy-Supply-Investment-and-Bank-Facilitated-Financing-Ratios.pdf
2. <https://www.marshmcclennan.com/insights/publications/2020/apr/climate-change-is-a-global-financial-risk.html#:~:text=Climate%20change%20will%20put%20at,to%20accelerate%20our%20preparation%20now>
3. <https://epic.uchicago.edu/area-of-focus/climate-change-and-the-us-economic-future/>
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5. <https://www.blackrock.com/corporate/literature/whitepaper/bii-managing-the-net-zero-transition-february-2022.pdf>
6. <https://www.ipcc.ch/assessment-report/ar6/>
7. <https://www.iea.org/reports/net-zero-by-2050>
8. https://assets.bbhub.io/professional/sites/24/Financing-the-Transition_Energy-Supply-Investment-and-Bank-Facilitated-Financing-Ratios.pdf
9. <https://web-assets.bcg.com/d2/e4/a13ce7e640ba96a5821709fec9d7/bcg-to-seize-a-7-trillion-opportunity-banks-need-bolder-strategies-jan-2024.pdf>
10. <https://www.blackrock.com/corporate/sustainability/managing-the-net-zero-transition>
11. <https://web-assets.bcg.com/d2/e4/a13ce7e640ba96a5821709fec9d7/bcg-to-seize-a-7-trillion-opportunity-banks-need-bolder-strategies-jan-2024.pdf>
12. https://www.unepfi.org/wordpress/wp-content/uploads/2022/08/FAQ-General_public-facing-1.pdf
13. <https://www.sierraclub.org/sites/default/files/2023-07/Sierra-Club-Capital-Markets-Report.pdf>
14. https://www.bankingonclimatechaos.org/wp-content/uploads/2023/08/BOCC_2023_vF.pdf
15. <https://www.rbc.com/community-social-impact/assets-custom/pdf/2022-net-zero-report.PDF>
16. <https://www.rbc.com/community-sustainability/assets-custom/pdf/esg-progress-report-2023.pdf>
17. https://www.bankingonclimatechaos.org/wp-content/uploads/2023/08/BOCC_2023_vF.pdf
18. <https://www.goldmansachs.com/our-commitments/sustainability/2022-sustainability-report/multimedia/report.pdf>
19. <https://www.goldmansachs.com/our-commitments/sustainability/tcf-report-2023/report.pdf>
20. https://www.bankingonclimatechaos.org/wp-content/uploads/2023/08/BOCC_2023_vF.pdf
21. https://about.bankofamerica.com/content/dam/about/report-center/esg/2023/2023_TCFD_Report.pdf
22. https://www.bankingonclimatechaos.org/wp-content/uploads/2023/08/BOCC_2023_vF.pdf
23. https://www.morganstanley.com/content/dam/msdotcom/en/assets/pdfs/Morgan_Stanley_2022_ESG_Report.pdf

BloombergNEF's Energy Supply Banking Ratios

A metric for financing the transition

Trina White

Co-authors: Ryan Loughhead, Jak Linstaedt,
Claudio Lubis, Jonas Rooze, William Young

March 20, 2024

What level of investment is required...

In both low-carbon energy and fossil fuels?

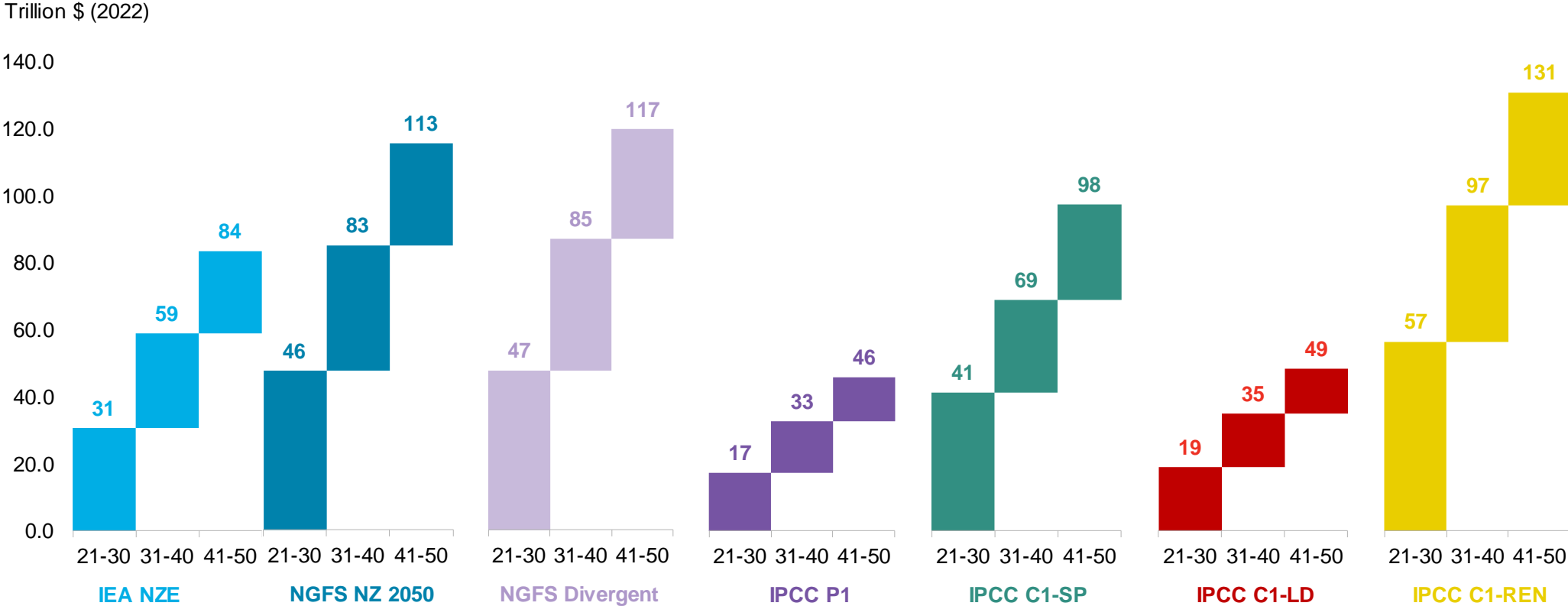


Source: Bloomberg LP



A 1.5C world requires huge investment in total energy supply to meet climate targets

