

ETRC – Cost of Capital and Investment Tracking

CHARTBOOK 2024

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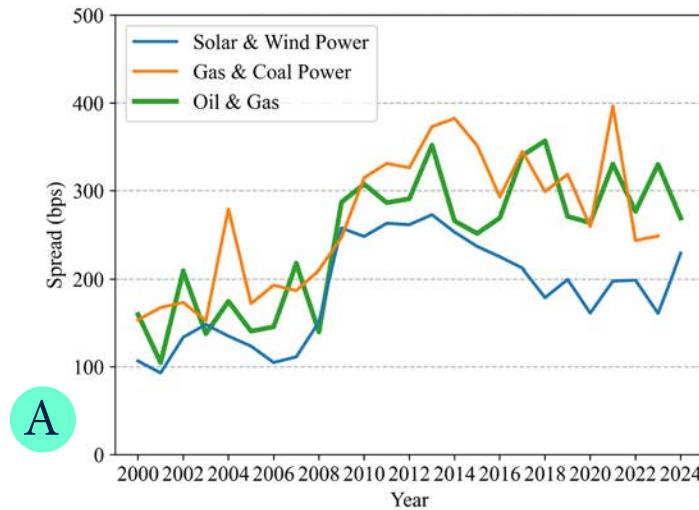
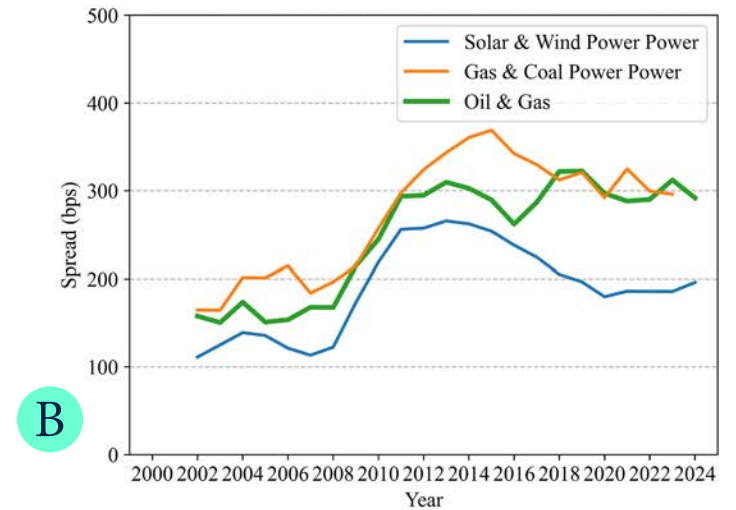
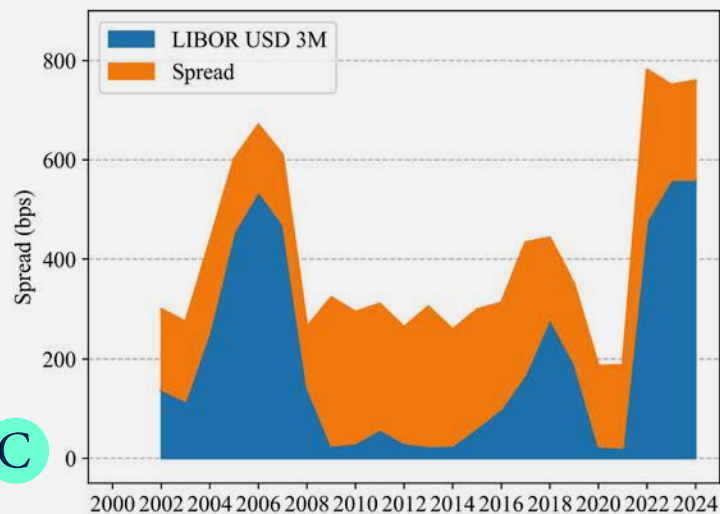
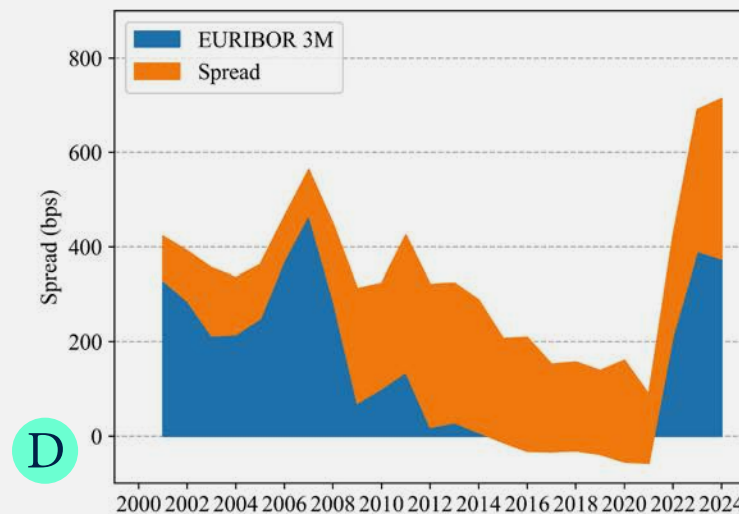
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The background is a complex, abstract composition. It features a large, vertical teal shape on the left side, which has a textured, almost crystalline appearance. The rest of the background is a mix of dark blue and teal tones with intricate, organic patterns that resemble marbled paper or a microscopic view of a material. Overlaid on this are several white geometric shapes: a large, rounded rectangle in the center-right, and a smaller circle at the bottom center. The text 'Key Findings' is positioned within the large rounded rectangle.

Key Findings

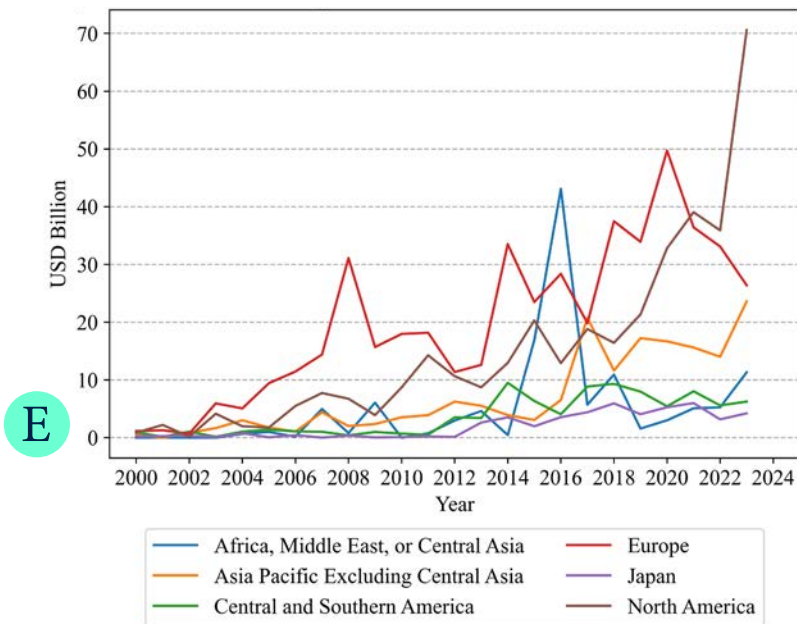
- In 2023, there was a jump in project finance spreads for solar & wind power, almost closing the gap with gas & coal power, and oil & gas (Figure A).
- Over the past decade, the spread of solar & wind power has averaged around 200bps, while gas & coal power has averaged around 300bps (Figure B).

GLOBAL - PROJECT FINANCE SPREAD

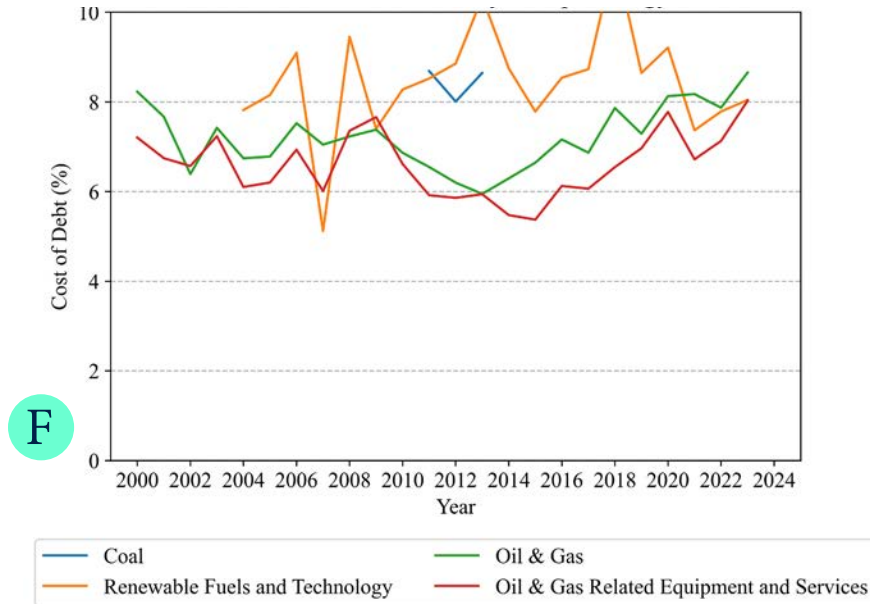
GLOBAL - PROJECT FINANCE SPREAD
- 3YR MOVING AVERAGENORTH AMERICA - SOLAR & WIND POWER -
COST OF DEBT DECOMPOSITIONWESTERN EUROPE - SOLAR & WIND POWER -
COST OF DEBT DECOMPOSITION

- Project finance transactions are priced as a spread over a floating interest rate.
- Between 2020 and 2023, sharp interest rate rises increased the overall cost of debt of new projects (Figure C & D).
- The cost of debt of solar & wind in North America increased from 1.9% to 7.5%, and from 1.4% to 6.0% in Western Europe.

PROJECT FINANCE - TOTAL PROJECT COST -
RENEWABLE POWER, FUELS AND TECHNOLOGY



NORTH AMERICA - INDUSTRY GROUP - ENERGY



- In North America, the total project cost of renewable power, fuel, and technology projects that received financing almost doubled, from \$37bn to \$69bn (Figure E).
- The corporate cost of debt of renewable fuels and technology companies fell below oil & gas and oil & gas related services and equipment companies (Figure F.)
- This highlights the potential impact of the Inflation Reduction Act.

In North America, the total project cost of renewable power, fuel, and technology projects that received financing almost double from \$37bn to \$69bn



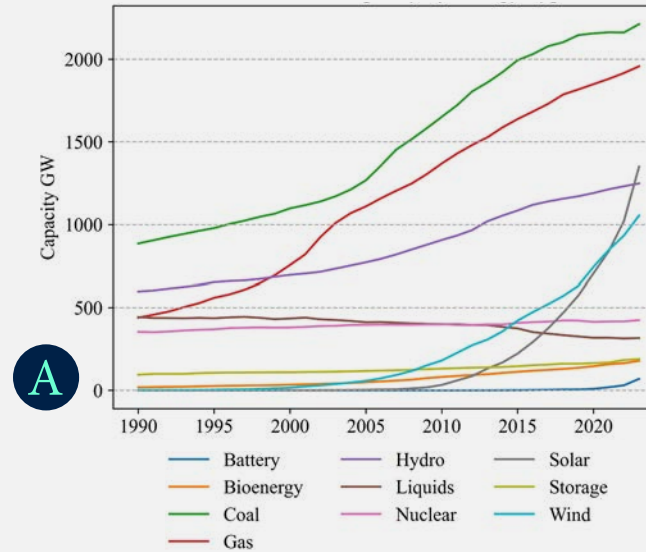
The background of the slide features a photograph of high-voltage electrical transmission towers and power lines stretching across a landscape. The image is heavily stylized with a semi-transparent teal overlay. Large, overlapping circles in various shades of teal are positioned behind the towers. A white, rounded rectangular frame is superimposed on the right side of the image, containing the title text.

Electric Utilities

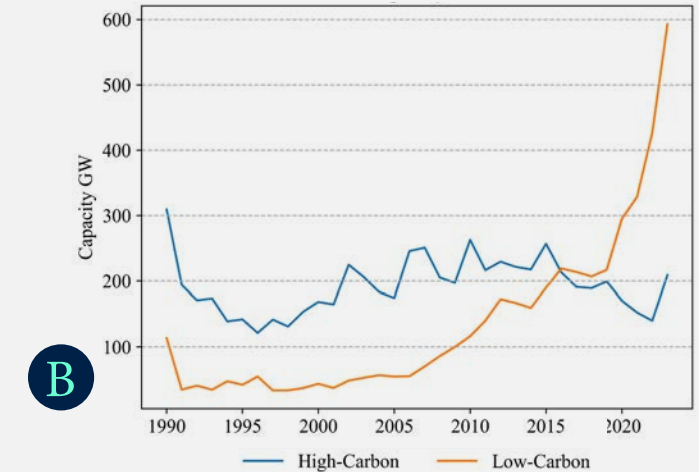
Low-carbon capacity is growing rapidly

- Driven by sharp falls in costs and a supportive policy environment, **solar and wind power capacity have seen sharp increases**, with the proportion of global capacity rising from 4% in 2010 to 26% in 2023 (Figure A). This surge has led to predictions that a peak in global power emission is imminent¹.
- However, the global capacity of coal and gas capacity has continued to rise in absolute terms, but with the share of global capacity falling from 58% in 2010 to 46% in 2023 (Figure A).
- Since 2015, new capacity from low-carbon sources has overtaken high-carbon** (Figure B). This indicates that the transition from high- to low-carbon generation is occurring, but with an on-going risk of carbon lock-in from continued high-carbon capacity additions.
- Given increasing new investment, **solar and wind assets have maintained a low capacity-weighted average life** (Figure C), however, nuclear, geothermal, and hydro assets are rapidly ageing following limited new investment. These assets are critical due to their baseload characteristics.

