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We're inside energy.

How The Energy Space Can Thrive in a Post-ESG World

Dan Romito, Consulting Partner

March 2023

Executive Summary / Key Takeaways

The Cost Of Admission To The Capital Markets Party Is ESG Data

The Current State of ESG Data Does NOT Reflect Economic Reality

Economic Reality Is Distorted Because Existing ESG Data Quality Is Relatively Poor & Skewed

Regardless Of What We Think, Companies Are Now Forced To Report & Provide ESG Data

Net Zero Is Not Going To Happen

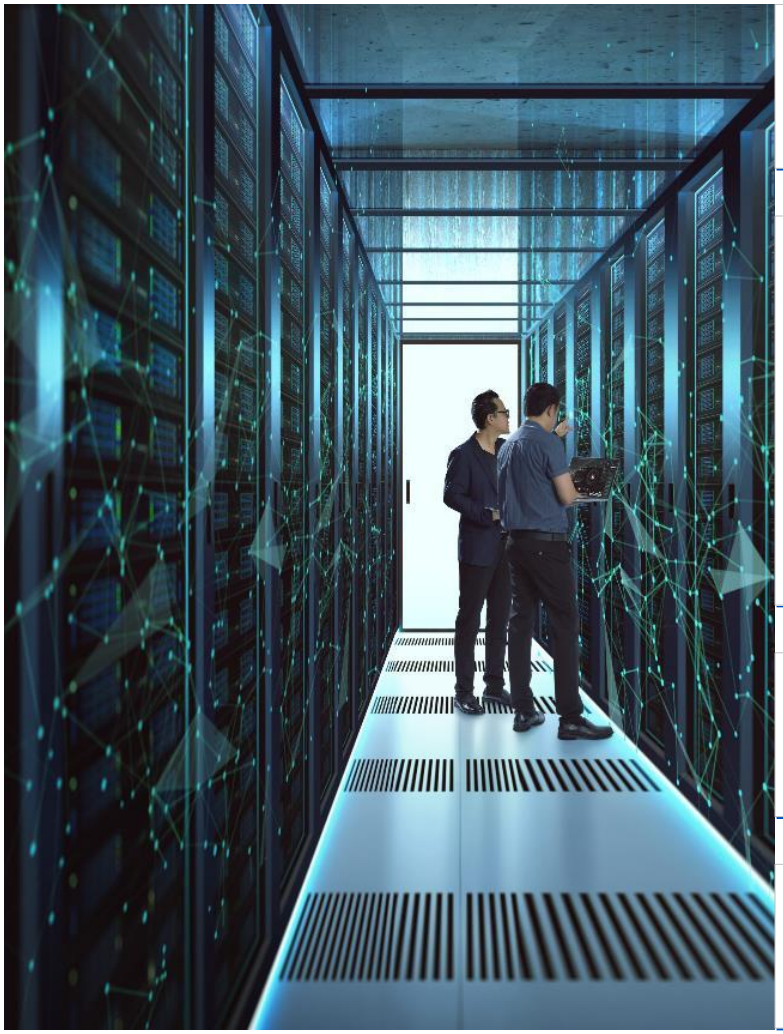
Action Items Should Revolve Around Retaking The Narrative By Utilizing Quantitative Data

ESG Data & Disclosure Can Impact Cost of Capital Either Negatively OR Positively

How To Convert ESG Risks Into Potential Opportunities Must Be Part Of The Revised Narrative

Thriving In A Decarbonizing World Must Address Potential ESG-Related Liabilities and Tax Credits

The Cost Of Admission To The Capital Markets Party Is ESG Data



Volume, Variety, Veracity and Velocity

Every minute

357	2833	63
computers sold	smart phones sold	websites hacked

2.5 quintillion bytes of data is created daily

NYSE captures 1 terabyte of information per day

https://www.digitalinformationworld.com/2018/06/infographics-data-never-sleeps-6.html

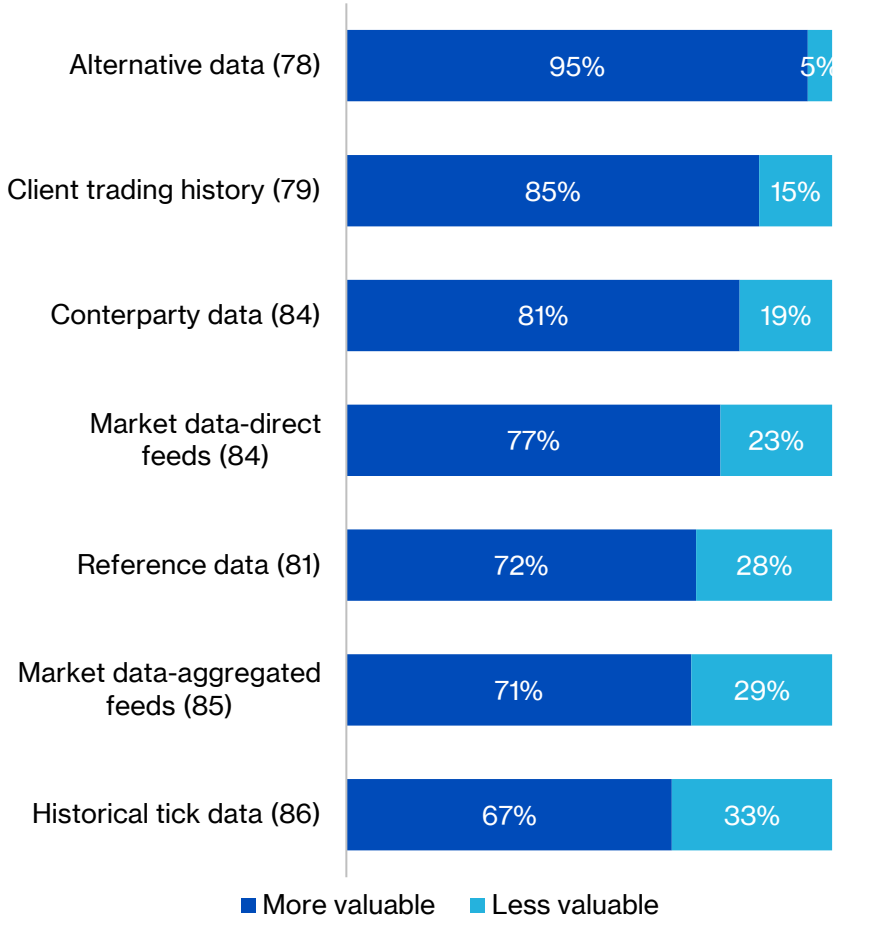
Critical To Separate Demand For Data From Anti-ESG Sentiment

State Leaders Takes Sides on ESG

States Treasurer Signed Pro-ESG Letter[1]

State AG Signed Anti-ESG Letter

Anticipated Value of Data Types to the Trading Process in Next 3-5 Years



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Source: Greenwich Associates 2019 Future of Trading Study; Note: Numbers in parentheses represent respondents.