Cumulative total energy supply investment from 2021, by climate scenario

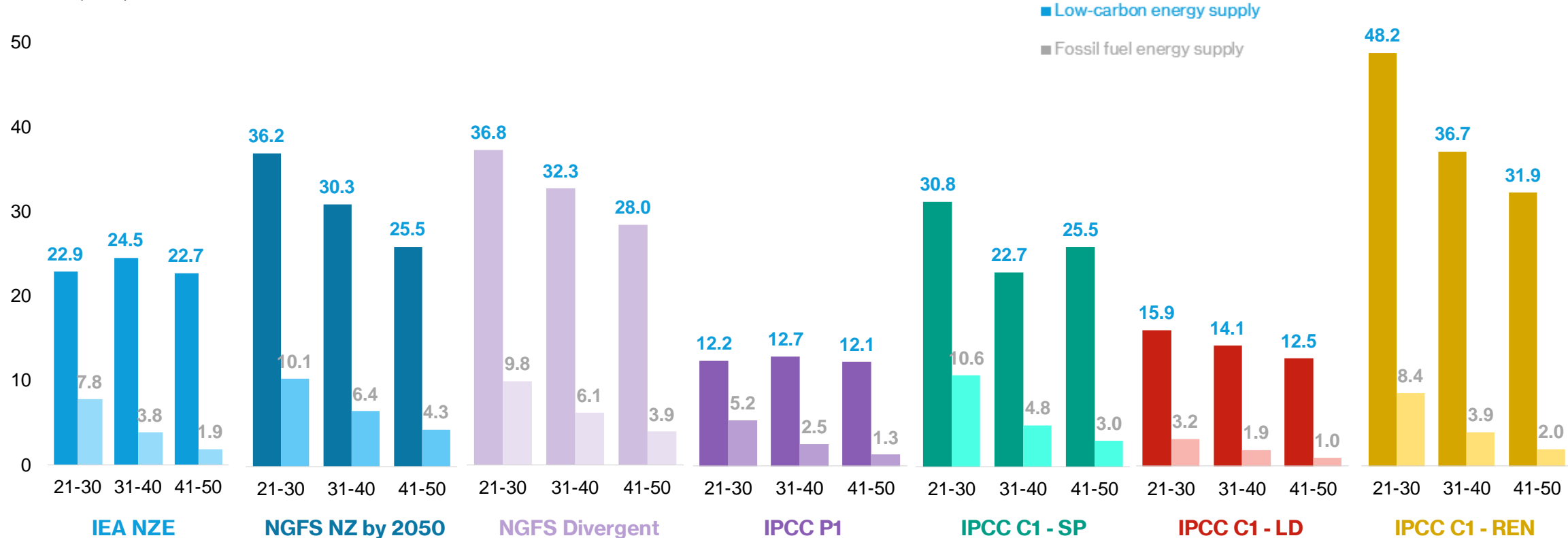


Source: BloombergNEF, IEA, IPCC, NGFS. Note: Total energy supply investment constitutes of low-carbon power supply, hydrogen infrastructures and uses, carbon capture and storage, upstream, midstream, and downstream for oil, gas, and coal and unabated fossil fuel power generation. For more on total energy supply investment, see: [Counting Cash in Paris Aligned Pathways \(web | terminal\)](#) and [Investment Needs of a 1.5°C World \(web | terminal\)](#)

Low-carbon energy supply investment far exceeds fossil fuels in all 1.5C-consistent scenarios

Energy supply investment by scenario and type

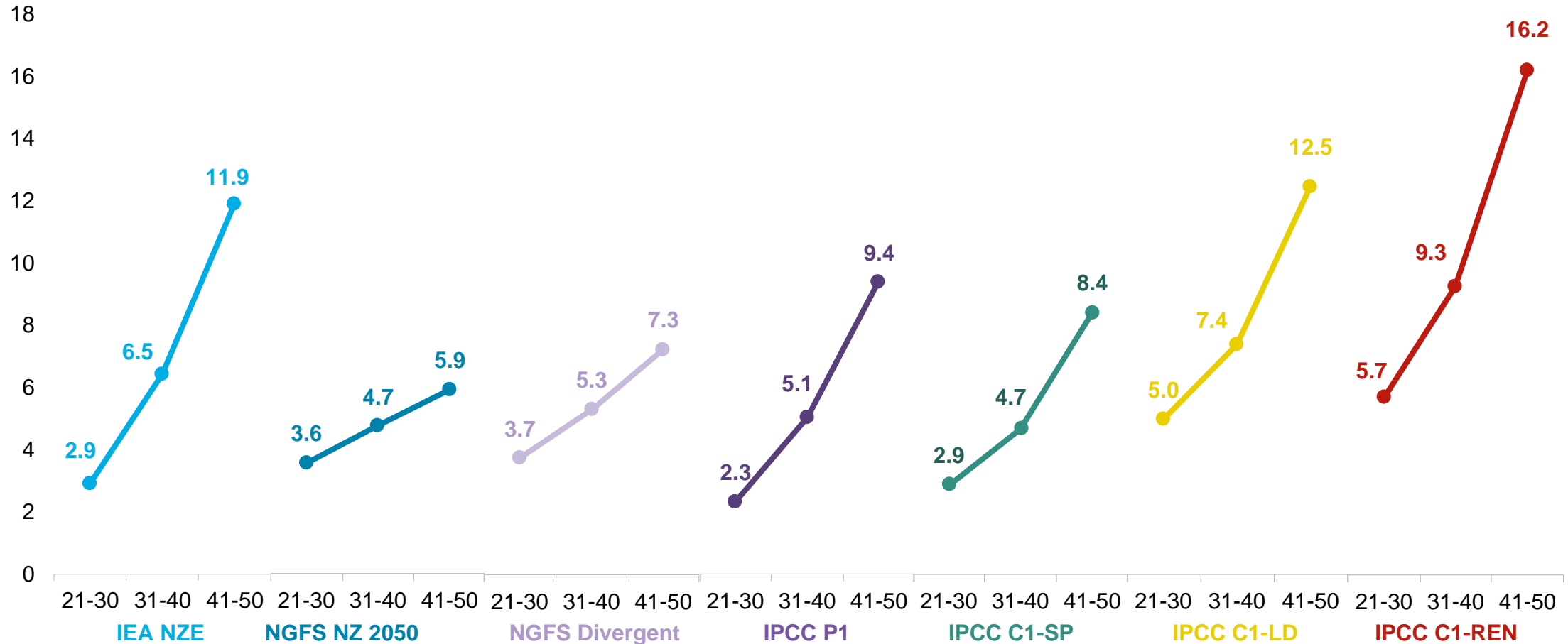
\$ trillion (2022)



Source: BloombergNEF, International Energy Agency (IEA), the Intergovernmental Panel on Climate Change (IPCC), the Network for Greening the Financial System (NGFS).