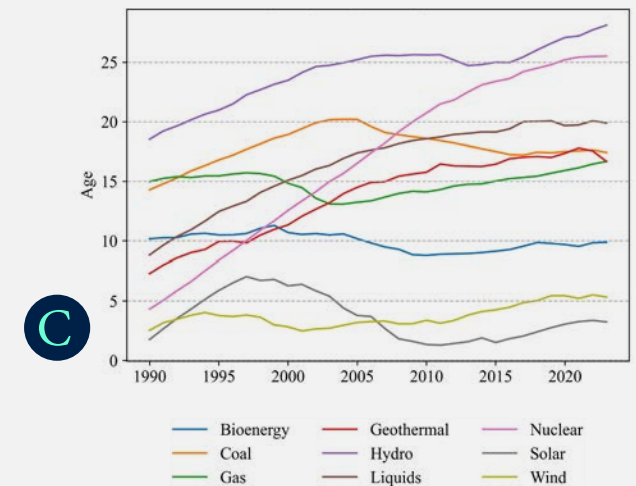
GLOBAL POWER CAPACITY BY ENERGY TYPE



ANNUAL CAPACITY ADDITIONS

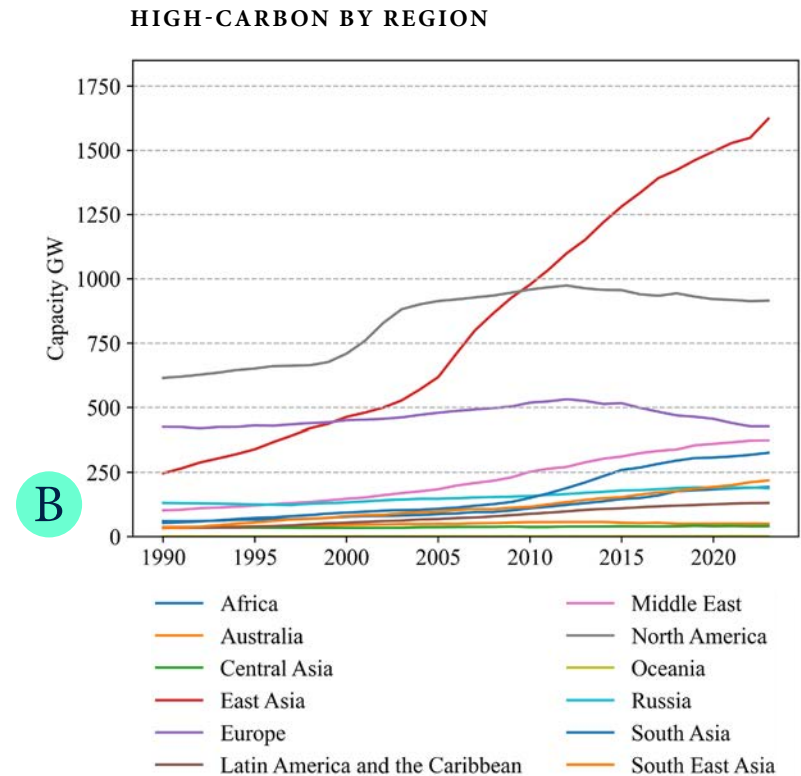
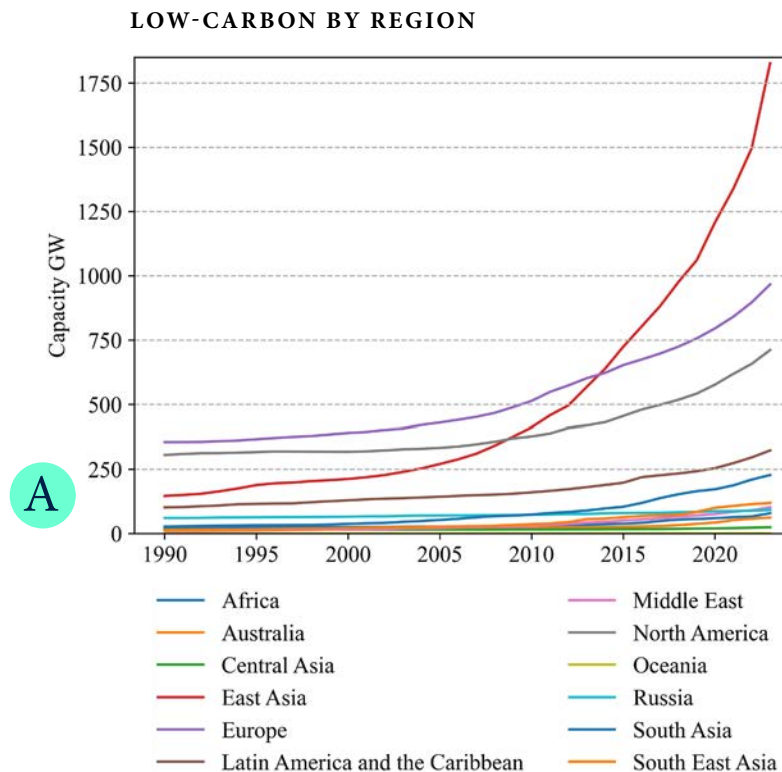


CAPACITY WEIGHTED AGE OF ASSETS



High-carbon capacity has peaked in developed countries, but not developing countries

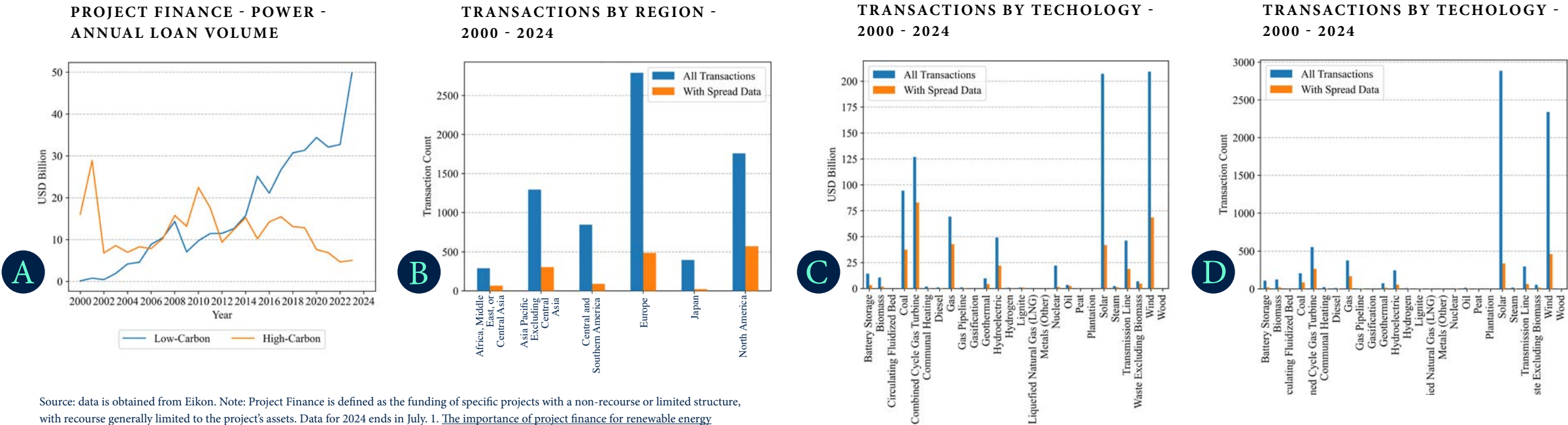
- **Low-carbon capacity has risen across all regions** (Figure A). However, East Asia (namely, China) dominates global capacity with a share of 40% in 2023, up from 24% in 2010.
- **High-carbon capacity peaked in 2012 in both North America and Europe**, after which it has been gradually decreasing, as policies have prioritised new low-carbon power (Figure B).
- **However, high-carbon capacity has continued to increase, in particular in East Asia**, which accounted for 36% of global capacity in 2023, up from 29% in 2010. Other developing regions have also increased capacity (Middle East, South Asia, Russia, South-East Asia, and Latin America and the Caribbean) (Figure B).
- Motivations for continued investment in fossil fuel power could include a need for baseload power, utilisation of local resources, lower up-front capital costs, and inertia arising from existing infrastructure and vested interests¹.



High-carbon capacity has continued to **increase, in particular in East Asia**, which accounted for 36% of global capacity in 2023

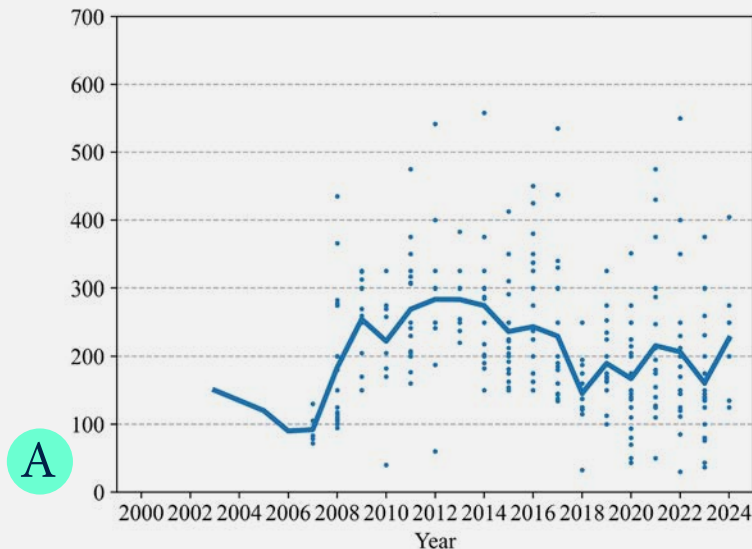
Project finance has played an important role in the financing for renewables

- **Project finance loan volumes have grown sharply for renewables, reaching \$50bn in 2023**, while falling over time for gas & coal (Figure A).
- **Project finance loan volumes are dominated by Europe and North America.** However, across regions only a fraction of transactions have reported spread pricing data (Figure B).
- The majority of project finance loans are priced as floating rate loans, with borrowers paying a spread on top of floating rate (e.g. LIBOR).
- By technology, **project finance transactions have been used extensively to fund new solar and wind projects** (Figure C & D). Long-term predictable cash-flows and high upfront capital costs make project finance a suitable alternative for financing by developers, especially when constrained by high levels of existing debt on their balance sheets¹.
- Across technologies, only a fraction of transactions have spread data reported (Figure C & D).

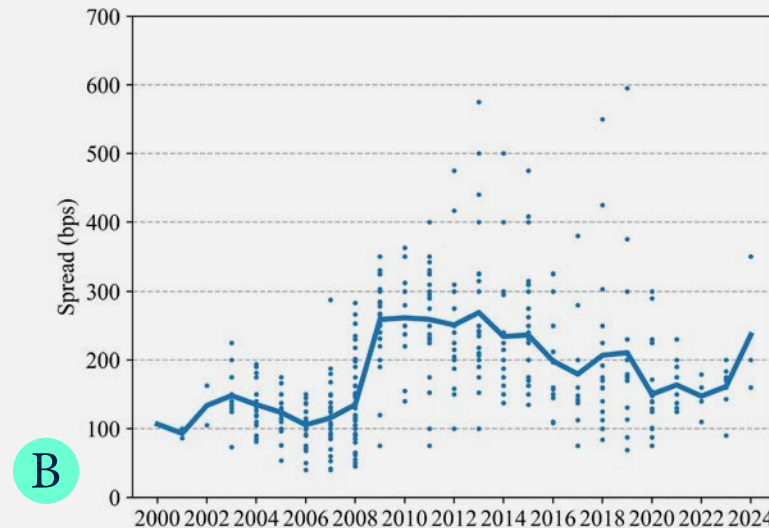


Over the past decade, spreads have been lower for renewables than fossil fuels ...