1. NYC Treasurer Comptroller Brad Lander also signed the pro-ESG letter

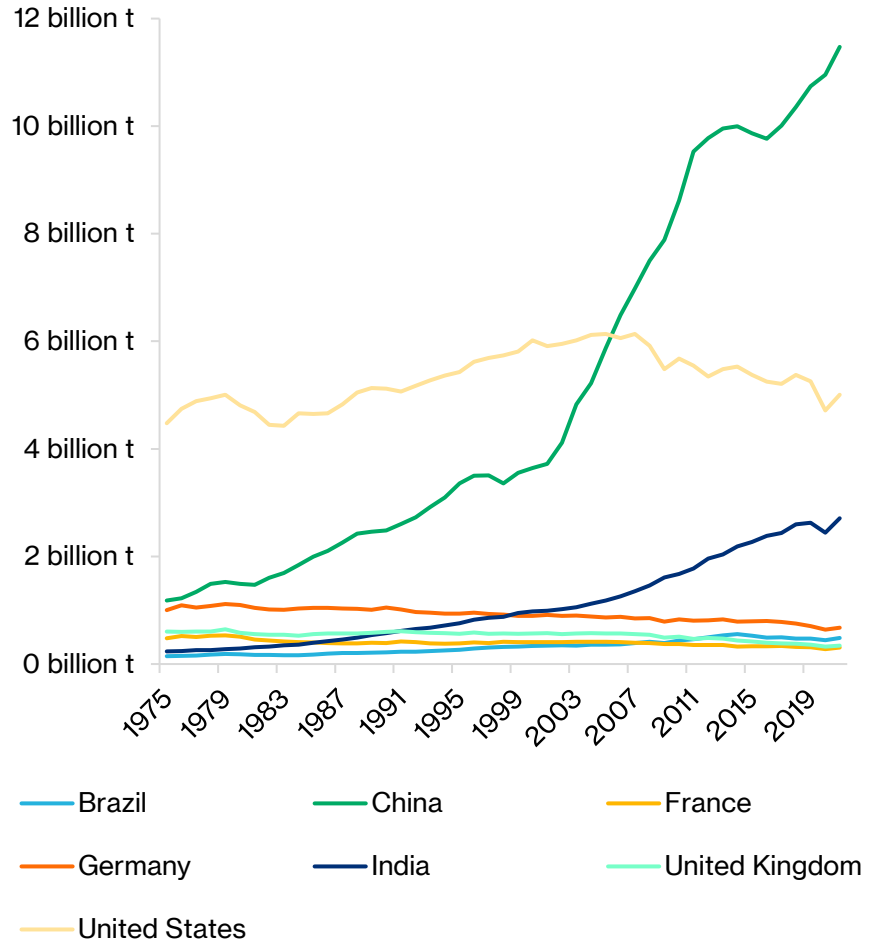
The Current State of the ESG State:

What Does Economic Reality Actually Reflect?

The Trending Emissions Profile For The United States Is Impressive

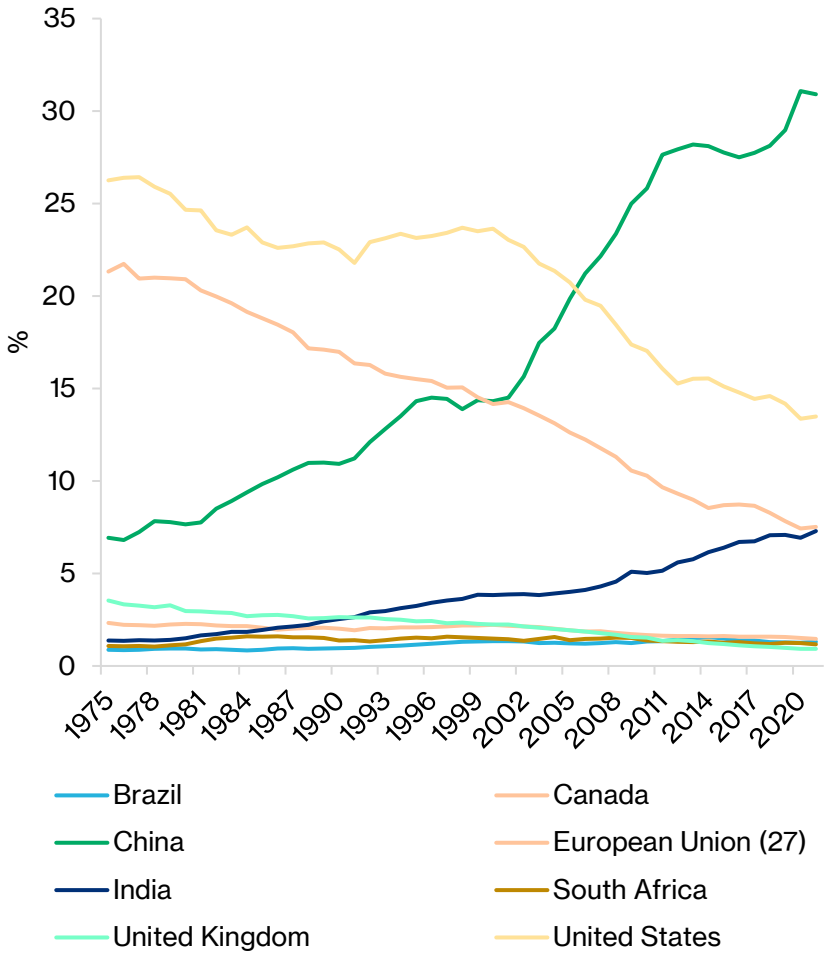
Annual CO^2 emissions

Carbon dioxide (CO2) emissions from fossil fuel and industry. Land use change is not included.



Annual share of global CO_2 emissions

Carbon dioxide (CO2) emissions from fossil fuels and industry. Land use change is not included



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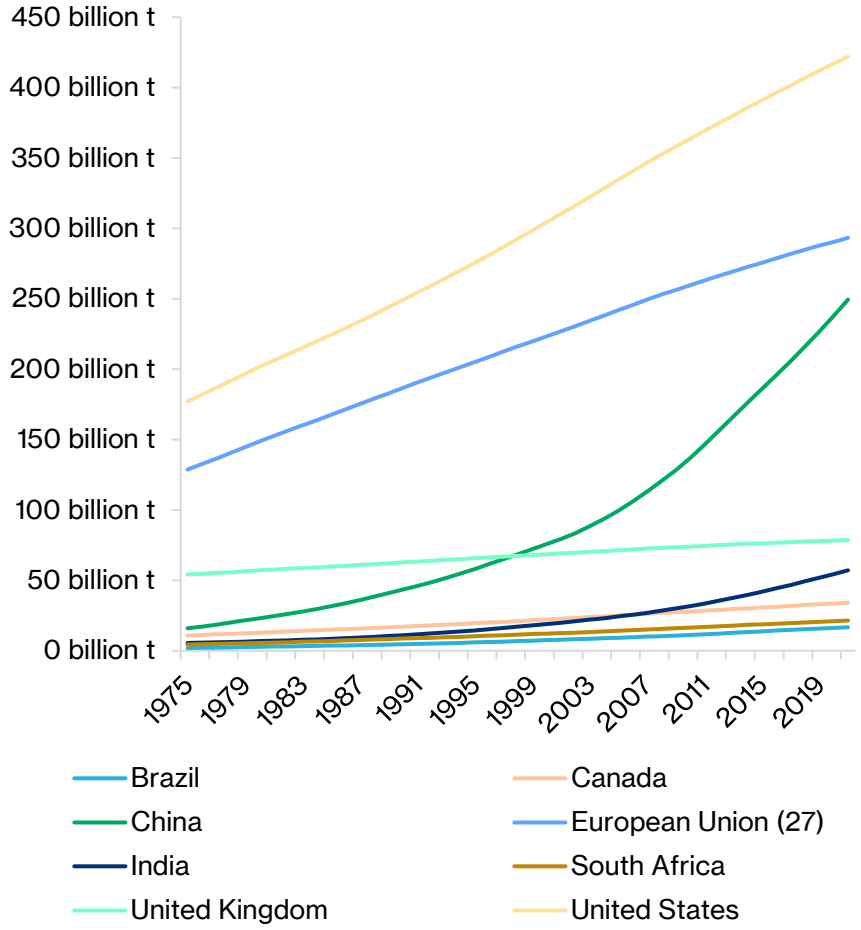
Source - https://ourworldindata.org/co2-emissions#:~:text=China%20is%2C%20by%20a%20significant,closely%20by%20Europe%20with%2017%25.