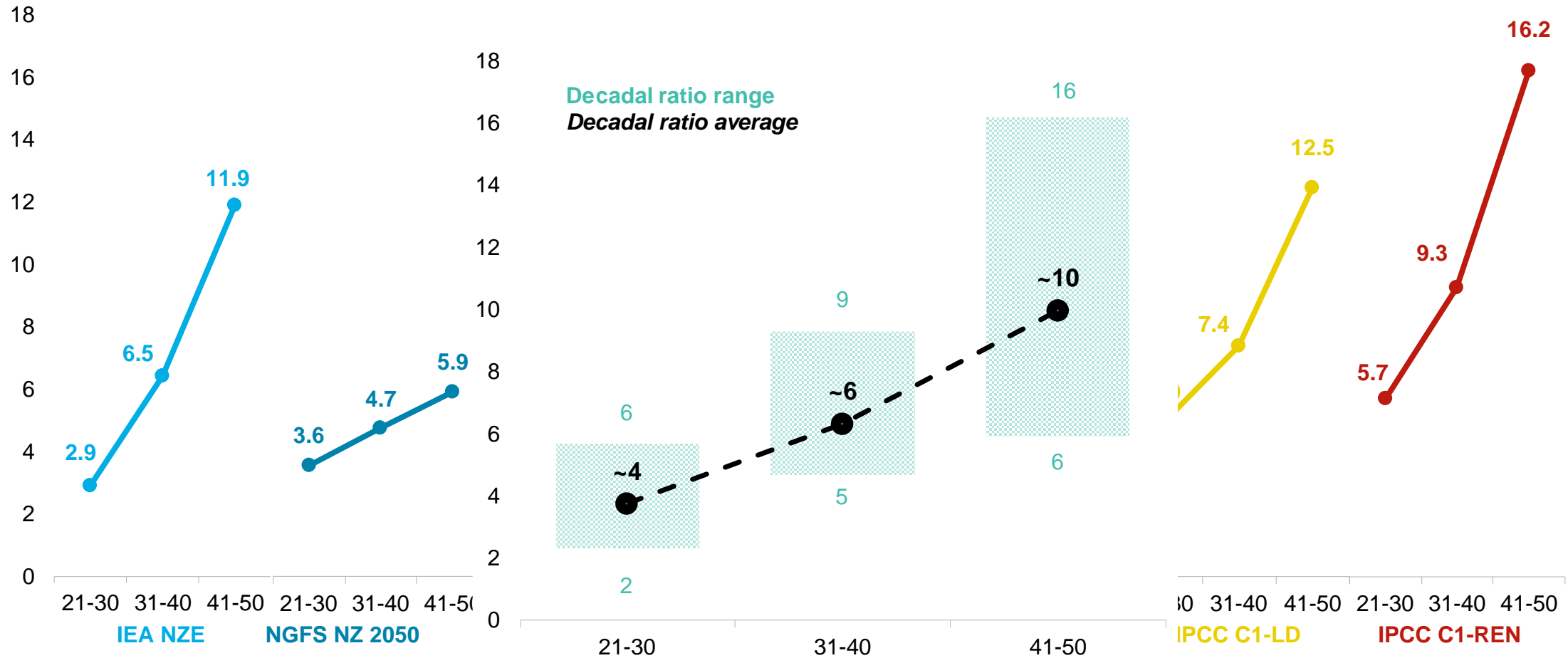
Note: NZE stands for Net Zero Emissions. IPCC P1 is a low-energy demand scenario. IPCC C1 are scenarios that limit warming to 1.5C by 2100 with no or limited overshoot of the carbon budget. SP stands for shifting pathways, LD stands for low demand and REN stands for renewables.

Ratios allow us to normalize across scenarios



Source: BloombergNEF, IEA, IPCC, NGFS

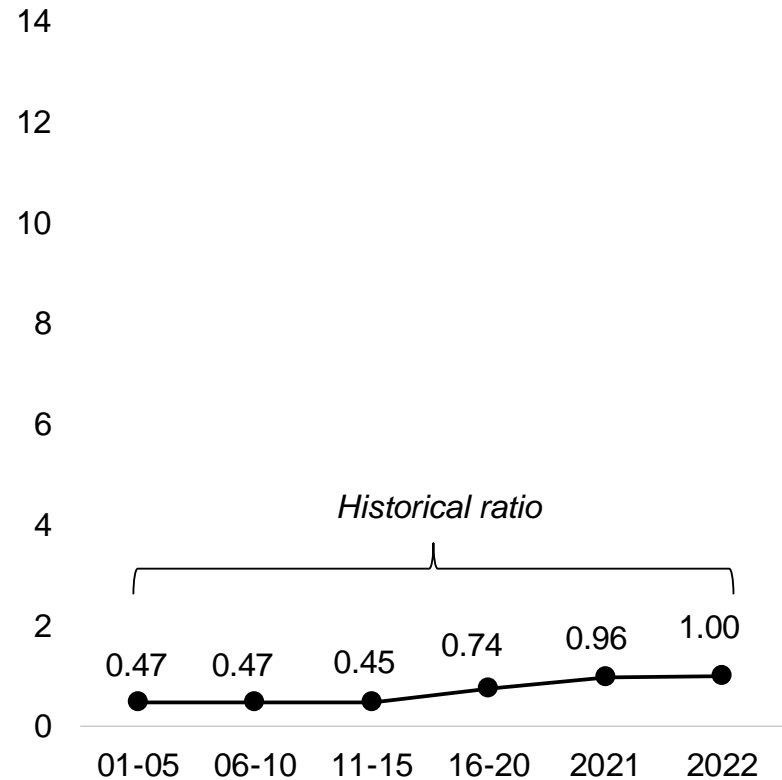
Ratios allow us to normalize across scenarios



Source: BloombergNEF, IEA, IPCC, NGFS

Investment ratios are currently at about parity between low-carbon energy and fossil fuels...