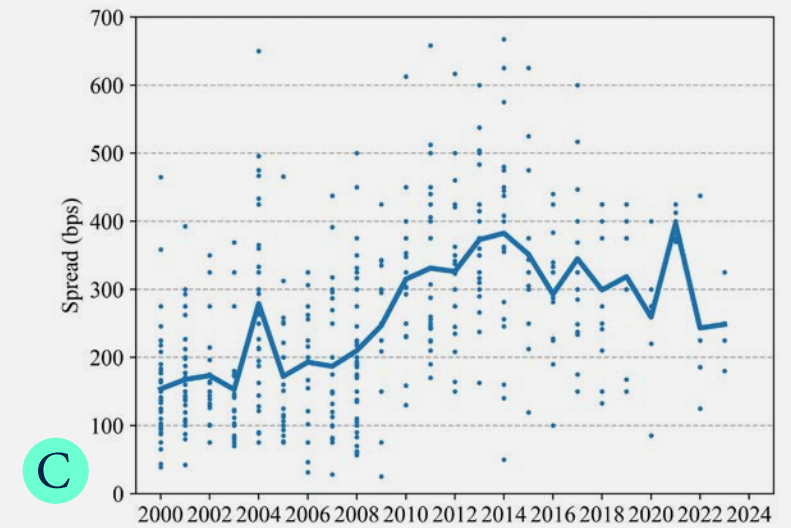
GLOBAL - SOLAR - PROJECT FINANCE SPREAD



GLOBAL - WIND - PROJECT FINANCE SPREAD



GLOBAL - GAS & COAL - PROJECT FINANCE SPREAD

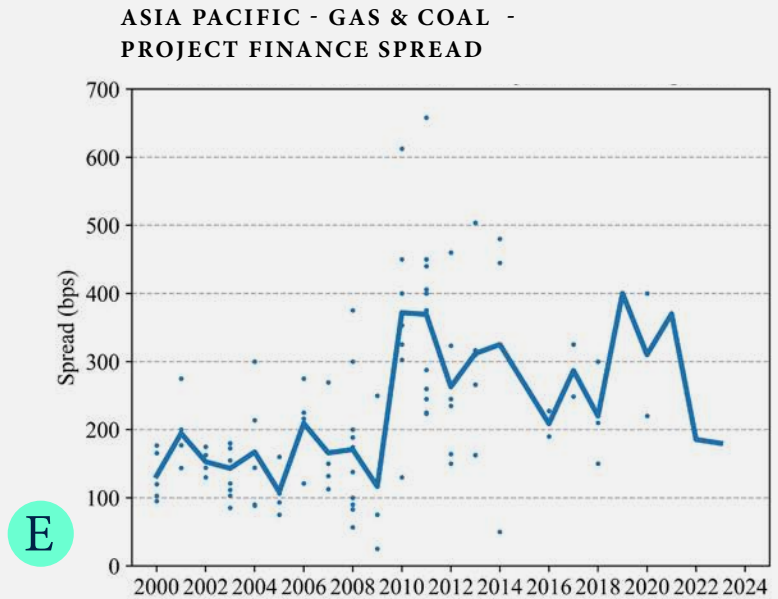
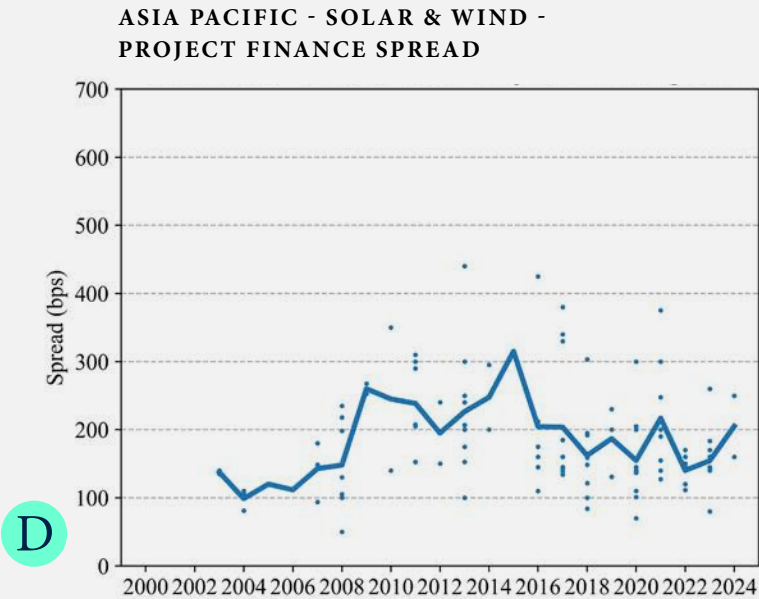
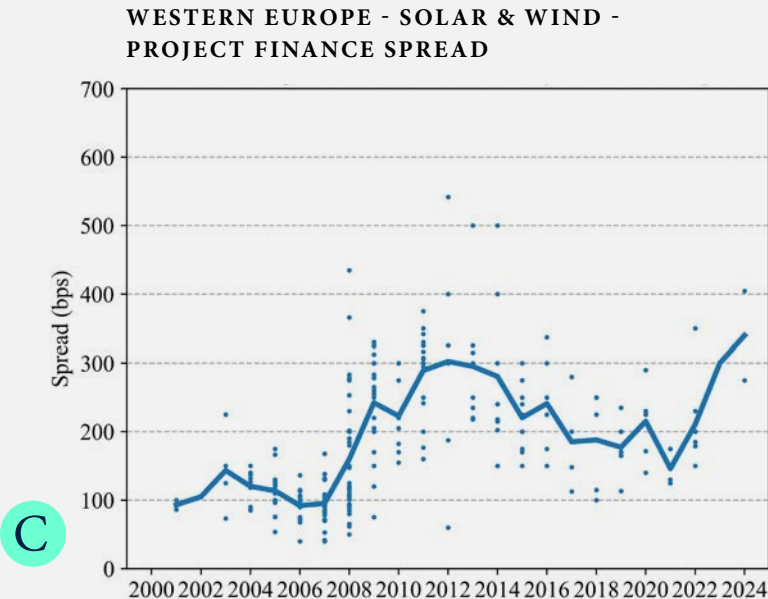
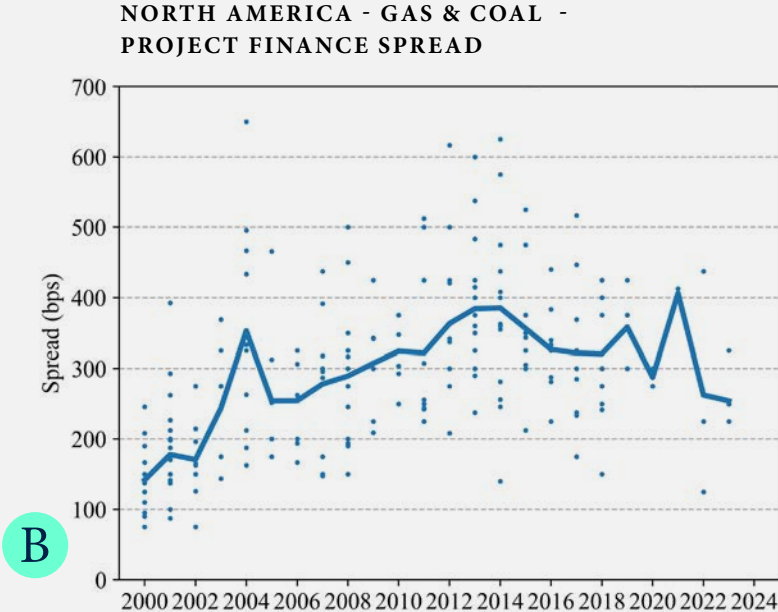
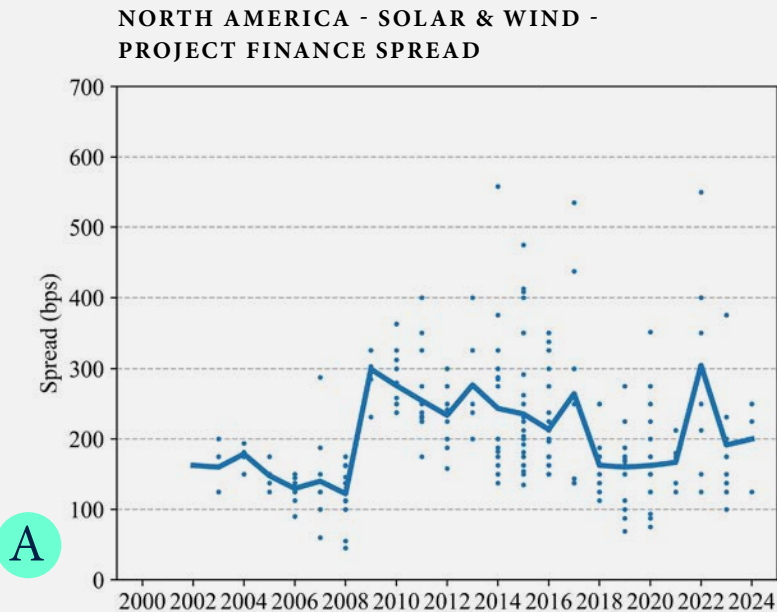


- In Figure A and B we plot the spread of each individual transaction where there is data (dots), as well as the annual mean (line).
- For both solar & wind and gas & coal, we see an increase in the level of spread post vs pre 2010.
- For both solar & wind and gas & coal, we observe a gradual decrease in the average spread post 2010.

- For **solar & wind**, the **average spread** has oscillated at around **200bps** over the past decade (Figure A & B).
- For **gas & coal**, the **average spread** has oscillated at **300bps** over the past decade (Figure C).
- This indicates that the **pricing of risks at the asset level has been relatively constant** in both low and high-carbon power, but that **risks are perceived as being lower in solar & wind than fossil fuel power**.
- For **solar & wind**, we observe a **clear uptick in spreads in 2023**, breaking a general downward trend in spreads observed across sectors since 2010. This could be due to issues facing the industry, such as increased input prices from inflation, supply chain issues, and a higher sensitivity to increased interest rates¹.

... this holds across regions

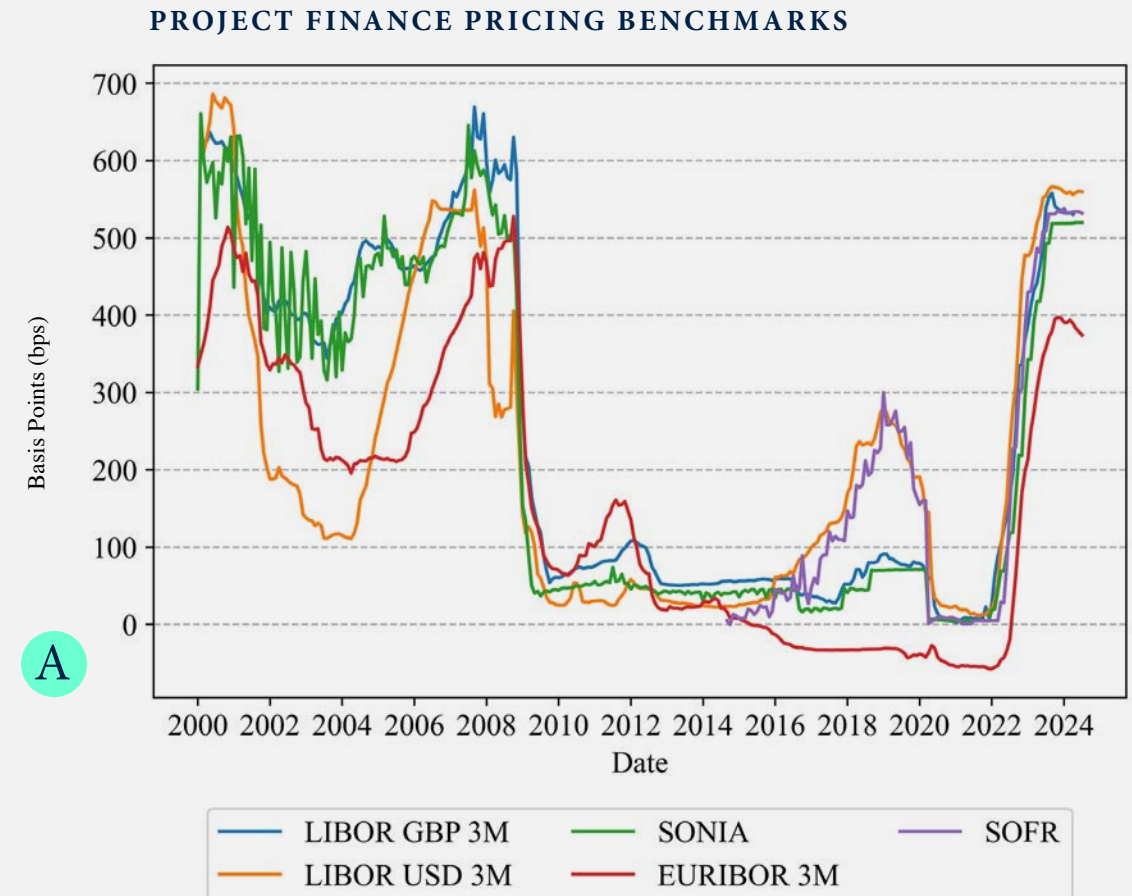
- Across all regions, over the past decade, spreads for solar & wind have tended to fall around 100bps lower than gas & coal.
- However, **across regions, we see an uptick in spreads for solar & wind in the past few years**, driven by solar in Europe, and wind in North America.
- See the annex for more detailed analysis of regional trends.
- Note: gas & coal is not shown for Europe due to a lack of transactions.



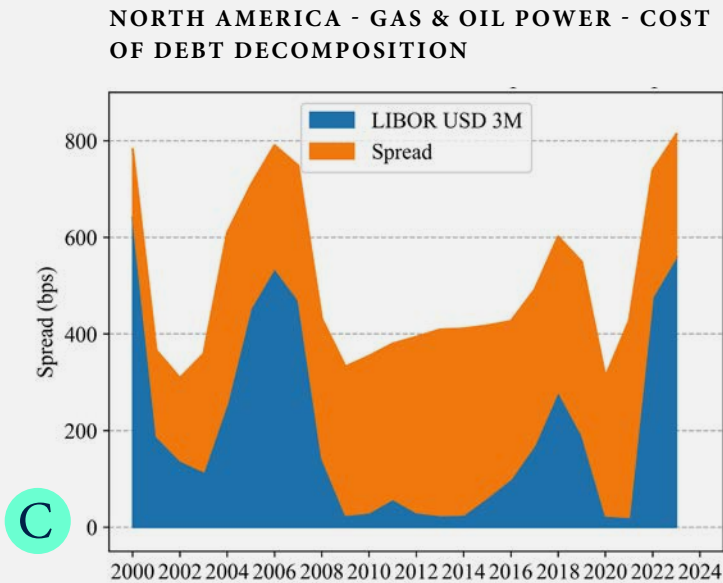
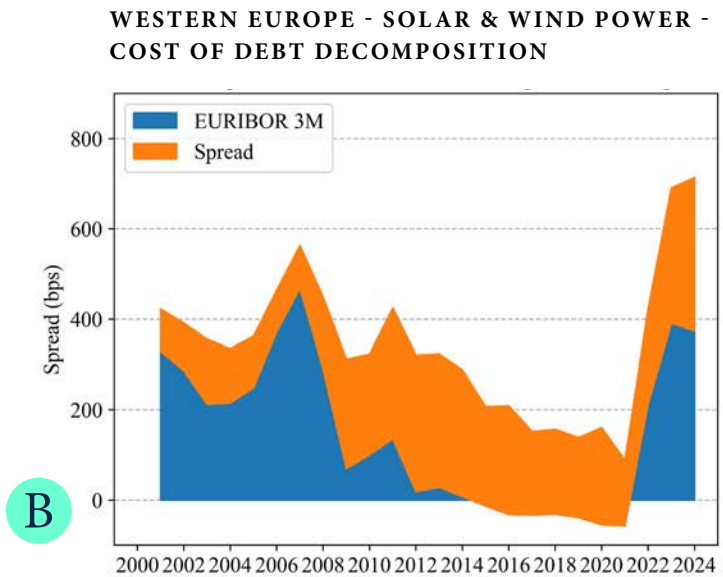
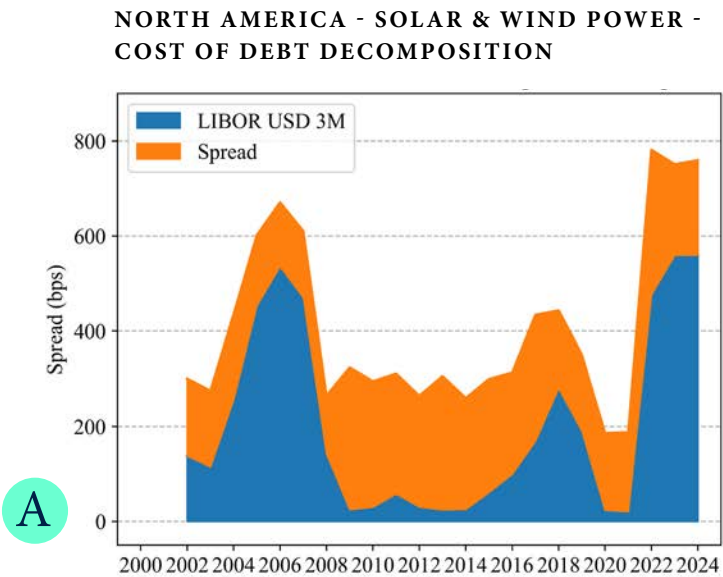
Source: data is obtained from Eikon. Data for 2024 ends in July. Bps = basis points = 100th of 1%. [1. Renewable Energy Market Update](#)

Project finance pricing benchmarks have risen sharply

- Project finance transactions have different benchmarks depending on the currency. Those used within our dataset include:
- **GBP TRANSACTIONS:**
 - London Inter-Bank Offered Rate (LIBOR) GBP (3 month shown for illustration)
 - Sterling Overnight Indexed Average (SONIA)
- **USD TRANSACTIONS:**
 - London Interbank Overnight Rate (LIBOR) USD (3 month shown for illustration)
 - Secured Overnight Financing Rate (SOFR)
- **EUR TRANSACTIONS:**
 - Euro Interbank Offered Rate (EURIBOR)
- Since 2021, in line with central bank interest rates, these benchmarks have risen sharply from close to/below zero to between 4-6% (Figure A).