Exponential (China) vs. Linear (U.S.) Cumulative Carbon Emissions Profile

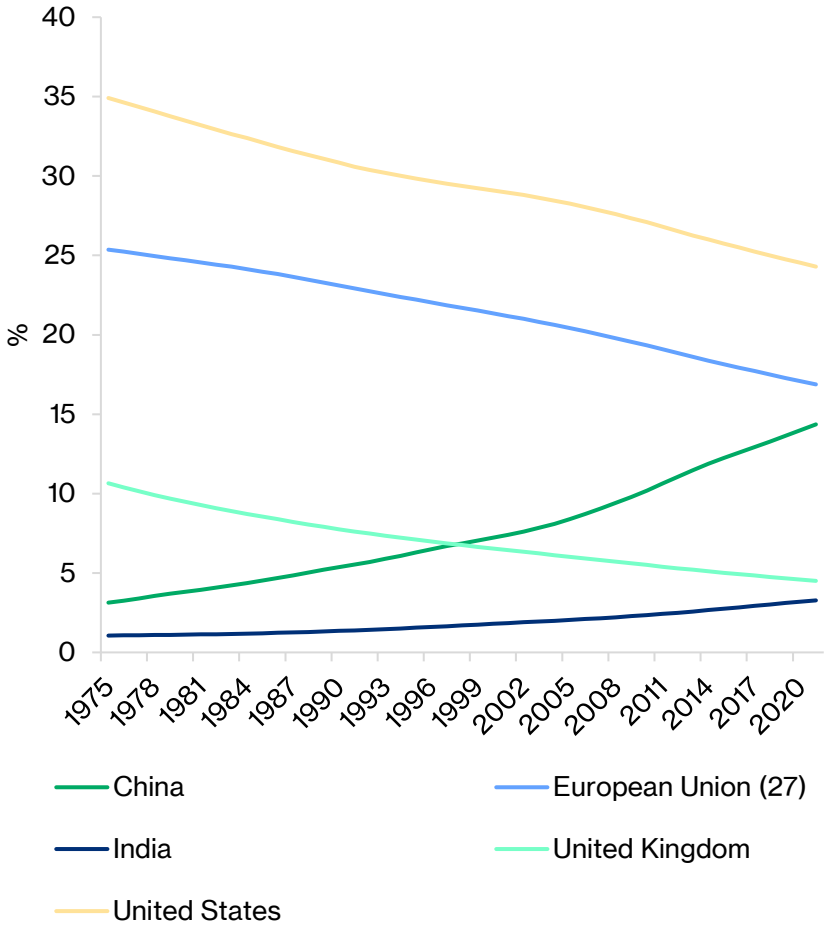
Cumulative CO_2 emissions

Cumulative emissions are the running sum of CO_2 emissions produced from fossil fuels and industry since 1750. Land use change is not included.