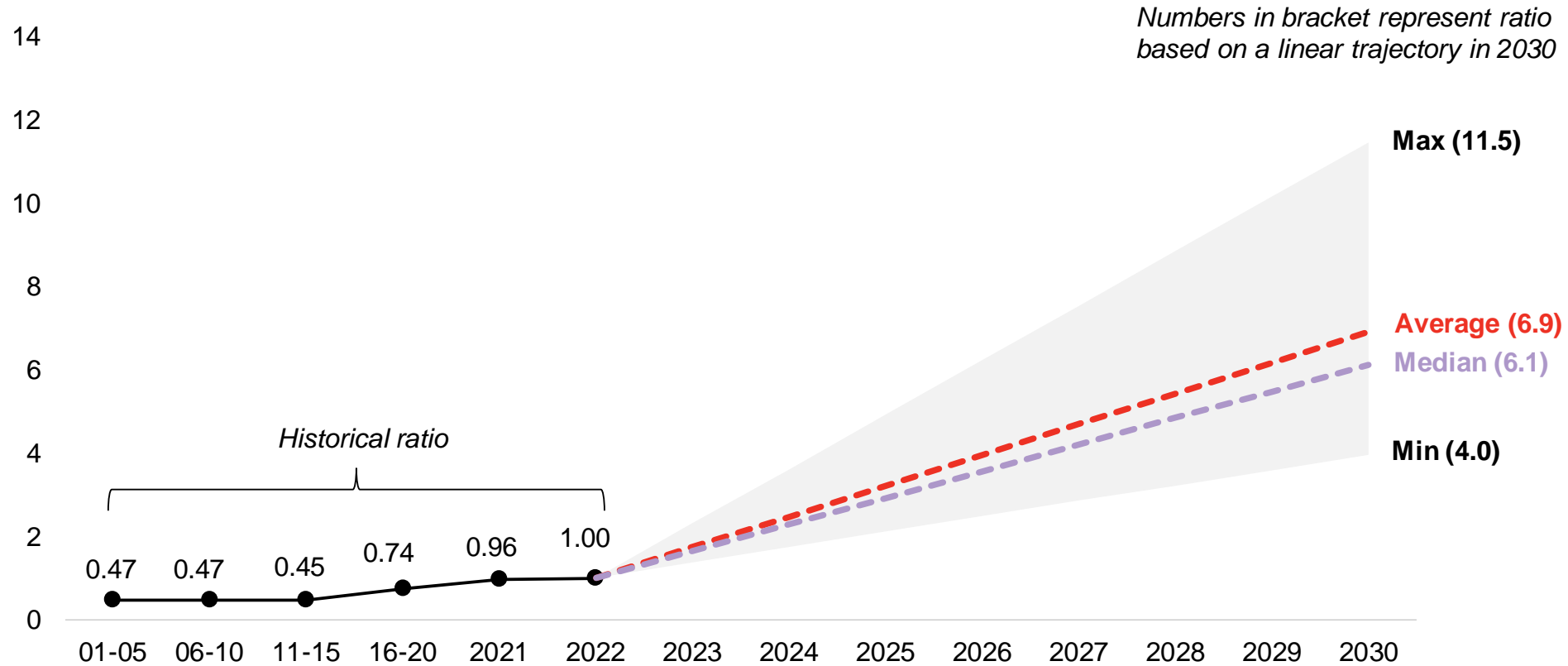
Energy supply investment ratio



Source: BloombergNEF, IEA, IPCC, NGFS

...but to achieve 1.5C, low-carbon energy supply investment would need to *rapidly* scale this decade

Energy supply investment ratio



Source: BloombergNEF, IEA, IPCC, NGFS

How does current bank financing stack up?

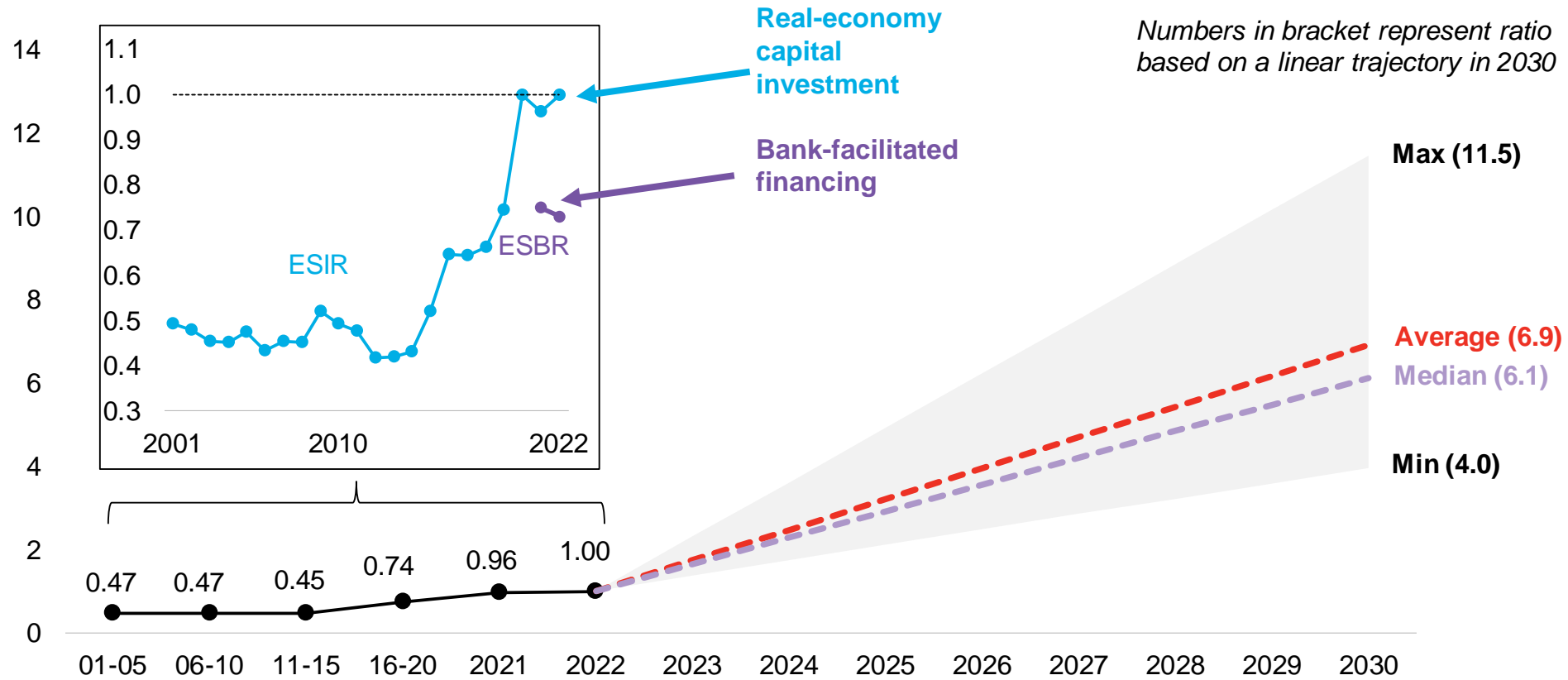
An aerial photograph of a wind farm during sunset. The sun is low on the horizon, casting a warm, golden glow over the landscape. Several large, white wind turbines are visible, with their long blades extending across the fields. The terrain is a mix of green and brown, suggesting agricultural land. The sky is filled with soft, orange and yellow clouds.

Source: Bloomberg LP

How does current bank financing stack up?