Increases in the cost of debt have been driven by rising interest rates



Region	Technology	2020 Rates (bps)	2020 Spread (bps)	2020 Cost of Debt (bps)	2023 Rates (bps)	2023 Spread (bps)	2023 Cost of Debt (bps)	2020 Prop of CoD from Spread	2023 Prop of CoD from Spread
North America	Solar & Wind	24	162	186	560	192	751	87%	26%
Western Europe	Solar & Wind	-55	190	135	391	211	602	100%	27%
North America	Gas & Coal	24	288	311	560	254	814	92%	31%

Source: data is obtained from Eikon and iborate.com. Note: Figures A,B,C are shown to mid-year 2024. Data for 2024 ends in July. Bps = basis points = 100th of 1%. CoD = Cost of Debt.

- Across regions and technology, **the cost of debt increased sharply between 2020 and 2023, driven by increases in interest rates.** In 2020 spreads accounted for the majority of the cost of debt in 2020, this was reversed in 2023. (“Spread” represents the average annual spreads, as shown in previous slides).
- The cost of debt of solar & wind in North America increased from 1.9% in 2020 to 7.5% in 2023. This was driven by a 540bp increase in the benchmark rates, with average spreads increasing by 30bps.
- The cost of debt of solar & wind in Western Europe increased from 1.3% in 2020 to 6.0% in 2023. This was driven by a 450bp increase in benchmark rates and a 20bp increase in spreads.
- The cost of debt of gas & coal in North America increased from 3.1% in 2020 to 8.1% in 2023. This was driven by a 540bp increase in benchmark rates, with average spreads falling 30bps.

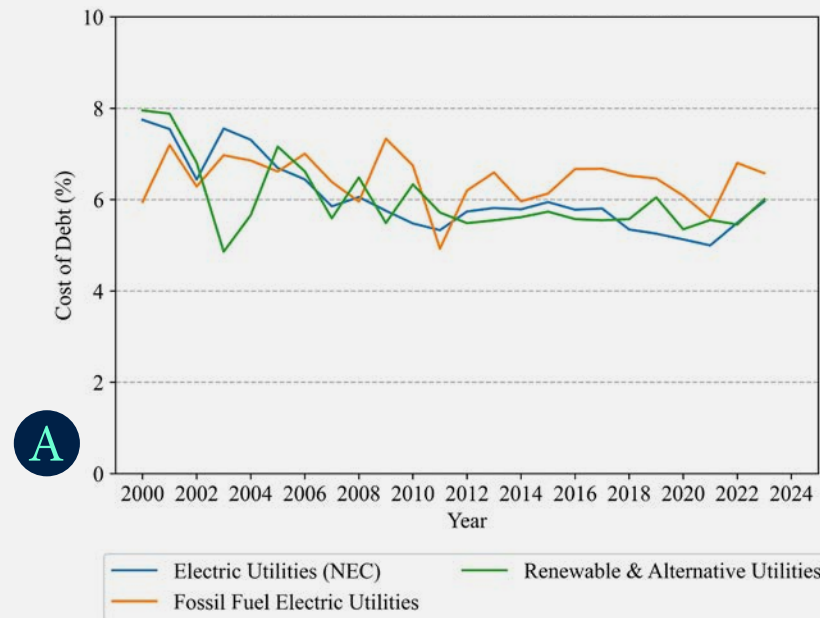
Corporate cost of debt is highest for fossil utilities

6.6%

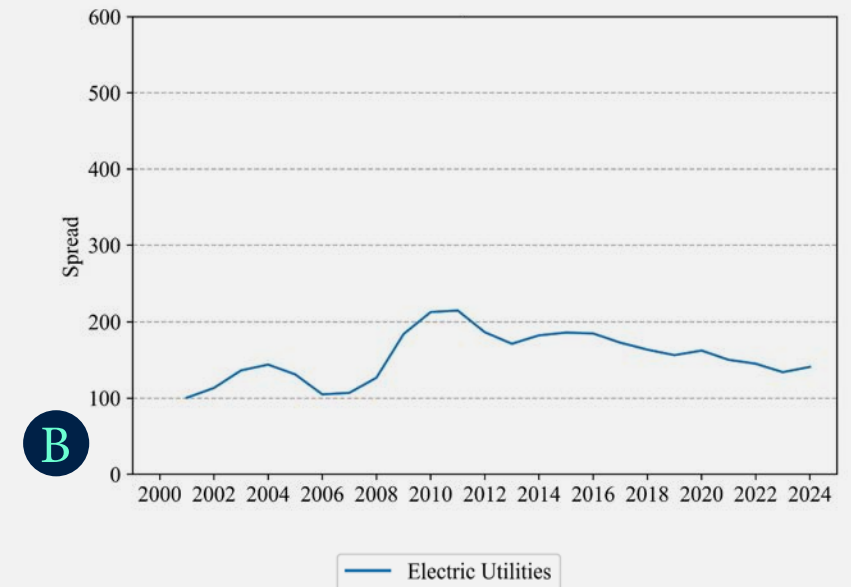
Consistent with previous ETRC tracking reports, globally, we observe that fossil fuel electric utilities the highest cost of debt (6.6% in 2023)

- The corporate cost of debt is calculated by dividing firm-level interest expense by total debt.
- Consistent with previous ETRC tracking reports, globally, we observe that fossil fuel electric utilities the highest cost of debt (6.6% in 2023), following by renewable electric utilities (6.0%) and then diversified electric utilities (6.0%) (Figure A). This implies that pure play fossil fuel power companies are viewed as more risky than pure play renewables.
- In recent years, there has been an uptick in corporate borrowing costs, with the average cost of debt across sectors increasing from 5.6% in 2020 to 6.2% in 2023. This has been driven by more by an increase in interest rates, as opposed to higher spreads on new debt raised, which has remained stable (Figure B).

GLOBAL - ELECTRIC UTILITIES



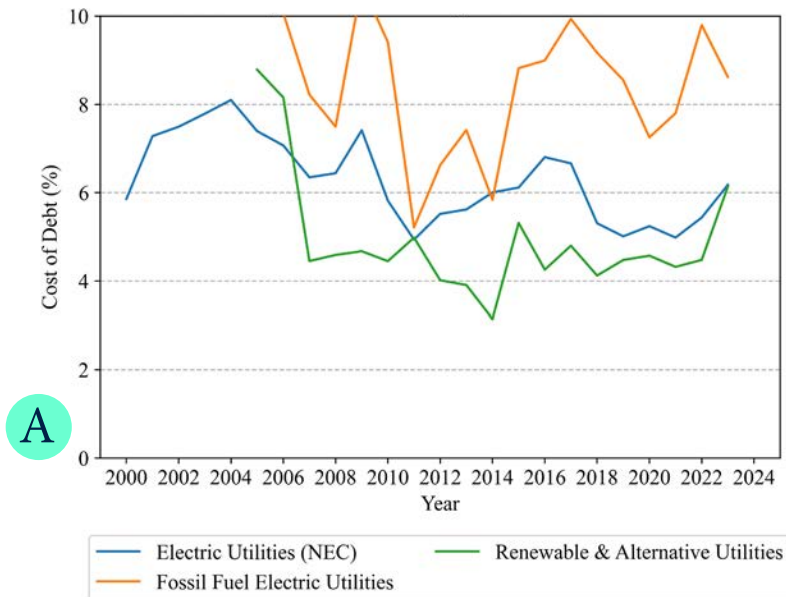
ELECTRIC UTILITIES - SYNDICATED LOANS



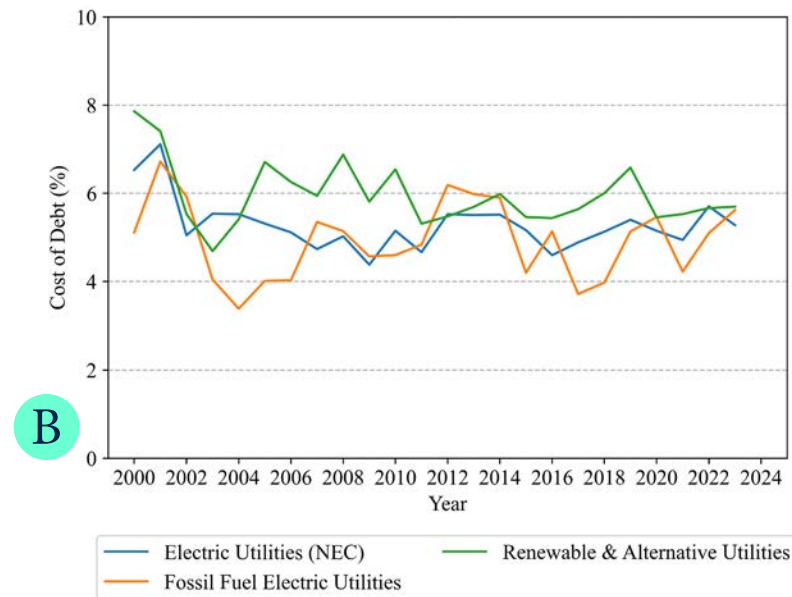
In recent years, there has been an uptick in corporate borrowing costs, with the average cost of debt across sectors increasing from 5.6% in 2020 to 6.2% in 2023.

In Europe, corporate cost of debt is highest for fossil fuels

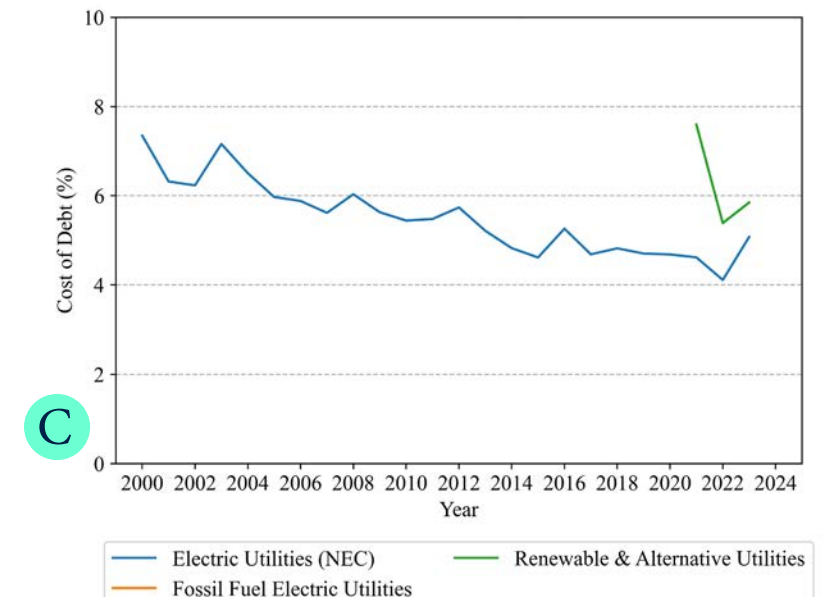
EUROPE - ELECTRIC UTILITIES



ASIA - ELECTRIC UTILITIES



NORTH AMERICA - ELECTRIC UTILITIES



- In Europe, we see a clear disparity between sub-sectors. Fossil fuels have the highest cost of debt (8.6% in 2023), while renewables (6.1%) and diversified electric utilities have the lowest (6.2%) (Figure A). The cost of debt of renewable & alternative electric utilities rose sharply in 2023, highlighting the challenges faced by the industry.

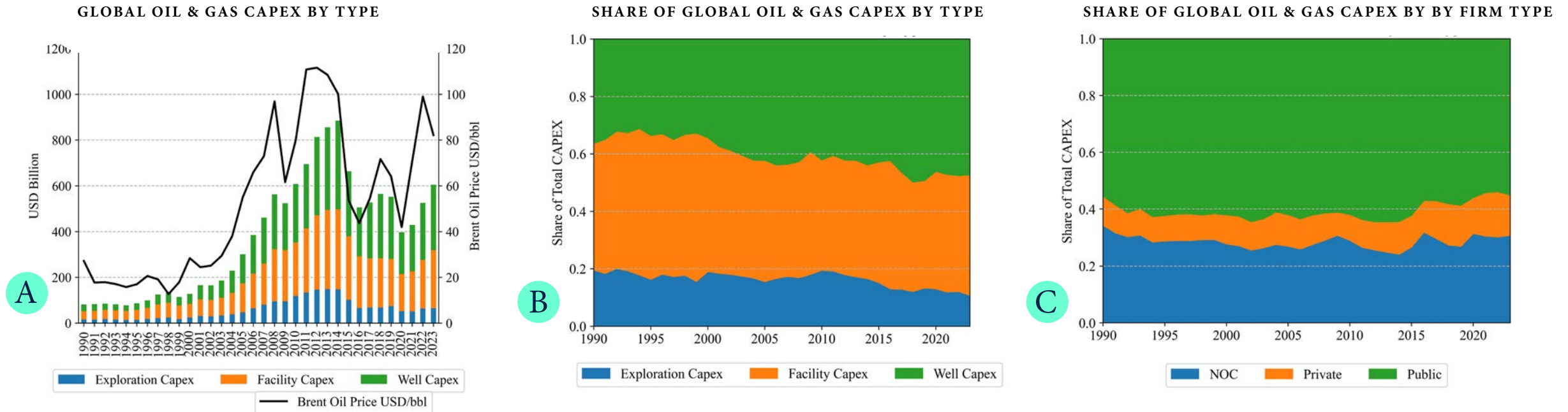
- In Asia, the cost of debt between different types of firms has converged in recently years, with all types of utilities having a comparable cost of debt around 5.5%.
- In North America, although data is lacking due to few firms labelled as pureplay renewables/fossil fuels, it appears that renewables have a higher cost of debt than diversified electric utilities in recent years (5.8% vs 5.1%) (Figure C). These firms tend to be large established players, with low financing costs.

Source: data is obtained from Eikon. Note: cost of debt = interest expense/total debt.

The background of the slide features a teal-tinted photograph of an offshore oil rig in the ocean. The rig is a complex structure with a tall derrick and various platforms. The sky is filled with soft, white clouds. The overall aesthetic is modern and professional, with large, semi-transparent teal shapes overlaid on the left side of the image.