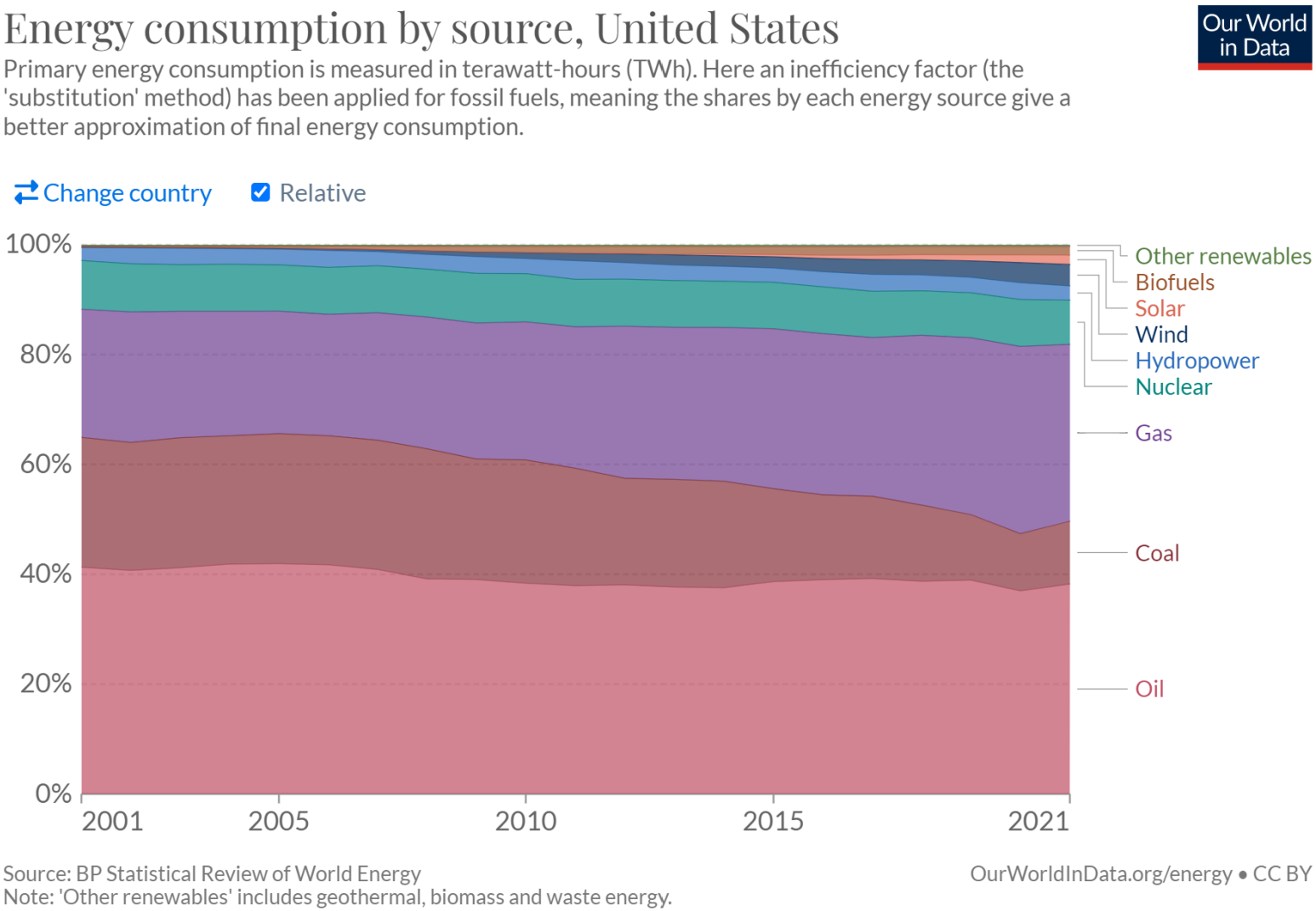


Share of global cumulative CO_2 emissions

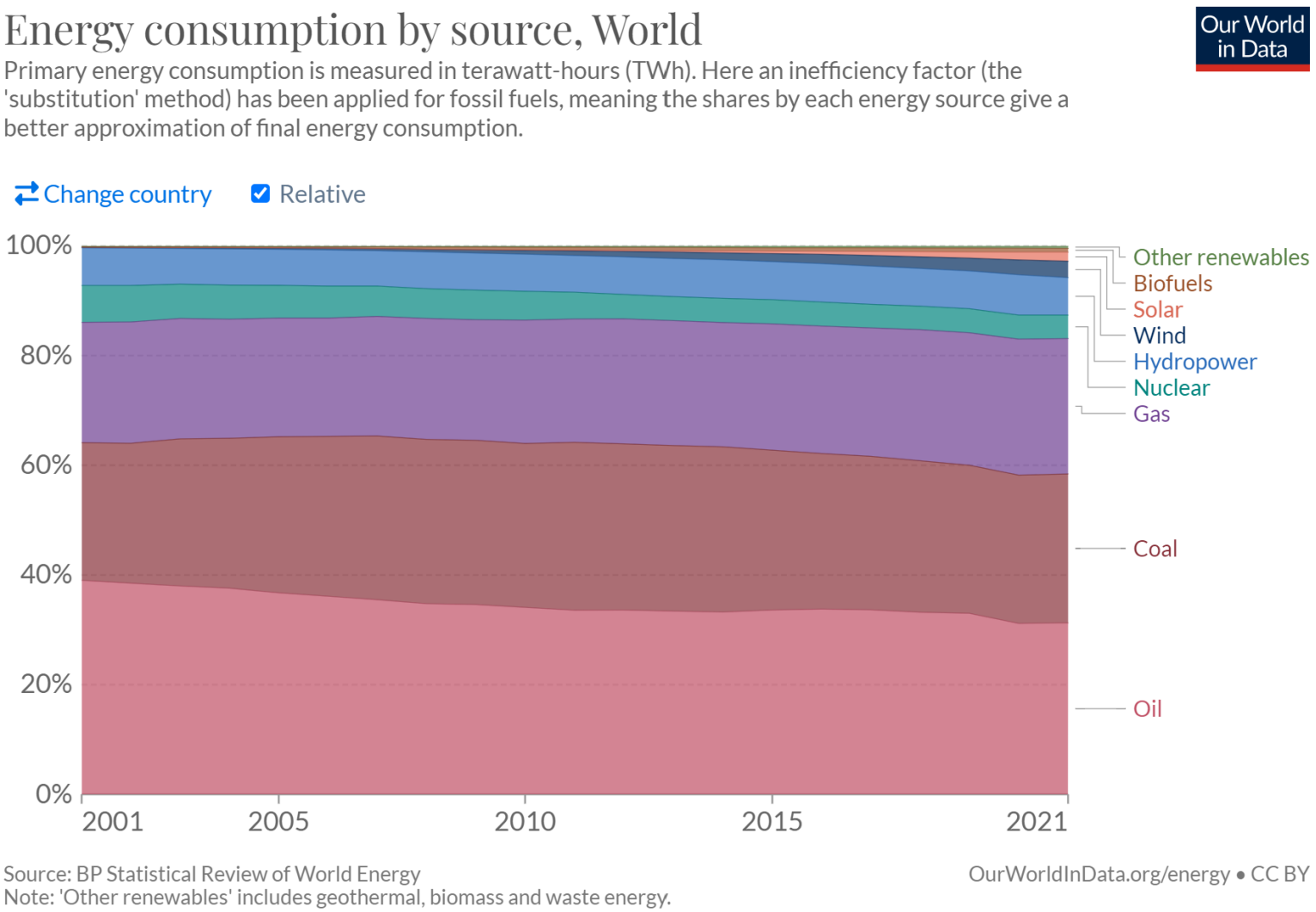
Cumulative emissions are calculated as the sum of annual emissions from 1750 to a given year. This measures fossil fuel and industry emissions. Land use change is not included



The U.S. Energy Mix is ~82% Oil, Gas & Coal...

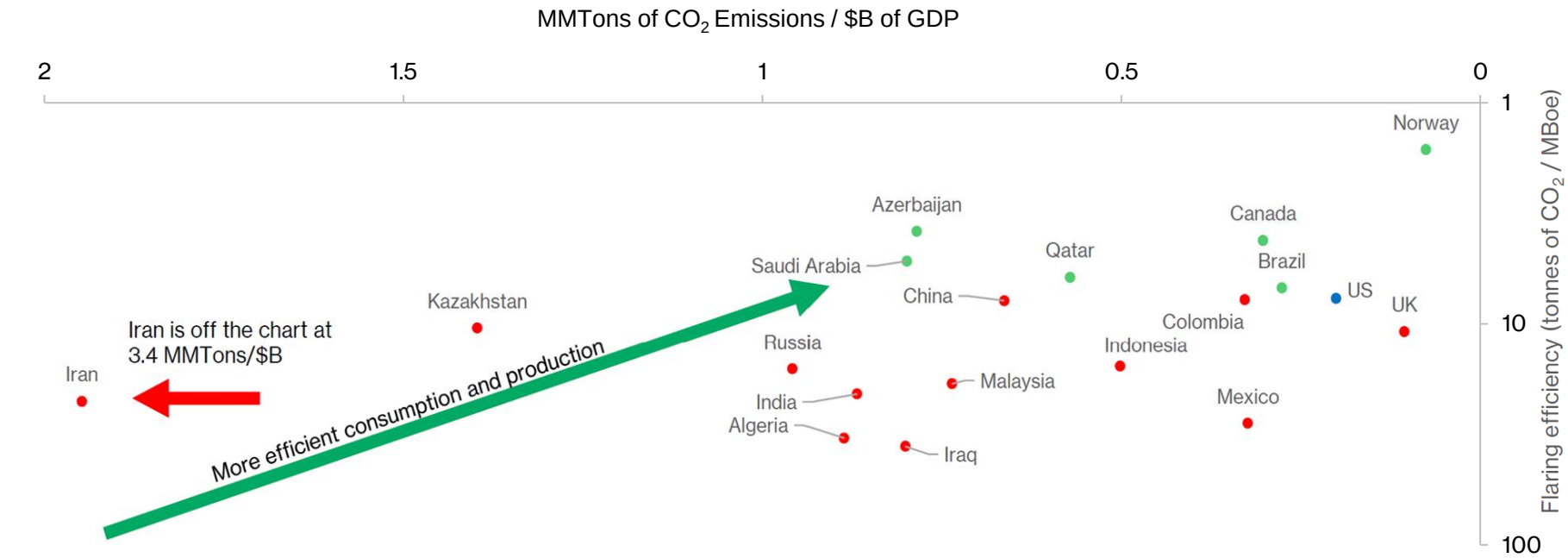


The World's Energy Mix Is ~85% Oil, Gas & Coal...



So…Shouldn't The U.S., UK & Norway Run Point On Production?

Emissions Relative to GDP vs. Flaring Efficiency



- **We have bellwether nations that should be imitated** – Norway leads the pack as the cleanest producer with the cleanest economy. Canada, Brazil, US, Qatar, Azerbaijan, and Saudi Arabia follow as relatively clean producers with cleaner economies
- **The energy transition can start by cleaning our current energy world** – There is significant progress that other countries can implement today that would dramatically improve the world's carbon footprint.
- Russia and Iran together make up 7% of the world's CO2 emissions and **26% of the world's CO2 from flaring**