Banks broadly reflect the underlying real economy, facilitating energy capital flows in a ratio of 0.7:1

Energy supply investment ratio

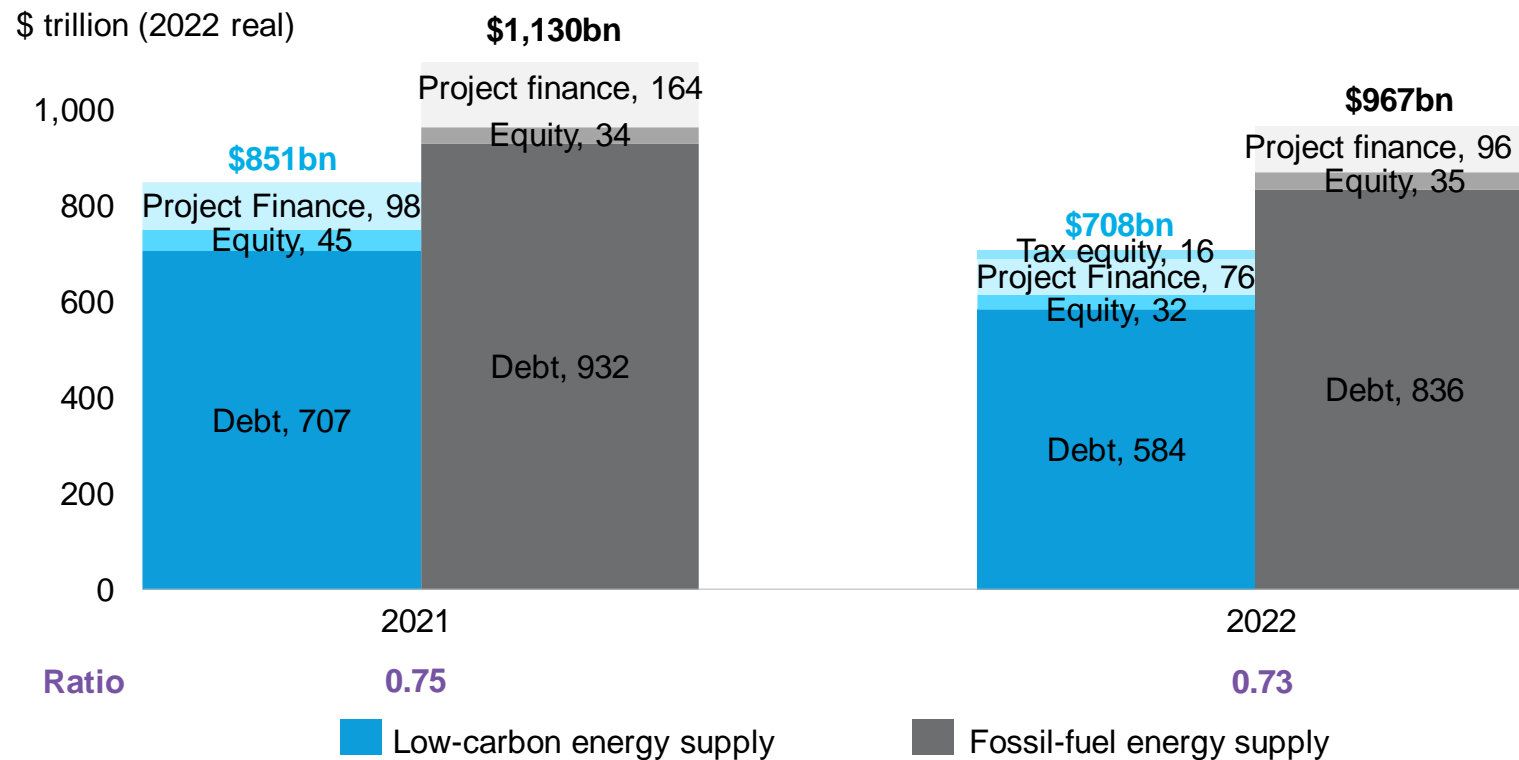


Source: BloombergNEF, IEA, IPCC, NGFS, Urgewald, Rainforest Action Network, IJGlobal

How does current bank financing stack up?