Oil & Gas

Exploration CAPEX has fallen in absolute and relative terms



- Oil & gas CAPEX fell sharply in line with a fall in oil prices from 2014. Total CAPEX has rebounded from lows in 2020 but is still significantly below its peak in 2014 (Figure A).
- The share of CAPEX accounted for by exploration-related activities has fallen over time, down from ~20% in 2010 to ~10% in 2023 (Figure B). This indicates that firms are placing less of an emphasis on the discovery and development of new assets, reflecting predictions that oil demand will plateau this decade, as the world gradually transitions away from oil & gas¹.

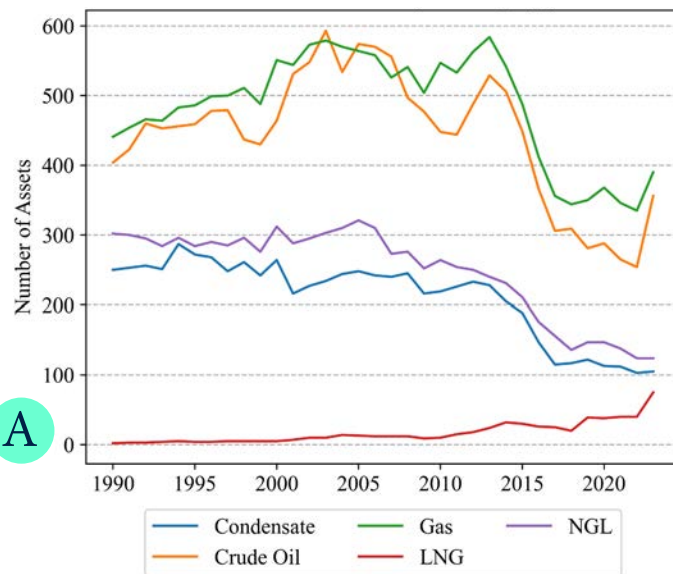
- Over the past decade, **the proportion of CAPEX accounted for by public firms has fallen**, relative to private and nationally owned companies (NOCs) (Figure C). Such a shift reflects the growth in private capital, enabling firms to grow without

relying on public markets. Furthermore, private firms have been actively acquiring assets from public firms, which have faced greater scrutiny and reporting burdens².

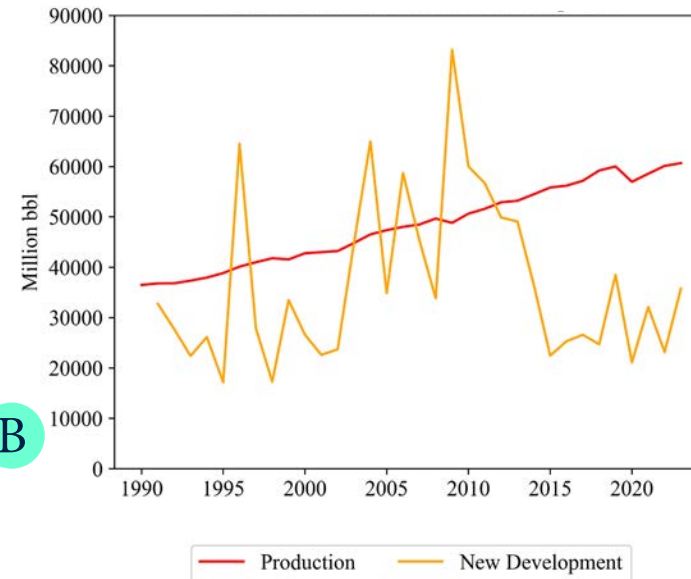
Source: data is obtained from Rystad. Note: Exploration Capex = costs of acquiring acreage, doing seismics, and drilling wildcats or appraisal wells to discover and delineate oil and gas fields. Facility Capex = initial capital expenses related to establishing the facility and necessary infrastructure, as well as pre-drilling costs. Well Capex = capital expenses for drilling more development wells throughout the field life of an asset. 1. BP predicts global oil demand will peak in 2025. 2. A \$140bn asset sale: the investors cashing in on Big Oil's push to net zero

The number of new assets have been falling, except for LNG

ASSETS UNDER DEVELOPMENT BY TYPE

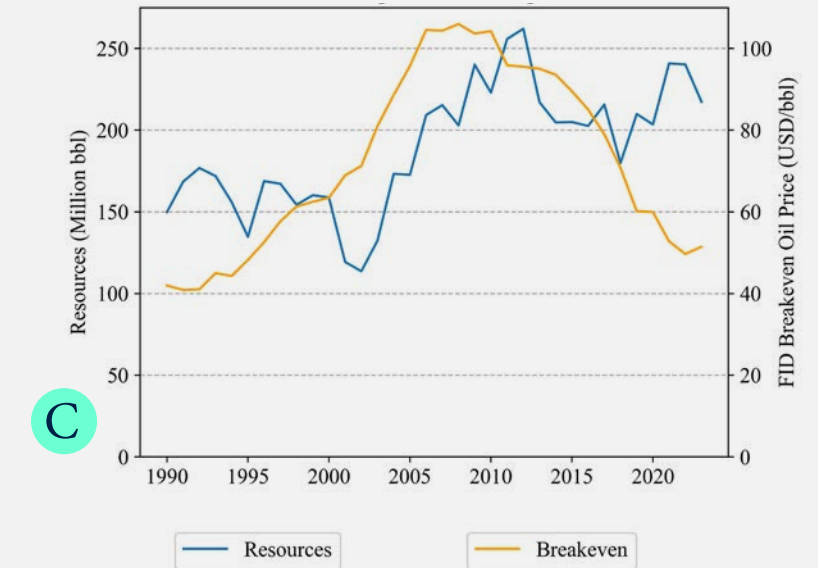


GLOBAL PRODUCTION VS NEW DEVELOPMENT



- This fall in CAPEX shown in the previous slide is reflected in the number of assets under development, which fell sharply around 2013-2014. However, there has been a slight rebound in the number of new assets under development in 2023 for gas and crude oil (Figure A).

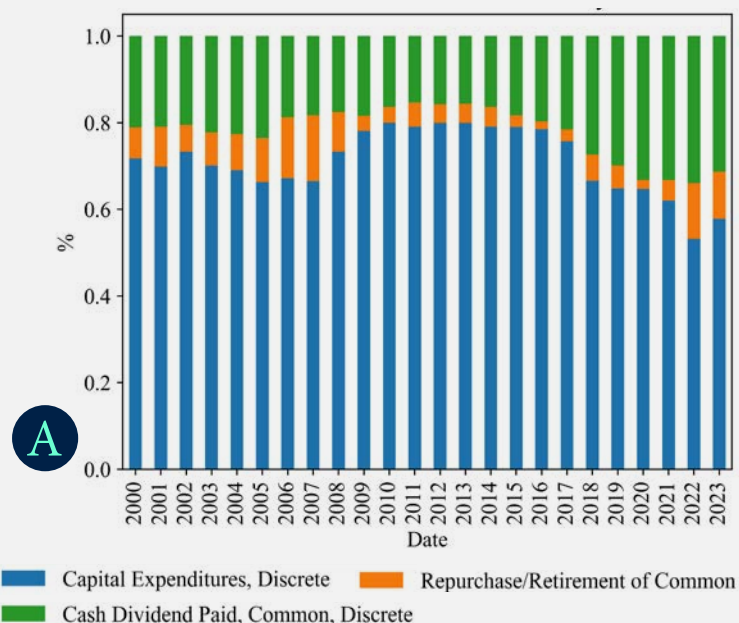
ASSETS UNDER DEVELOPMENT - AVERAGE CHARACTERISTICS



- The number of LNG assets under development has been steadily **increasing** (Figure B), with many firms viewing LNG as a transition fuel.
- For the past decade, the scale of assets under development has been significantly below annual production, indicating that **reserves are being depleted due to reduced investment in new assets** (falling reserve replacement ratio) (Figure B). This fits the narrative of firms expecting peak oil demand soon, as well as pressure from investors to maintain capital discipline even as oil prices rebound¹.
- For new assets under development, there has been a clear fall in average breakeven oil prices since 2010, indicating a focus on the **competitiveness of new assets** when final investment decisions are made (Figure C).

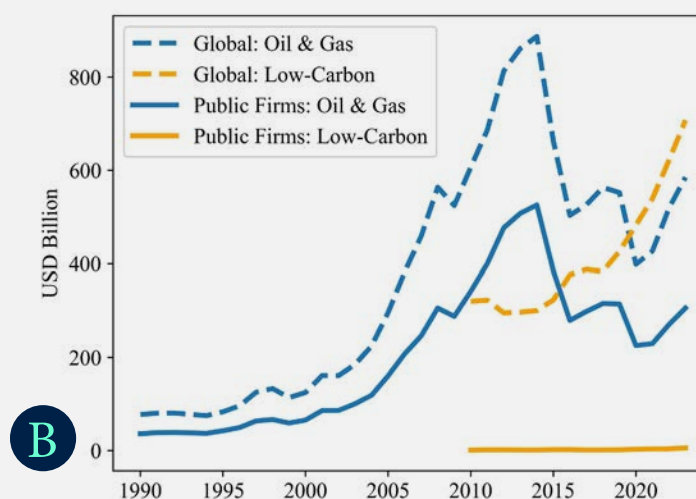
Even when oil & gas companies are cash rich, low-carbon investments remain low

OIL & GAS CAPEX VS DIVIDENDS VS BUYBACKS



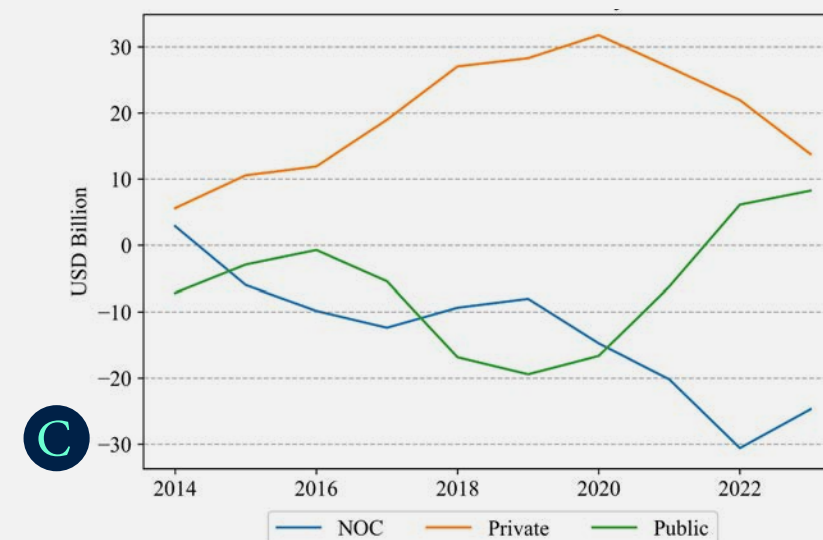
- In 2022/2023, the combined value of dividends and share buybacks by public firms in the oil & gas industry almost matched total capital expenditure, based on Eikon data (Figure A). This demonstrates that **oil & gas firms have the capacity to scale up investment in low-carbon energy**.

GLOBAL OIL & GAS AND LOW-CARBON CAPEX



- However, even though low-carbon investments by oil & gas firms are rising, based on Rystad data, these were **equal to just 1.9% of total oil & gas upstream CAPEX in 2023, and equal to just 0.9% of global low-carbon investment (Figure B)**. In comparison, BNEF estimate that 9% of CAPEX is allocated to low-carbon energy, limited to only oil & gas majors, with this accounting for 2.6% of global low-carbon energy investment.¹ This indicates that to date, in the aggregate, oil & gas firms have not made any significant progress with regard to transitioning.

CUMULATIVE NET TRANSACTIONS BY M&A

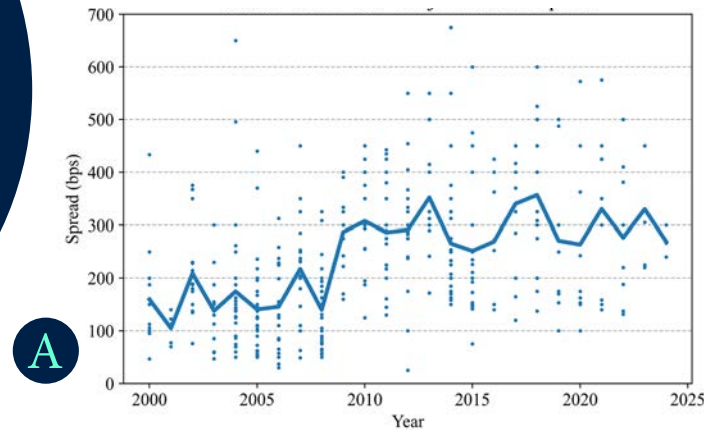


- After years of asset sales to private firms, since 2020 **public firms have engaged in an M&A spree**, driven by activity in North America and consolidation in the shale industry (Figure C). Such activity enables oil & gas firms to capitalise on higher share prices supported by oil prices, dividends, and buybacks.

Oil & gas project finance spreads are similar to fossil fuel power

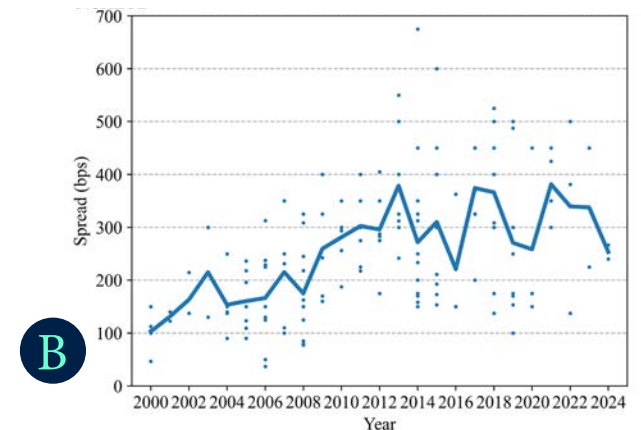
- Globally, we observe that the average spread for project finance transactions is around 300bps for oil & gas assets (Figure A). This is line with gas & coal power (~300bps) and higher than solar & wind (~200bps), **indicating that oil & gas is seen as riskier than renewables but comparable to fossil fuel power.**
- This holds in both Northern America & Western Europe (Figure B) and in the rest of world (Figure C). Using North American spread estimates, we observe that the cost of debt of new projects rose to 9% in 2023, up from 3.2% in 2020 (Figure D). This was driven by an increase in rates of 540bps of this period, while spreads increased by 40bps (Figure D). In 2020, spread accounted for 93% of the cost of debt, this fell to 38% in 2023 (Figure D).