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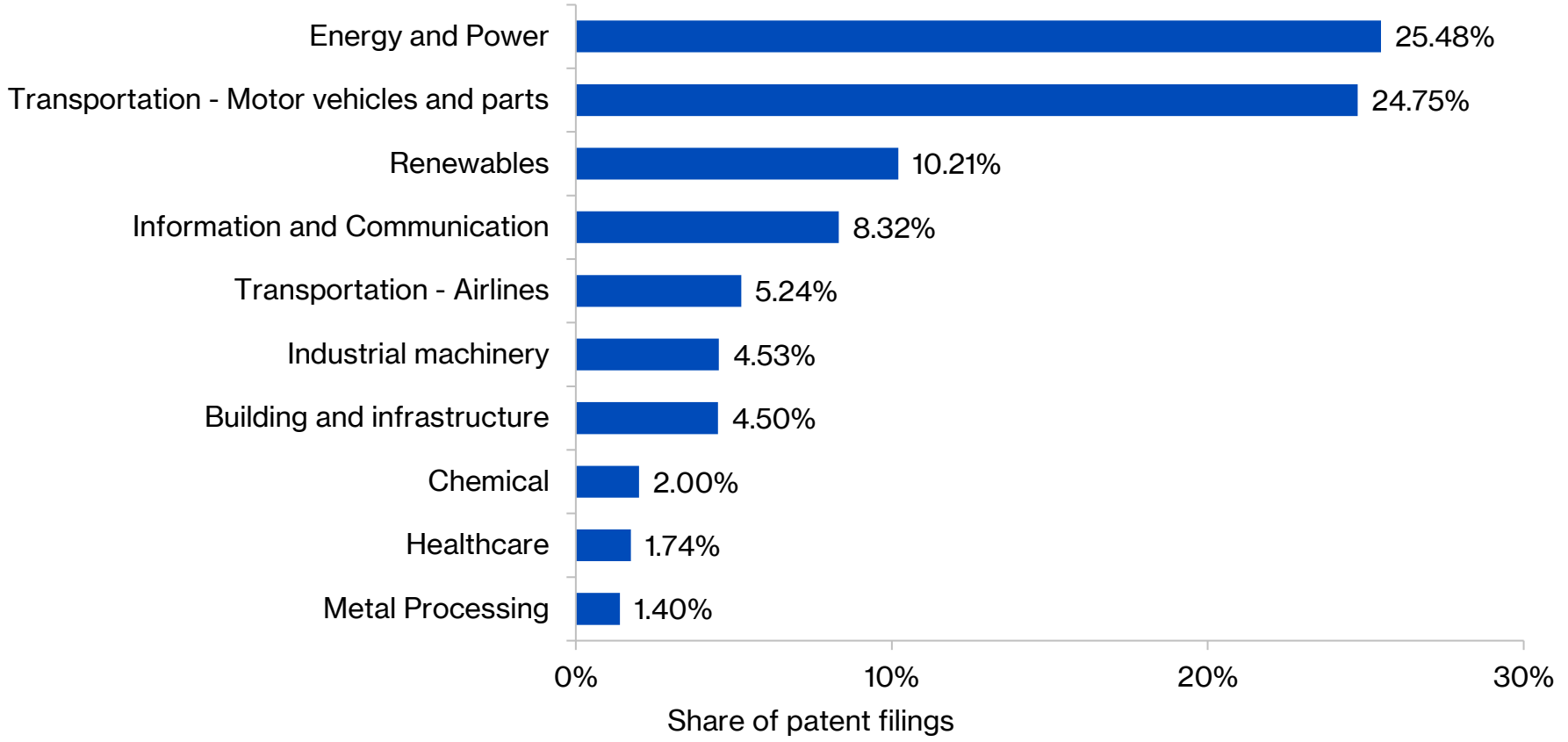
Source – BP Statistical Review of World Energy 2021, World Bank, Pickering Energy Partners Analysis

BTW...Energy & Power Have Created More "Green" Than Renewables

Distribution of green patent filings worldwide as of 2020, by industry



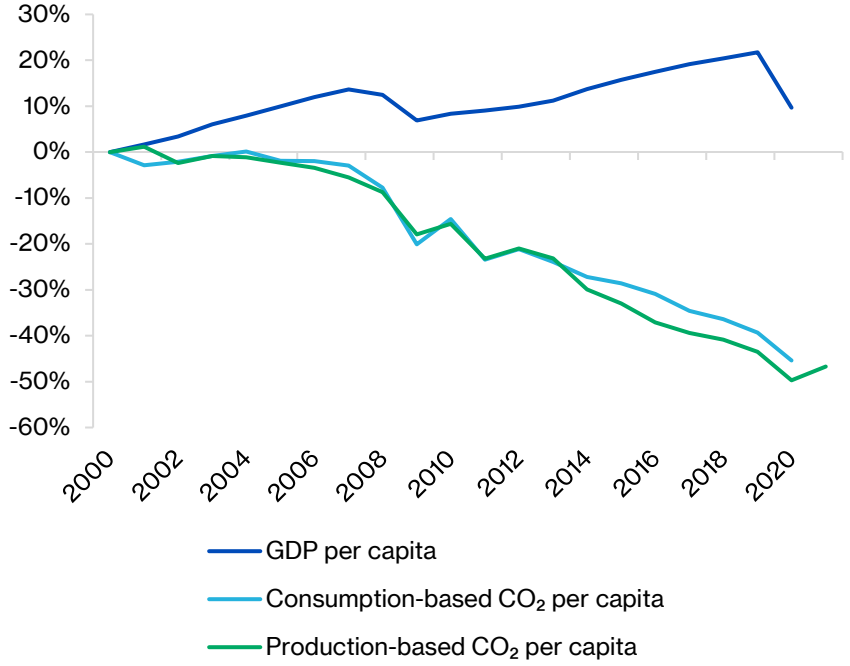
The energy space remains perhaps best positioned in terms of capitalization to execute the transition

https://jsom.utdallas.edu/news/awardwinning-study-shows-greenpatent-results-dont-square-for-energy-industry

The United States Has Also Figured Out How To Decouple

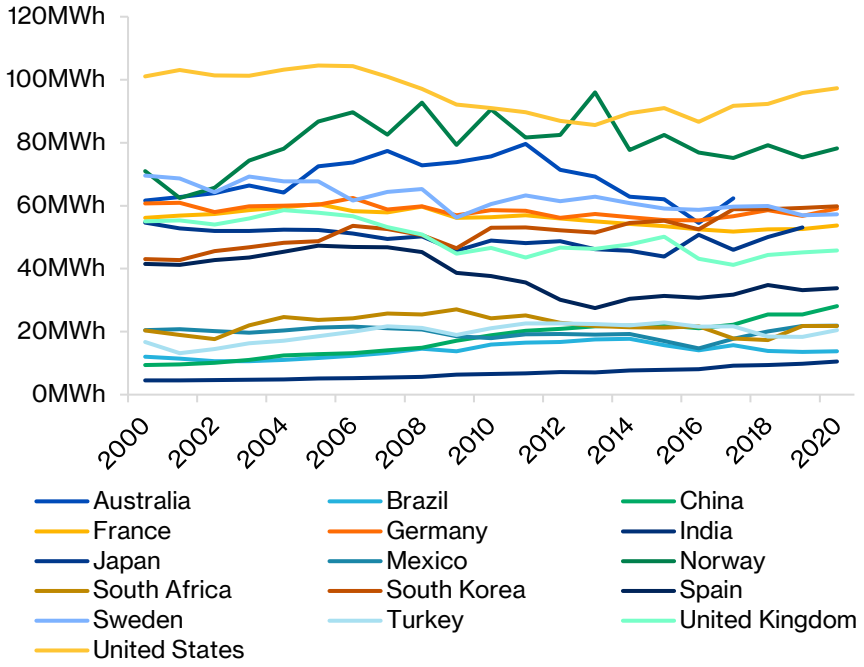
Change in per capita CO2 emissions and GDP, United States

Consumption-based emissions are national emissions that have been adjusted for trade. This measures fossil fuel and industry emissions. Land use change is not included.



Consumption-based (trade-adjusted) energy use per person

Consumption-based (trade-adjusted) energy use measures domestic energy used to produce exported goods, plus energy used to produced imported goods.