Energy financing declined slightly in 2022; ratio remained similar at 0.73:1

Energy supply underwriting by all banks, 2021-22, by financing type

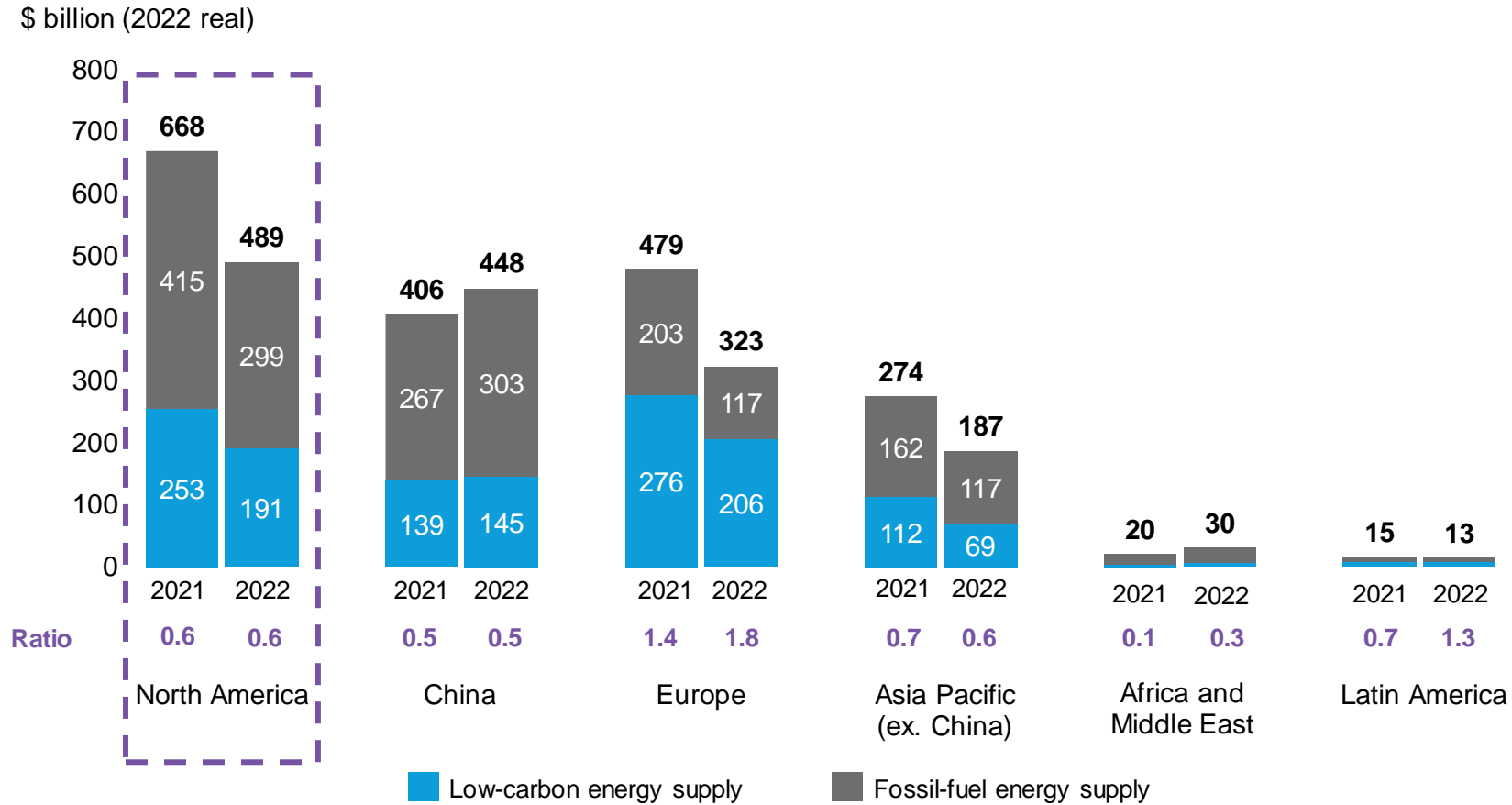


Source: Bloomberg LP, BloombergNEF, RAN, Urgewald, IJGlobal

How does current bank financing stack up?

North American banks make up the largest share of energy supply financing, with a ratio of 0.6:1

Energy supply facilitated financing by bank headquarters, 2021-22

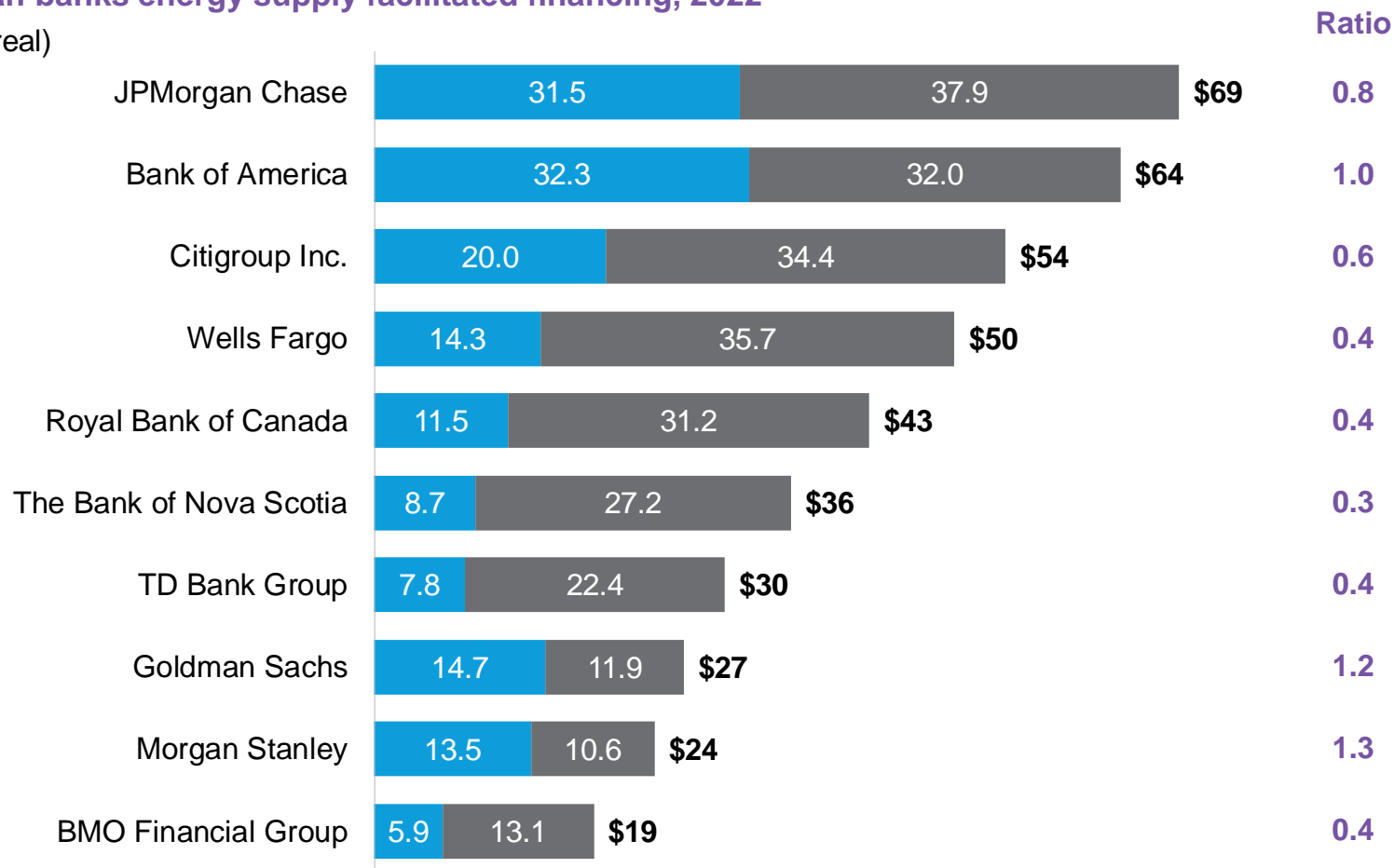


Source: Bloomberg LP, BloombergNEF, RAN, Urgewald, IJGlobal

Institutional level data reveals differences within region

North American banks energy supply facilitated financing, 2022

\$ billion (2022 real)