GLOBAL - OIL & GAS -
PROJECT FINANCE SPREAD



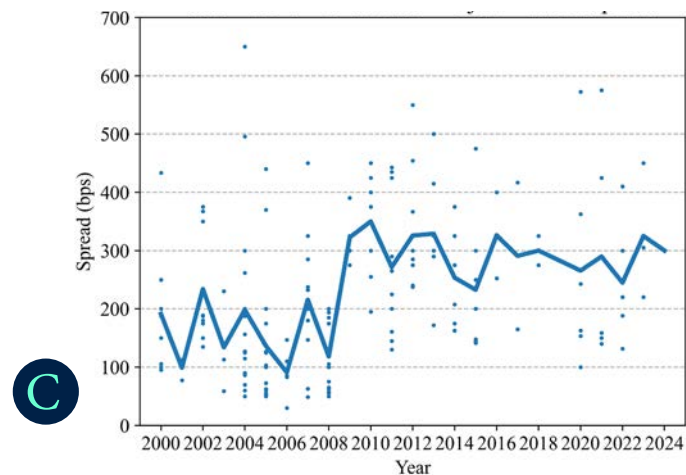
A

NORTH AMERICA & WESTERN EUROPE -
OIL & GAS - PROJECT FINANCE SPREAD



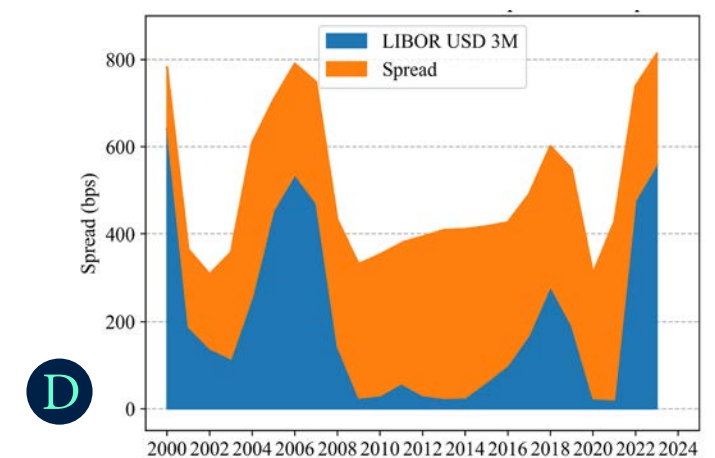
B

REST OF WORLD - OIL & GAS -
PROJECT FINANCE SPREAD



C

NORTH AMERICA - OIL & GAS -
COST OF DEBT DECOMPOSITION

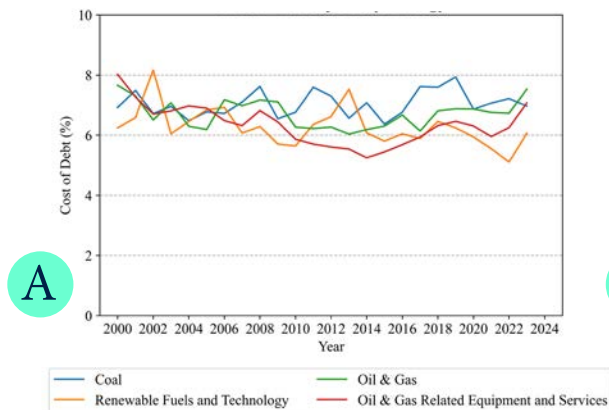


D

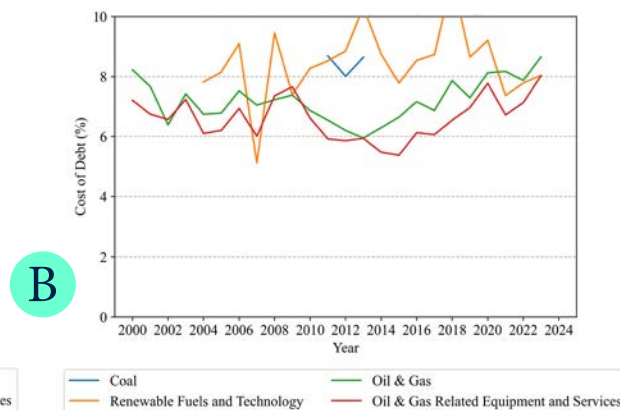
Renewable fuels & technology have the lowest corporate cost of debt

- Globally (Figure A), we observe that in 2023, oil & gas had the highest cost of debt (7.5%), followed by oil & gas related equipment and services (7.1%), coal mining (7.0%), and renewable fuels and technology (6.1%).
- In a new development, the cost of debt of renewable fuels & technology has fallen in recent years across regions relative to other sectors, falling below oil & gas for the first time. Falls occurred even as interest rates increased, indicating that lower spreads are the driver behind the decrease.
- This points in a change in the pricing of risk of renewable fuels & technology relative to fossil fuels.

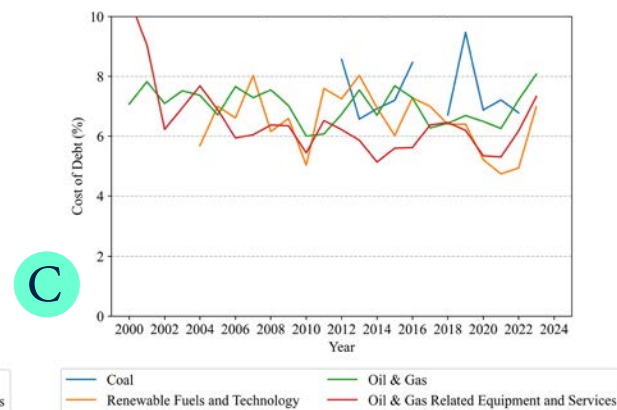
GLOBAL - ENERGY



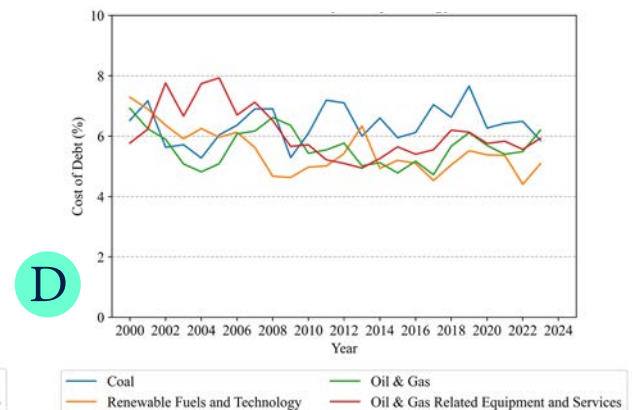
NORTH AMERICA - ENERGY



EUROPE - ENERGY

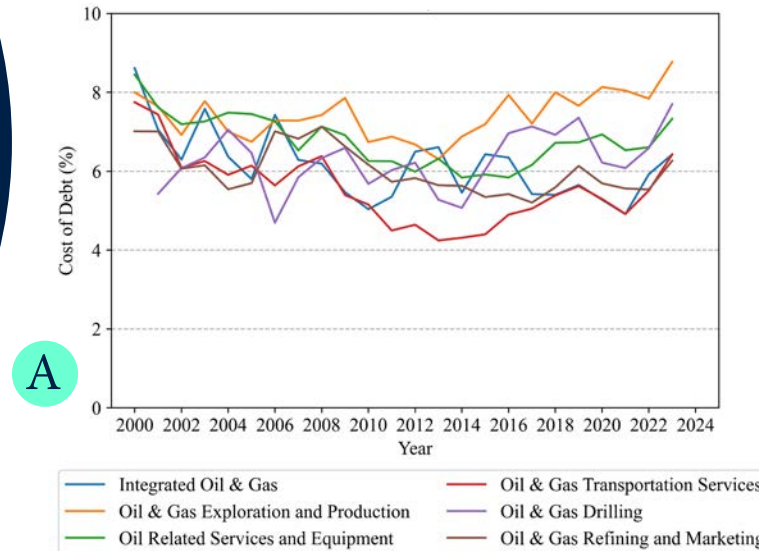


ASIA - ENERGY

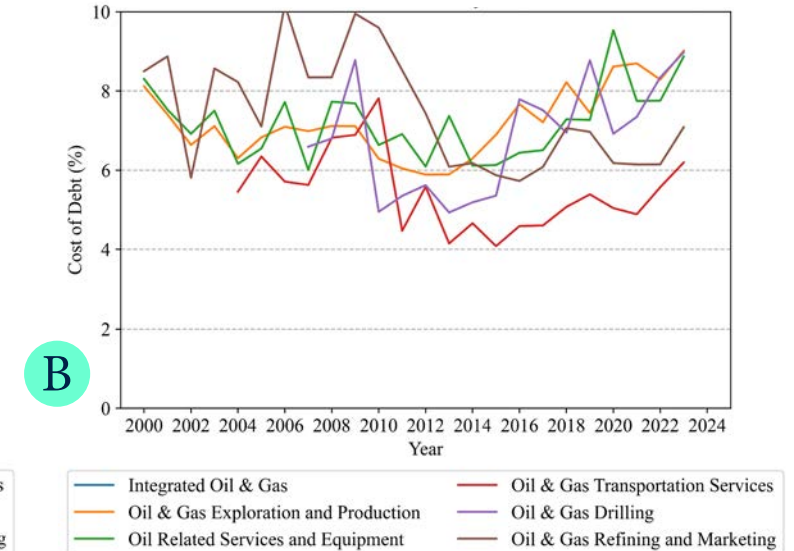


The corporate cost of debt for exploration & production firms is the highest

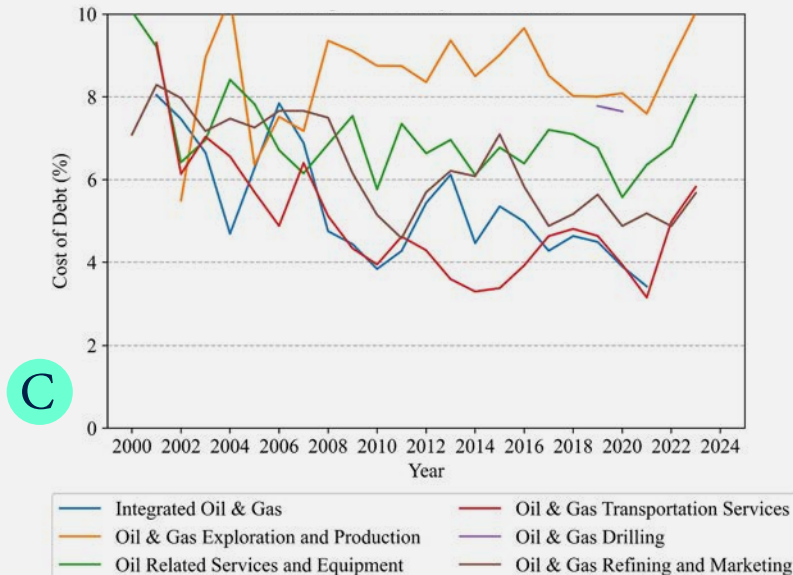
GLOBAL - OIL & GAS



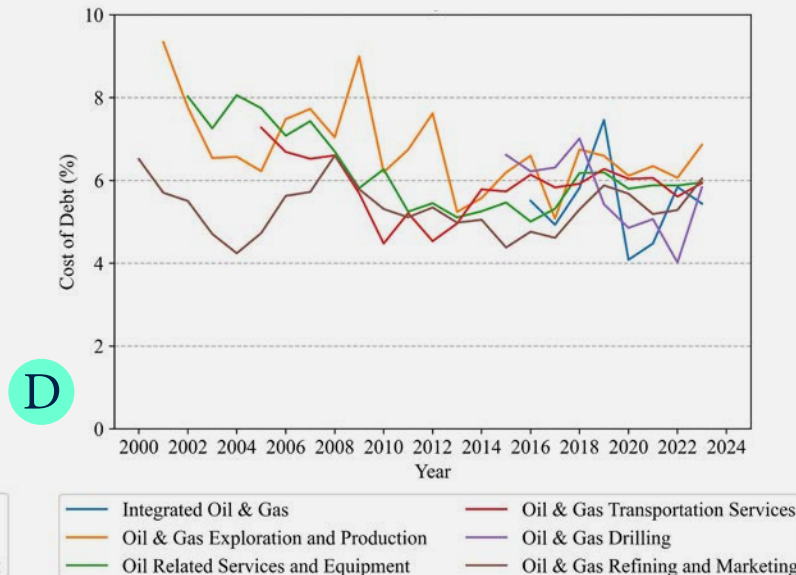
NORTH AMERICA - OIL & GAS



EUROPE - OIL & GAS



ASIA - OIL & GAS



- Consistent with previous ETRC tracking reports, globally, we see a clear **divergence between the cost of debt of exploration & production and the rest of the oil & gas industry** (Figure A).
- In 2023, the cost of debt of exploration & production was 8.7% (Figure A).
- This holds in North America, Europe, and Asia.

Source: data is obtained from Eikon. Note: cost of debt = interest expense/total debt.