- If we look at changes in GDP since 2000, we see a **large drop in emissions alongside a rise in GDP.**
- It's only over the **last 20 years** that this decoupling has started to happen
- There are two key reasons why emissions have fallen in these countries.
  - The US has managed to decouple energy use and economic growth, i.e., GDP has increased while total energy use has remained flat, or even fallen
  - These countries are complementing fossil fuels with low-carbon energy

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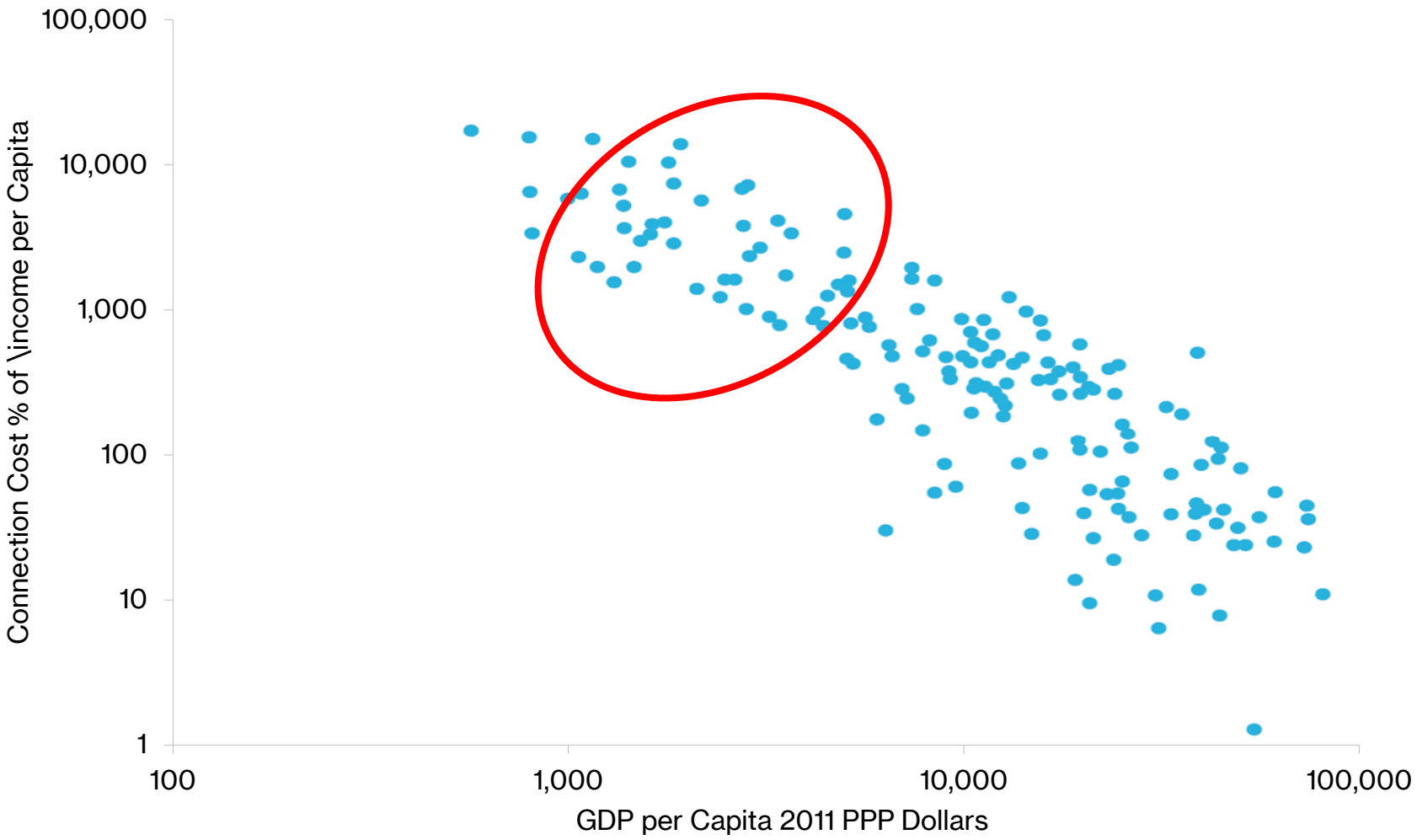
https://ourworldindata.org/co2-emissions#:~:text=China%20is%2C%20by%20a%20significant,closely%20by%20Europe%20with%2017%25.

Energy Costs Decrease As GDP per Capita Increase

Relationship Between Energy Cost and Per Capita GDP[2]



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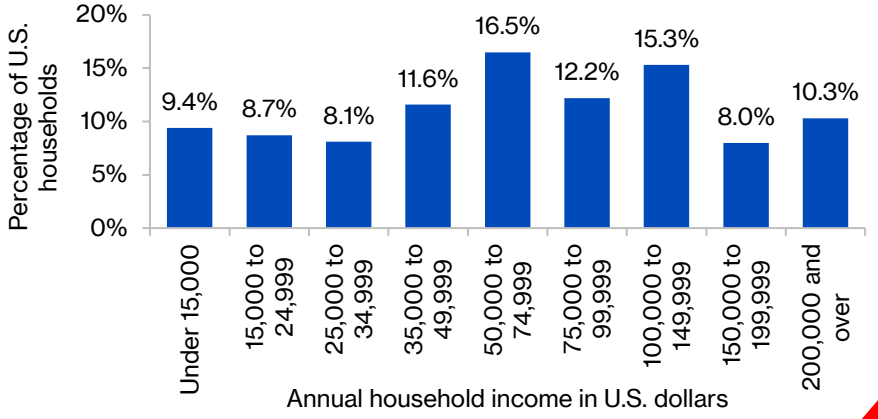
1. Source: ibid

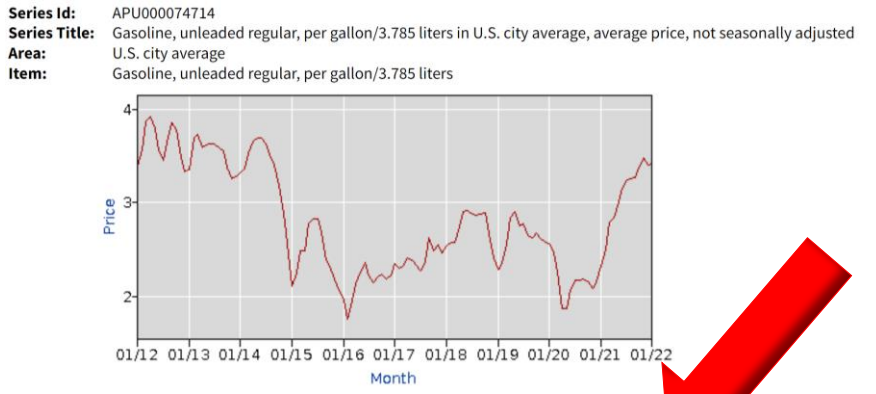
2. Source: Stern, D.I, Burke, P.J, & Bruns, S.B. (2019). The Impact of Electricity on Economic Development: A Macroeconomic Perspective, UC Berkeley: Center for Effective, Global Action. Retrieved from http://scholarship.org/uc/ite,/7jb0015q

The Common Citizen Is Currently Plagued By Affordability Constraints...