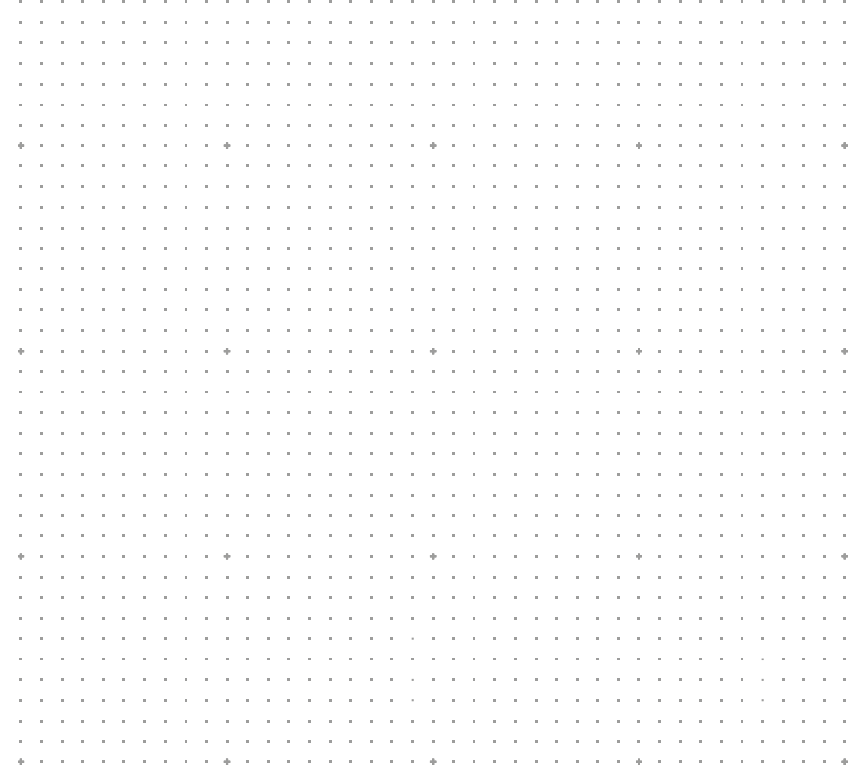


Source: Bloomberg LP, BloombergNEF, RAN, Urgewald, IJGlobal.

■ Low-carbon ■ Fossil fuels

How does BNEF approach this metric?

Methodology overview



BNEF's analysis spans the energy value chain

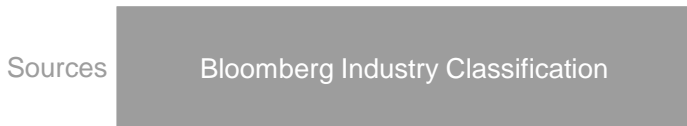
Focus of the ESBR	1 Energy Supply	2 Energy Demand	Excluded
	<p>Company revenue driven by the development, extraction, transportation or generation of energy.</p>	<p>Company revenue driven by the manufacture and financing of transportation technologies.</p>	
	<p>Production and supply</p>	<p>Consumption</p>	<p>Not included: Adjacent sectors</p>
Low-carbon	<p>Production and supply</p> <ul style="list-style-type: none"> Solar Wind Geothermal Hydropower Storage Marine power Biofuels and biomass Nuclear Electricity grid Hydrogen and CCS <p>Manufacturing</p> <ul style="list-style-type: none"> Plant development Solar, biomass, wind Smart grid equipment Clean energy equipment Solar cells/modules, inverters Wind turbines Geothermal equipment Hydro equipment Fuel cells Nuclear equipment 	<ul style="list-style-type: none"> Electric passenger vehicles Electric trucks Leasing electric vehicles Electric-vehicle financing 	<ul style="list-style-type: none"> Recycling and waste management Sustainable materials Pollution control equipment Metals and mining
Fossil Fuels	<ul style="list-style-type: none"> Utilities <ul style="list-style-type: none"> Fossil-fuel power generation Heating and cooling Coal <ul style="list-style-type: none"> Mining Rail/freight Oil and gas <ul style="list-style-type: none"> Exploration and production Transport Refining Marketing/trading Filling stations Equipment and infrastructure <ul style="list-style-type: none"> Generators Power generation equipment, parts and services Power boilers and heat exchangers Oilfield chemicals 	<ul style="list-style-type: none"> Passenger/commercial vehicles Manufacturing and leasing Engines and parts Trucks Shipbuilding Aircraft engines and parts Vehicle financing (passenger, commercial, railcar) Vehicle rental 	<ul style="list-style-type: none"> Rail (agriculture, chemicals, industrial products, etc.) Trucking freight Bus transit Taxi services Hydrogen and ammonia

How does BNEF approach this metric?

BNEF's methodology is built on transactions underwritten by banks for the energy sector

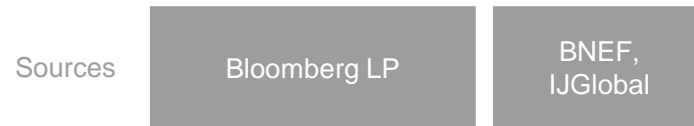
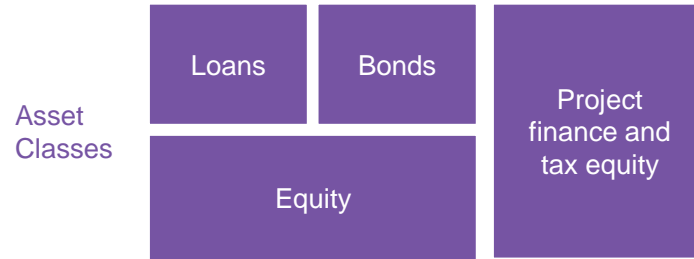
① Select company universe

Issuers
~16,000 companies with energy sector revenue



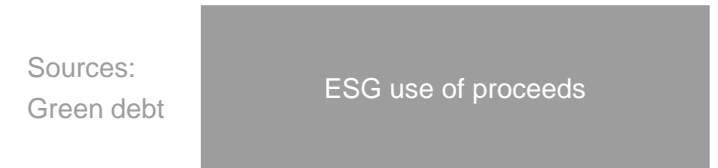
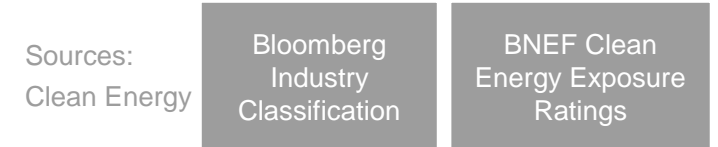
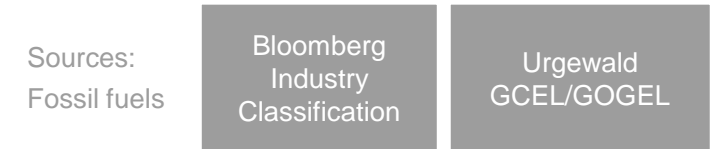
② Pull financing activity

Gather transaction data
issued by relevant companies



③ Adjust transactions

Adjust transaction data
for general corporate financing, by multiplying by percentage exposure to fossil fuels or clean energy



Add full value of transactions
for project finance and renewables tax equity

How does BNEF approach this metric?