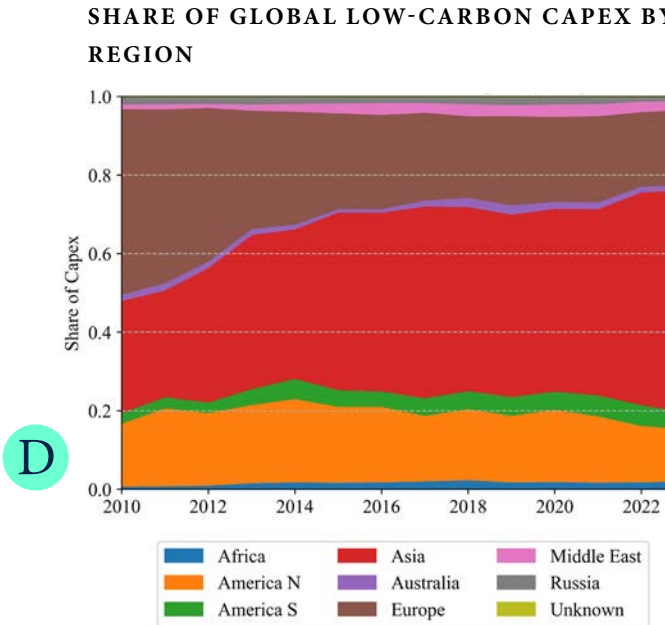
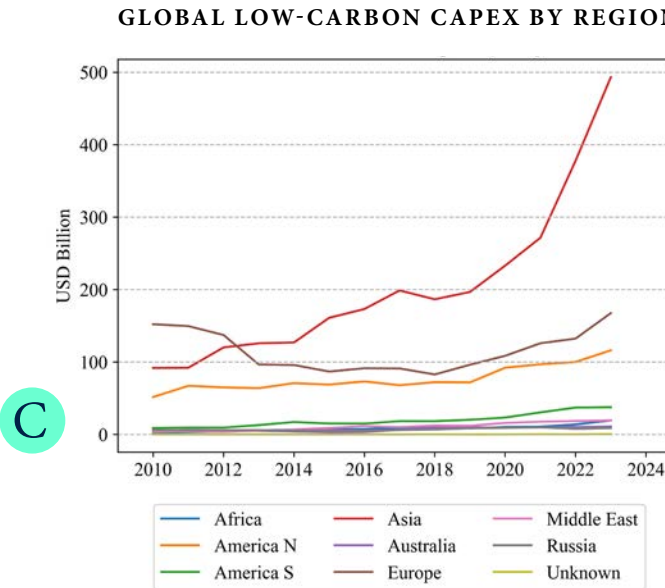
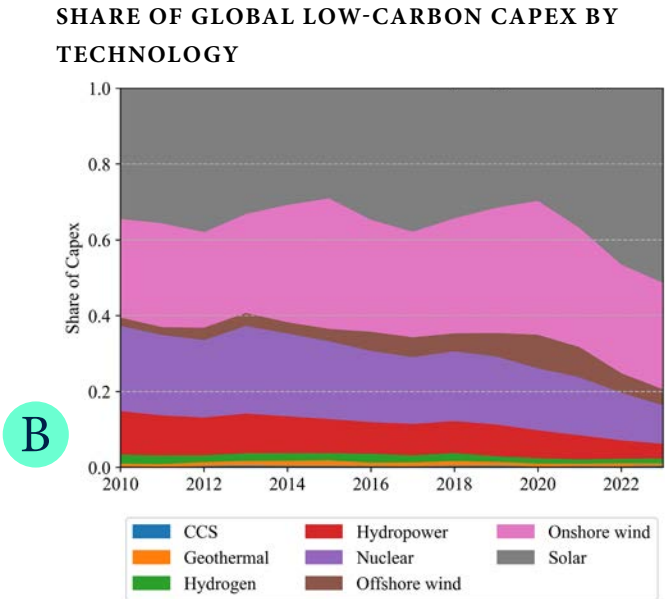
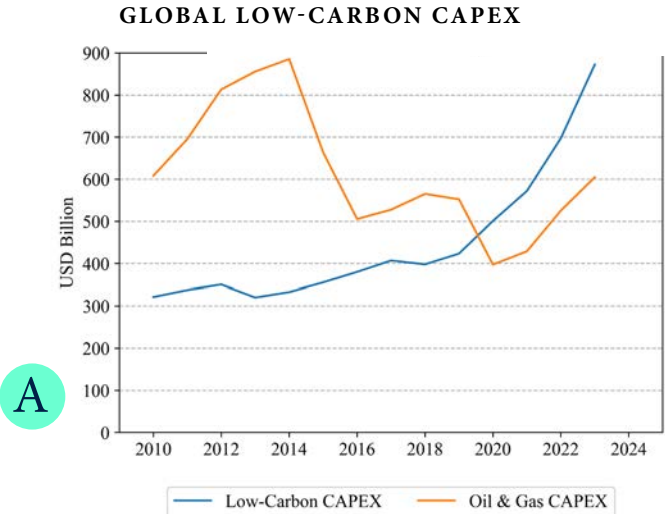
A teal-tinted photograph of a city skyline, featuring the Freedom Tower as a prominent landmark. The image is overlaid with various geometric shapes: a large white circle on the left, a white semi-circle on the right, and a large teal circle at the bottom center. The text "Low-carbon Investment" is written in white serif font within the white semi-circle on the right.

Low-carbon Investment

Low-carbon CAPEX has overtaken high-carbon CAPEX

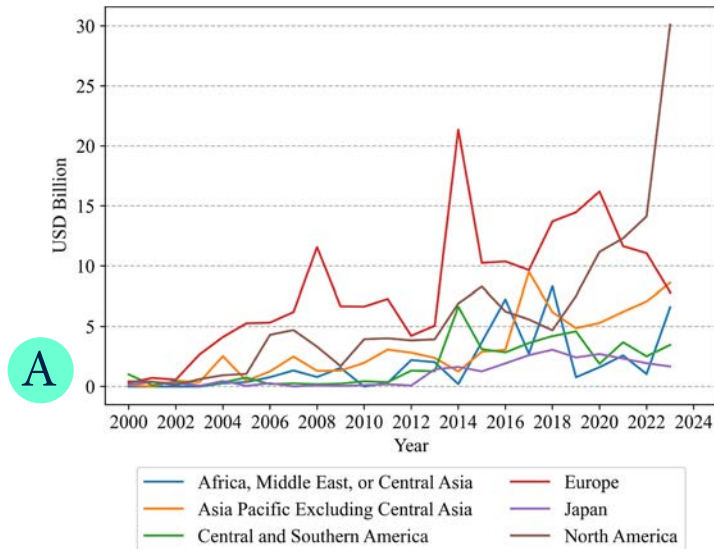
- As the low-carbon transition accelerates, **low-carbon CAPEX has overtaken high-carbon CAPEX** (Figure A), primarily driven by solar and wind (Figure B).
- In line with global capacity, Asian low-carbon CAPEX has grown rapidly (Figure C), with the region accounting for 57% of CAPEX in 2023 (Figure D). This highlights the extent to which Chinese investment has helped to drive down the cost of renewable energy globally¹.

Source: data is obtained from Rystad. 1. China's role in accelerating the global energy transition

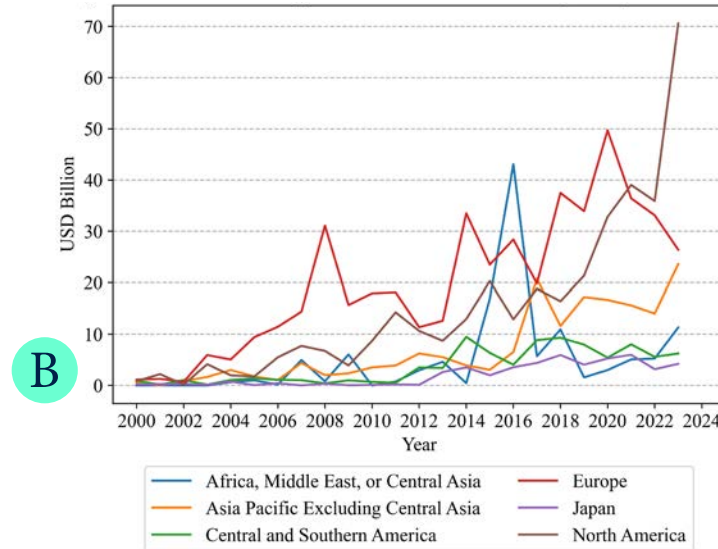


The IRA may have significantly increased low-carbon investment

PROJECT FINANCE - LOAN AMOUNT -
RENEWABLE POWER, FUELS, AND TECHNOLOGY



PROJECT FINANCE - TOTAL PROJECT COST -
RENEWABLE POWER, FUELS, AND TECHNOLOGY

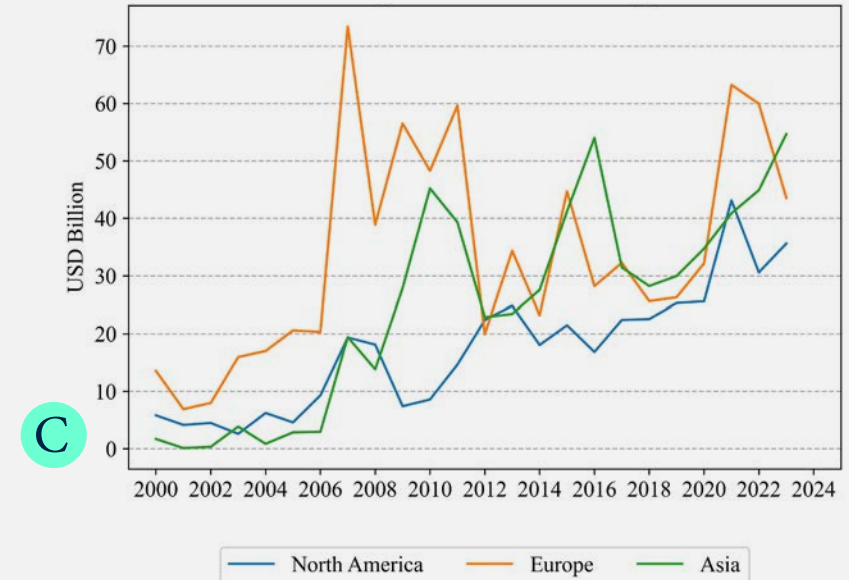


- As shown in the previous slide, North American low-carbon CAPEX increased in 2023 but still lags both Europe and Asia.
- However, after steadily increasing, **project finance volumes for low-carbon power, fuels, and technology doubled in North America in 2023** (Figure A and B), **highlighting the impact of the Inflation Reduction Act.**

- New project finance loans increased from \$14bn in 2022 to \$30bn in 2023, and the total value of new projects increased from \$37bn to \$69bn.

Source: data is obtained from Eikon.

ANNUAL FINANCING - RENEWABLE
TECHNOLOGY AND POWER



- Total issuances of equity, bond, and syndicated loans for low-carbon power, fuels, and technology has trended upwards overtime (Figure C). (However, many low-carbon technologies are misclassified, meaning the true value is significantly underestimated).
- Furthermore, we observed a **fall in the cost of debt of renewable fuels and technology** from 9.1% in 2020 to 8.0% in 2023, driven by lower spreads (Figure B Slide 22). This could be due to the Inflation Reduction Act (IRA), as smaller reductions occurred in other regions.

A landscape photograph of a wind farm at sunset, overlaid with a teal color scheme and dark geometric shapes. The scene features a grassy field, a dirt road leading to the horizon, and several wind turbines. A large dark teal shape is in the top left, a large dark teal circle is on the left, and a dark teal circle is at the bottom center. A white rounded rectangle on the right contains the word "Annex".

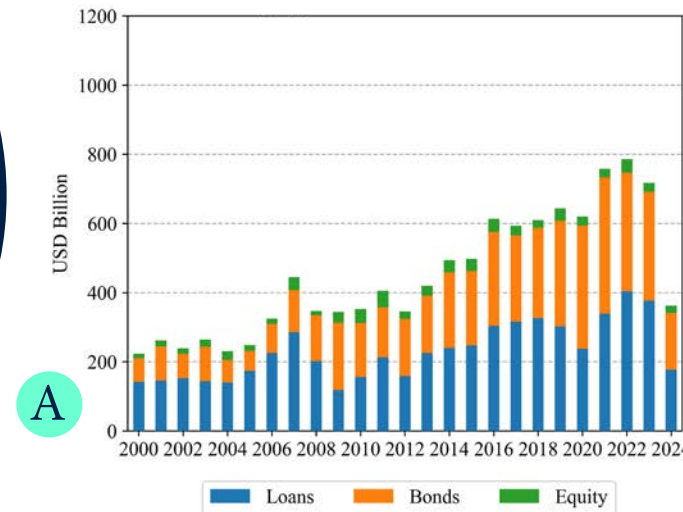
Annex

We focus on debt given that it represents the majority of financing

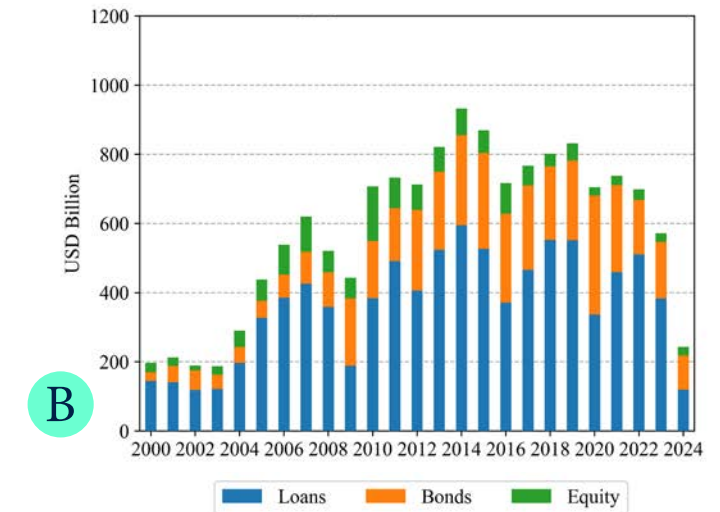
- This study focuses on debt finance and the cost of debt, as most of the financing for electric utilities and fossil fuel sectors is accounted for by debt (bonds and loans).
- This holds at the absolute level (Figure A, B) and for net financing (Figure C, D).
- For oil & gas, the industry has provided more in share buybacks than it has raised from new equity (Figure D).
- At the asset-level, 35% of asset finance for renewables companies from project finance, versus on balance corporate finance at 65%¹.