Percentage distribution of household income in the U.S. in 2020



CPI Average Price Data, U.S. city average (AP)

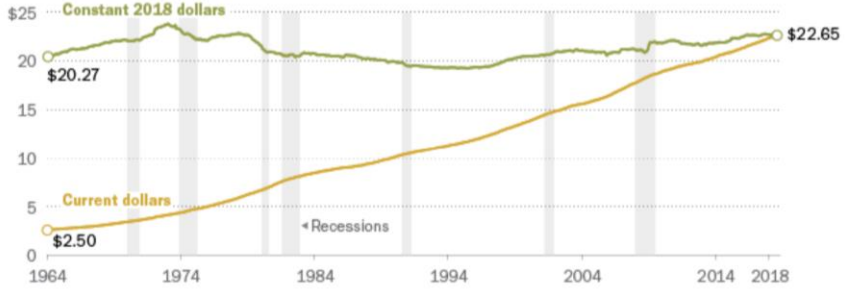


Number of people living below the poverty line in the United States from 1990 to 2020

(in millions)

American's paychecks are bigger than 40 years ago, but their purchasing power has hardly budged

Average hourly wages in the U.S., seasonally adjusted



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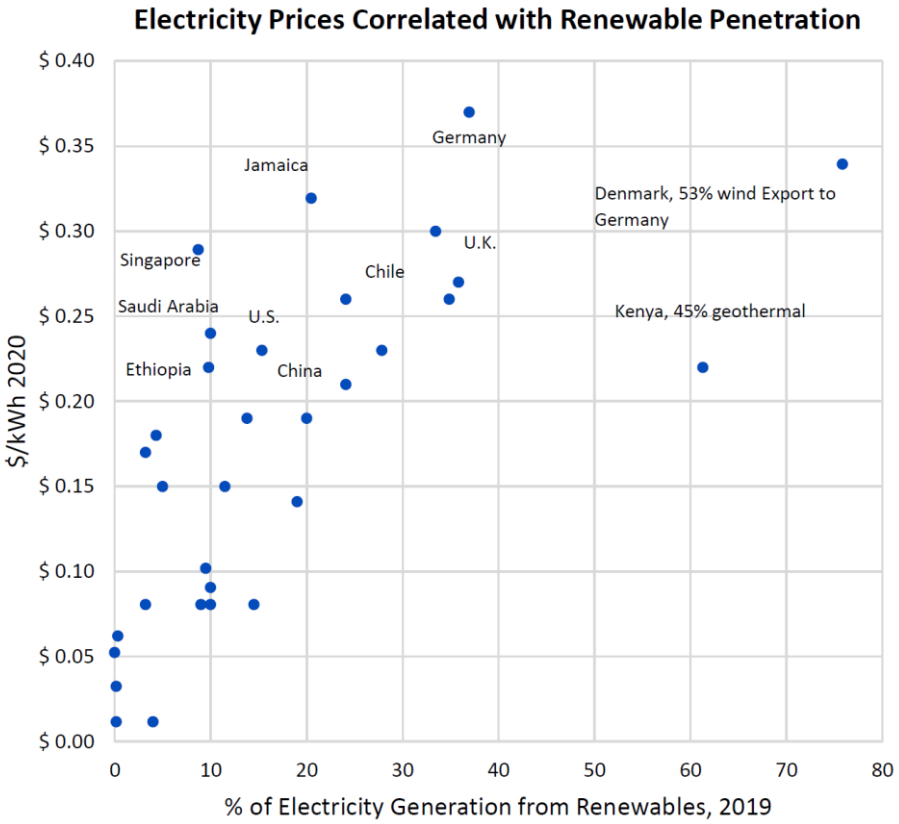
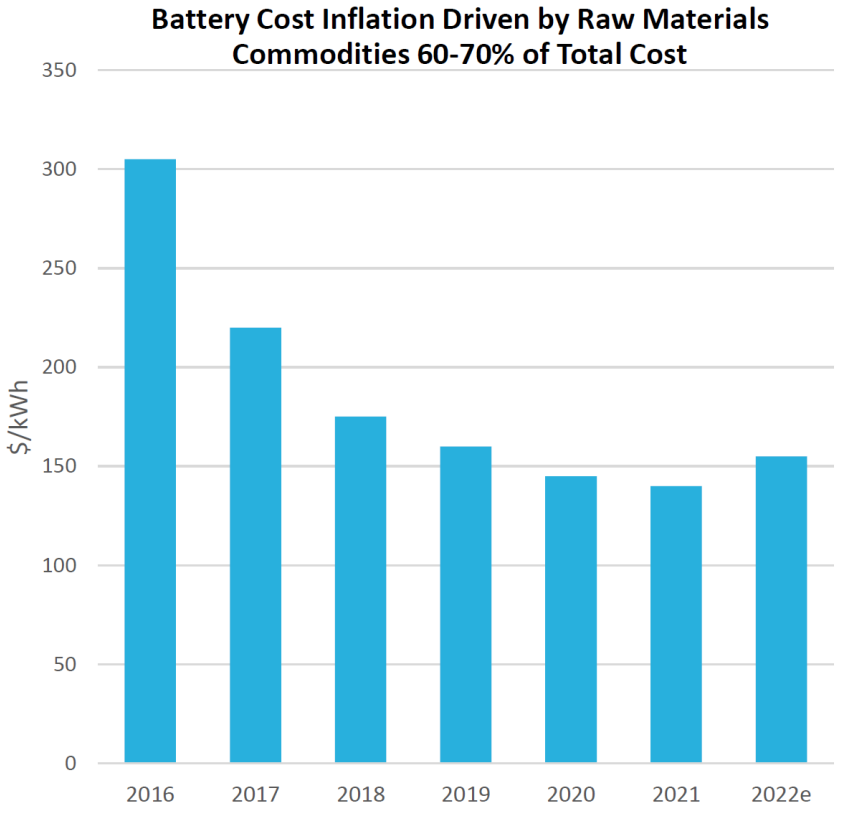
Source: U.S. Bureau of Labor Statistics;
Note: Data for wages of production and non-farm payrolls. "Constant 2018 dollars" describes wages adjusted for inflation. "Current dollars" describes wages reported in the value of the currency when received. "Purchasing power" refers to the amount of goods or services that can be bought per unit of currency

...And Inflation Is Endemic To The Energy Transition





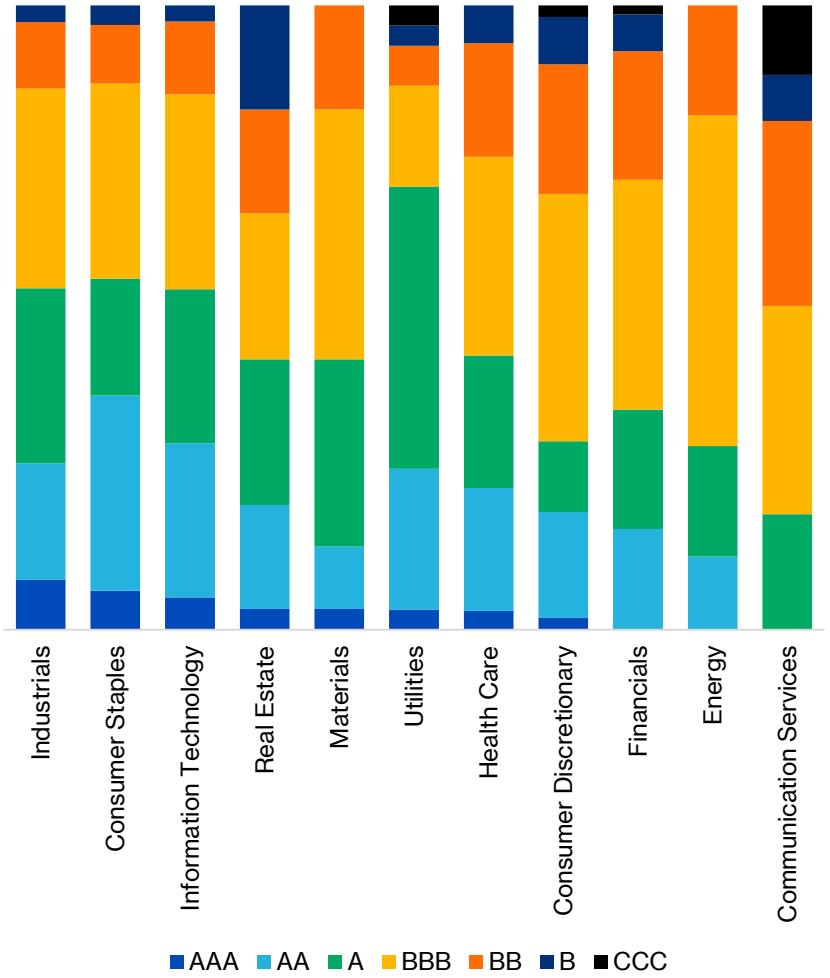
Source: BNEF, Thunder Said Energy. SailingStone Capital Partners, https://ourworldindata.org/grapher/share-elec-by-source?time=latest, https://www.statista.com/statistics/263492/electricity-prices-in-selected-countries

Why Isn’t This Story Being Told?