BNEF analysis spans four main bank financing activities and focuses on energy supply

Type of financing	Recourse debt issuances			Equity issuances			Non-recourse project finance		Tax equity	Not Included	
Asset class or type	Bonds	Loans	Green debt	IPOs	Additional share offerings	Rights offerings	Fossil fuels	Clean energy	Tax credit investment	Direct lending	Bilateral loans
Source	Bloomberg LP			Bloomberg LP			IJGlobal	BNEF	BNEF	No reliable, consistent disclosure	
Role	Underwriting			Underwriting			Underwriting		Direct investment	Balance sheet	
Energy supply results	~\$1.4 trillion total \$584 billion low-carbon, \$836 billion fossil fuels Energy Supply Banking Ratio = 0.7			~\$0.07 trillion total \$32 billion low-carbon, \$35 billion fossil fuels Energy Supply Banking Ratio = 0.9			~\$0.17 trillion total \$76 billion low-carbon, \$96 billion fossil fuels Energy Supply Banking Ratio = 0.8		~\$0.02 trillion total \$16 billion low-carbon		

Source: Bloomberg LP, BloombergNEF, RAN, Urgewald, IJGlobal. Note: Banks serve their clients in the energy sector in numerous other roles that are not the focus of this report. These include but are not limited to serving as an arranger or agent on a debt issuance, direct lending as opposed to underwriting, tax equity investing, asset management, and retail banking (in other words, loans for electric vehicles). Most of these omissions are due to data limitations.

How does the ESBR compare to other frameworks for assessing banks on climate progress?

	<u>Energy Supply Banking Ratios</u>	<u>Green Asset Ratio (EU Taxonomy)</u>	<u>Financed emissions accounting and net-zero targets</u>	<u>Green financing targets and progress</u>
Description	Ratio of <i>low-carbon to fossil-fuel</i> energy supply banking activity	Mandatory reporting of ratio of <i>green assets : total assets</i> on bank balance sheets	Emissions associated with on-balance sheet financing activities	\$ volume of finance and facilitation toward “green” companies and projects
Framework developer	BloombergNEF	European Banking Authority European Commission	Partnership for Carbon Accounting Financials (PCAF) Science-Based Targets initiative (SBTi)	Organic – individual banks have defined their own
What is included?	<ul style="list-style-type: none"> • Underwriting activity • Corporate bonds and syndicated loans • Equity issuances • Project finance and tax equity 	<ul style="list-style-type: none"> • Corporate and project loans • Equity holdings • Household auto and mortgages 	<ul style="list-style-type: none"> • On-balance sheet corporate and project loans • Equity and bond holdings • Household auto and mortgages • Sovereign debt 	<ul style="list-style-type: none"> • Corporate and project loans • Underwriting activity • Equity and bond holdings • Tax equity • Household electric vehicle loans
What is not included?	<ul style="list-style-type: none"> • Corporate bilateral or otherwise private loans • Retail (in other words, household) lending 	<ul style="list-style-type: none"> • Facilitated financing (in other words, underwriting) • Exposure to governments, central banks • Assets under management • Loans to small companies and non-EU corporates not subject to Non-Financial Reporting Directive (NFRD) (<i>but included in denominator</i>) 	<ul style="list-style-type: none"> • Facilitated financing (in other words, underwriting) – <i>standard in development</i> 	
Limitations	<ul style="list-style-type: none"> • Relies on commercial databases and estimates, rather than company reporting • Focused on two of the GFANZ four financing strategies: “climate solutions” and “managed phase out”, partial coverage of aligned or aligning in other words, ‘transition’ finance 	<ul style="list-style-type: none"> • Not tied to any benchmark rooted in science • Not growth-oriented; based on “stock” or balance sheet, rather than tracking new financial flows • Broad “green” bucket not focused on specific goals (in other words, climate) 	<ul style="list-style-type: none"> • Focused exclusively on emissions rather than solutions/new investment in low-emission assets • Incentivizes divestment – can lead to emissions being shifted off balance sheet • Anchored in sectoral emissions pathways 	<ul style="list-style-type: none"> • Not tied to a benchmark rooted in science • Broad “green” bucket not focused on one goal (in other words, climate) • Can be interpreted as a vanity metric
What has it added to the conversation?	<ul style="list-style-type: none"> • Focused on new investment and finance facilitations required for the energy transition • Rooted in 1.5C climate scenarios 	<ul style="list-style-type: none"> • Focused on balance sheet exposure of institutions to particular asset types • First mandatory reporting metric that focuses on the “green” side of the energy transition • Reporting increases transparency and data availability 	<ul style="list-style-type: none"> • Addresses the unique impact financials have, contrasted with real economy companies • Enabled financials to set net-zero targets • Backbone of many global sustainability reporting mandates, such as the CSRD (EU) and Securities and Exchange Commission proposals (US) for banks 	<ul style="list-style-type: none"> • Growth and opportunity oriented • Acknowledges the important role that facilitated finance plays

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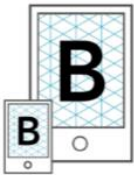
BloombergNEF (BNEF) is a strategic research provider covering global commodity markets and the disruptive technologies driving the transition to a low-carbon economy.

Our expert coverage assesses pathways for the power, transport, industry, buildings and agriculture sectors to adapt to the energy transition.

We help commodity trading, corporate strategy, finance and policy professionals navigate change and generate opportunities.

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3 Step Guide for Foundations / Family Offices New to Proxy Voting

Step 1 Figure out what you own and how by asking your investment advisor / CIO

- a. Separately Managed Account?
- b. Direct holdings in bank(s)?
- c. Mutual funds or ETFs?

Step 2 Ask your advisor if they have a proxy voting policy for you.

- a. If yes, how is the policy being applied to these resolutions?
- b. If no, are your shares being voted?

Directing your voting intentions

Step 3 Direct your vote, depending on how your investments are held.

a. Separately Managed Accounts:

- Direct your CIO or manager to look out for the proxies for these banks.
- Direct your manager how you want them to vote for you on these resolutions (often via Proxyvote.com, Broadridge)
- You can also vote directly yourself, through Broadridge by selecting a policy that aligns with your values (eg. As You Vote is ESG-aligned) or, for higher fees, hire a proxy voting service (eg. ISS, Glass Lewis)

b. Direct Equity Holdings:

- Direct your CIO or manager to look out for the proxies for these banks and direct them on how you want them to vote for you on the NYC resolutions

c. Mutual funds and ETFs:

- Request to vote your fractional shares through your asset manager (e.g. Blackrock and Fidelity)

For more information and guidance after this webinar contact: flaviedesgagne@trottierfoundation.com

Flavie Desgagné-Éthier, Climate Program Director, Trottier Family Foundation

An aerial view of the New York City skyline, featuring prominent skyscrapers like the Chrysler Building and the Empire State Building. The image is overlaid with a semi-transparent blue filter. In the center, there is a dark blue rounded rectangular box with a white border containing the text "Q & A" in white, bold, sans-serif font.

Q & A

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