Source: data is obtained from Eikon. A and B apply to public and private firms, while C and D apply only to public firms. Data for 2024 ends in July 1. FS-UNEP: [Global Trends in Renewable Energy Investment 2020](#)

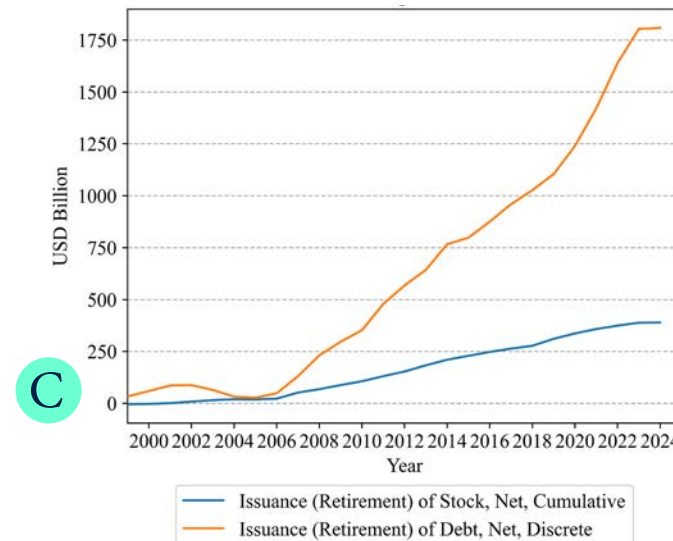
FINANCING BY SOURCE - ELECTRIC UTILITIES & IPPS



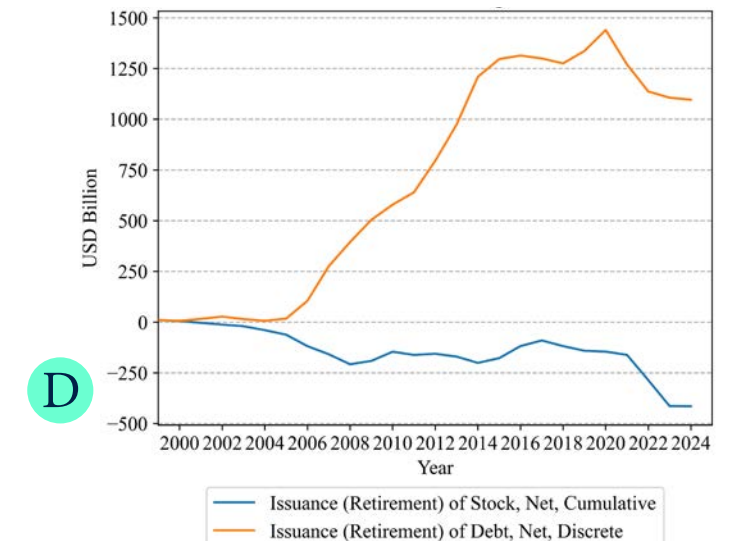
FINANCING BY SOURCE - OIL & GAS AND COAL



CUMULATIVE NET FINANCING - ELECTRIC UTILITIES & IPPS

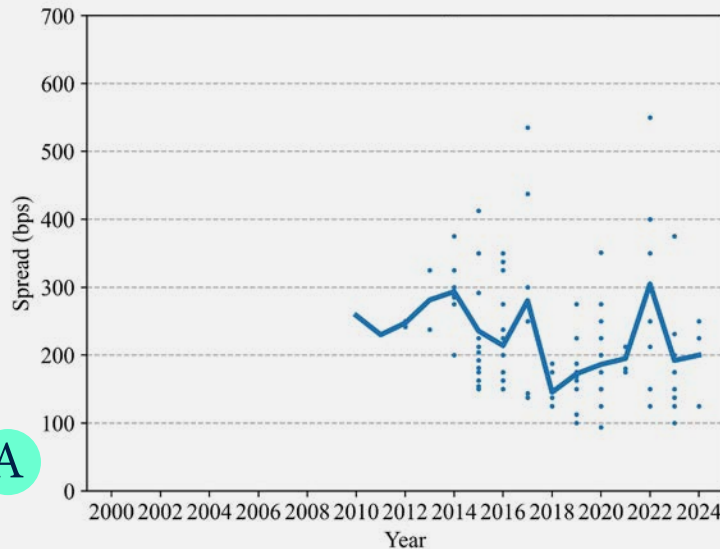


CUMULATIVE NET FINANCING - OIL & GAS

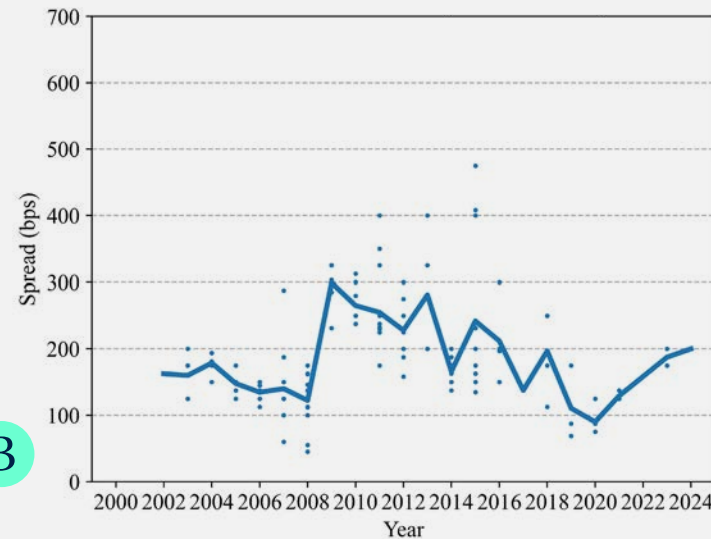


Project finance spreads in North America show similar trends

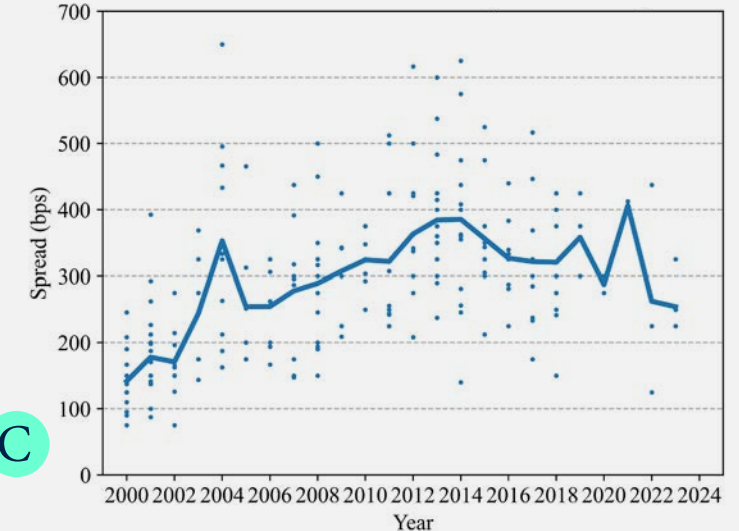
NORTH AMERICA - SOLAR - PROJECT FINANCE SPREAD



NORTH AMERICA - WIND - PROJECT FINANCE SPREAD



NORTH AMERICA - GAS & COAL - PROJECT FINANCE SPREAD

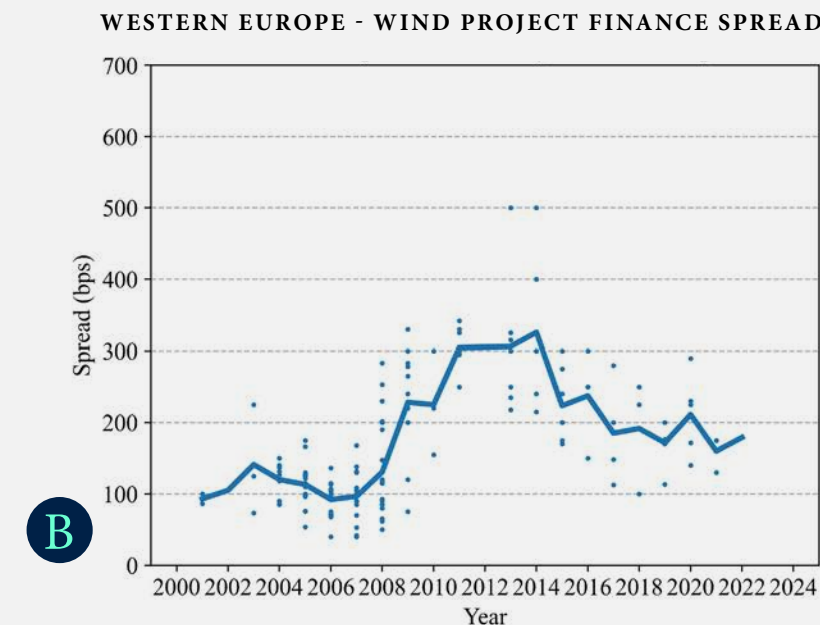
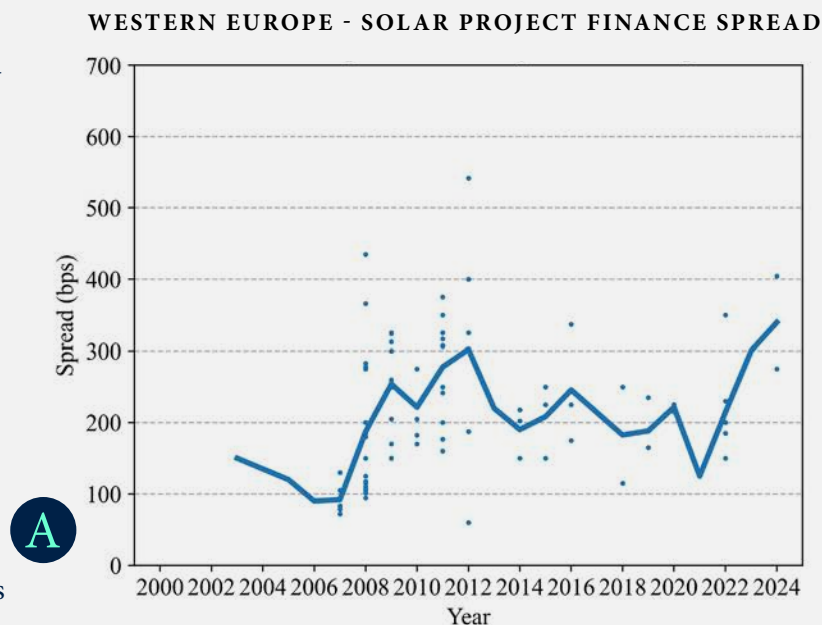


- In Figure A, we see that the spread of North American solar has oscillated around 200bps.
- In Figure B, we see that the spread of North American wind has fallen from around 300bps in 2010 to 100bps in 2020 but has increased to 200bps in 2023.

- **These spreads are in line with global averages.**
- In Figure C, We see that North American coal & gas appears to be falling gradually since the early 2010s, to around or just below 300bps. However, as fewer and fewer transactions occur, this measure becomes more volatile.

Project finance spreads in Europe show similar trends

- In Figure A, we see that the spread for solar has been around 200bps for most of the past decade **but has sharply increased in 2023/2024**.
- Europe's solar industry has been plagued by challenges, with solar panel manufacturers filing for bankruptcy due to competition from Chinese manufactures, while higher input prices and high capital costs have led to developers cancelling or postponing project that were structured to be profitable on lower interest rates. Furthermore, at the asset level, a massive expansion in solar power has led to record spells of negative prices in 2024 to an oversupply of electricity at peak times, reducing margins and raising questions regarding the profitability of future projects¹.
- While there are few data points in 2023/2024, these challenges **could have led to increased spreads**.
- In Figure B, we see that the spread for wind has oscillated around 200bps over the past decade. **These spread levels are close to global averages.**



Europe's solar industry has been plagued by challenges. **These challenges could have led to increased spreads.**

Source: data is obtained from Eikon. Data for 2024 ends in July.

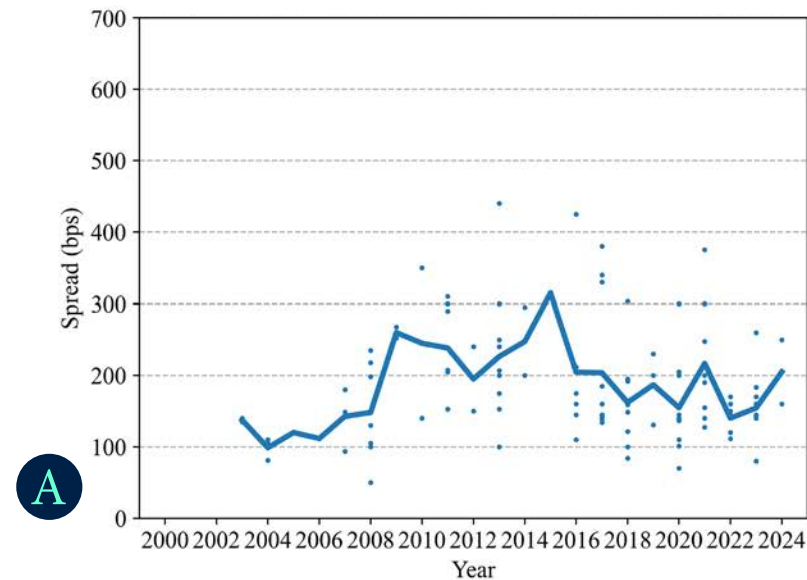
Bps = basis points = 100th of 1%.

1. [Europe's solar power surge hits prices](#)

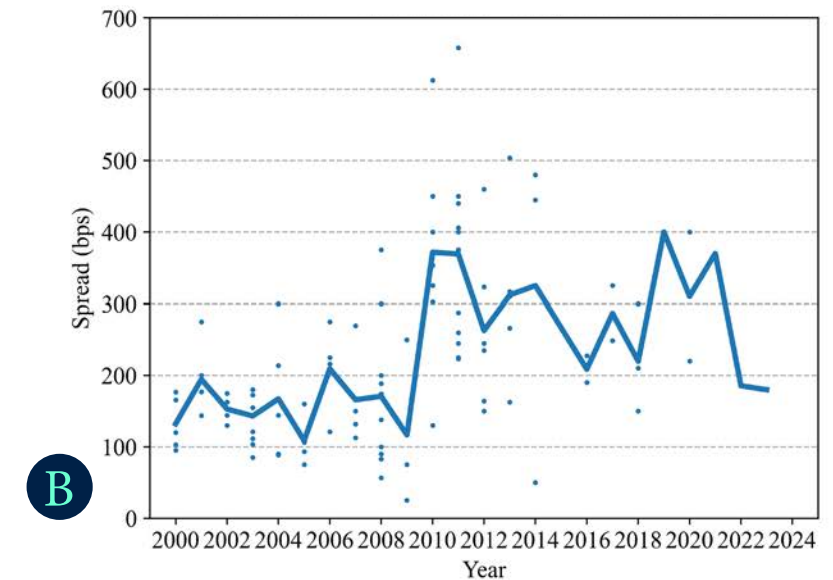
Project finance spreads in Asia Pacific show similar trends

- Asia Pacific solar & wind transactions with spread data are dominated by Australia (63), Taiwan (28), India (23), and South Korea (13), with 27 transactions in other countries.
- In line with other global and regional trends, in Figure A, we see that the **spread of Asia Pacific solar & wind has oscillated around 200bps**, with a slight uptick in 2024.
- While volatile, with limited data available, in line with global trends, the spread of gas & coal has oscillated around 300bps over the past decade.

ASIA PACIFIC - SOLAR & WIND
PROJECT FINANCE SPREAD



ASIA PACIFIC - GAS & COAL -
PROJECT FINANCE SPREAD



While volatile, with limited data available, in line with global trends, the spread of gas & coal has oscillated around 300bps over the past decade.