ESG Data Is Littered With Inaccuracies

Scoring Weights & Methodologies Are Empirically Biased Against Energy

Energy Companies Tend To Have Lower MSCI Scores



Sector Comparison

	Energy	Utilities	Industrials	Materials	Tech
Top 5 "E" Topics for Energy					
Carbon Emissions	18%	12%	5%	12%	2%
Biodiversity	13%	5%	1%	4%	0%
Toxic Emissions & Waste	10%	9%	6%	13%	0%
Opportunities in Clean Tech	2%	0%	10%	4%	12%
Water Stress	1%	10%	0%	11%	2%
Top 5 "S" Topics for Energy					
Health & Safety	13%	3%	10%	7%	0%
Community Relations	9%	1%	1%	3%	0%
Labour Management	1%	0%	15%	7%	5%
Human Capital Development	0%	12%	1%	0%	20%
Privacy & Data Security	0%	1%	2%	0%	10%
Weight of "G"					
Governance	34%	35%	46%	33%	40%

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https://www.msci.com/our-solutions/esg-investing/esg-ratings

FTX Trading Had A Higher Governance Score Than Exxon Mobil

FTX Trading Ltd. Next Report Date:

TRUVALUE LABS
A FACTSET Company

SASB Dimensions ⓘ Leadership and Governance

Business Model and...	Leadership and...	Social Capital
57	50	34

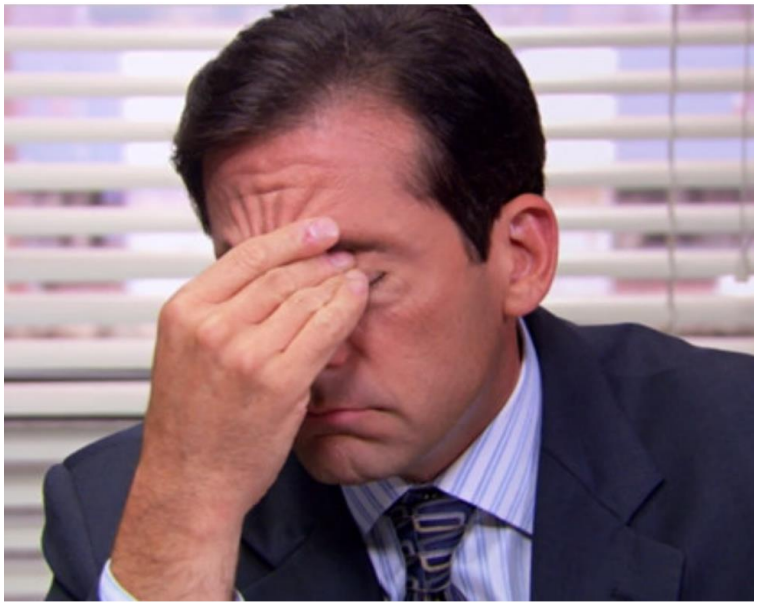
Spotlight Events: 2

Exxon Mobil Corporation $113.95 Next Report Date: 31 Jan '23

TRUVALUE LABS
A FACTSET Company

SASB Dimensions ⓘ Leadership and Governance

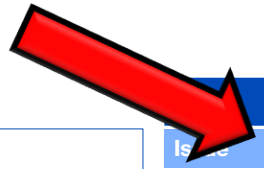
Business Mod...	Environment	Leadership an...	Human Capital
63	59	38	46
Spotlight Events: 14	Spotlight Events: 37	Spotlight Events: 9	Spotlight Events: 7



https://www.forbes.com/sites/georgecalhoun/2022/11/21/ftx-and-esg-a-panorama-of-failed-governance-pt-1--the-internal-failures/?sh=385f86ae2d9d

Proactive Engagement Is Required To Establish Economic Reality

- Where companies do not disclose ESG data, third-party aggregators, raters and detractors typically fill in the blanks
- Top-down guidelines tend to neglect individual bottom-up differentiation
- Resulting adversities derived from inaccurate rating methodologies are more substantial for the Energy sector



amazon

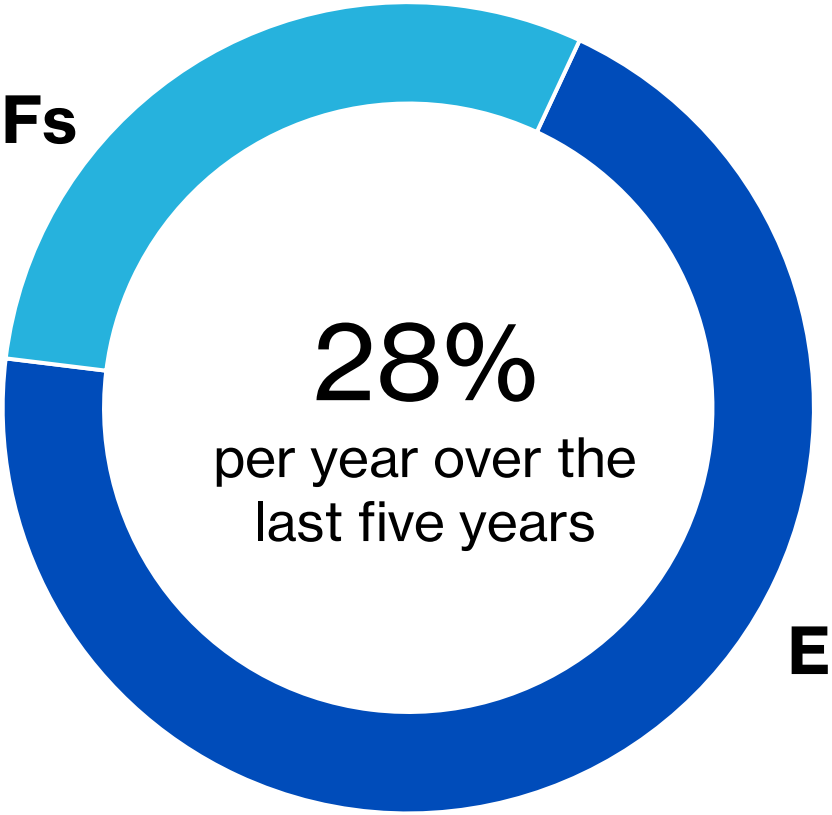
Environmental		Social		Governance	
Issue	Average Weight	Issue	Average Weight	Issue	Average Weight
Product Carbon Footprint	7.9%	Privacy & Data Security	29.0%	Governance	40.7%
Carbon Emissions	4.6%	Labor Management	16.8%		
Raw Material Sourcing	0.4%	Product Safety & Quality	1.1%		
		Human Capital Development	1.0%		
		Supply Chain Labor Standards	0.9%		
		Consumer Financial Protection	0.6%		
		Opportunities in Nutrition & Health	0.2%		

Chevron

Issue	Average Weight	Issue	Average Weight	Issue	Average Weight
Carbon Emissions	14.0%	Health & Safety	13.0%	Governance	33.0%
Biodiversity & Land Use	13.9%	Community Relations	13.0%		
Toxic Emissions & Waste	13.0%	Labor Management	0.3%		

https://www.msci.com/our-solutions/esg-investing/esg-ratings

The Extensive Influence Of ESG Data Determines Portfolio Eligibility

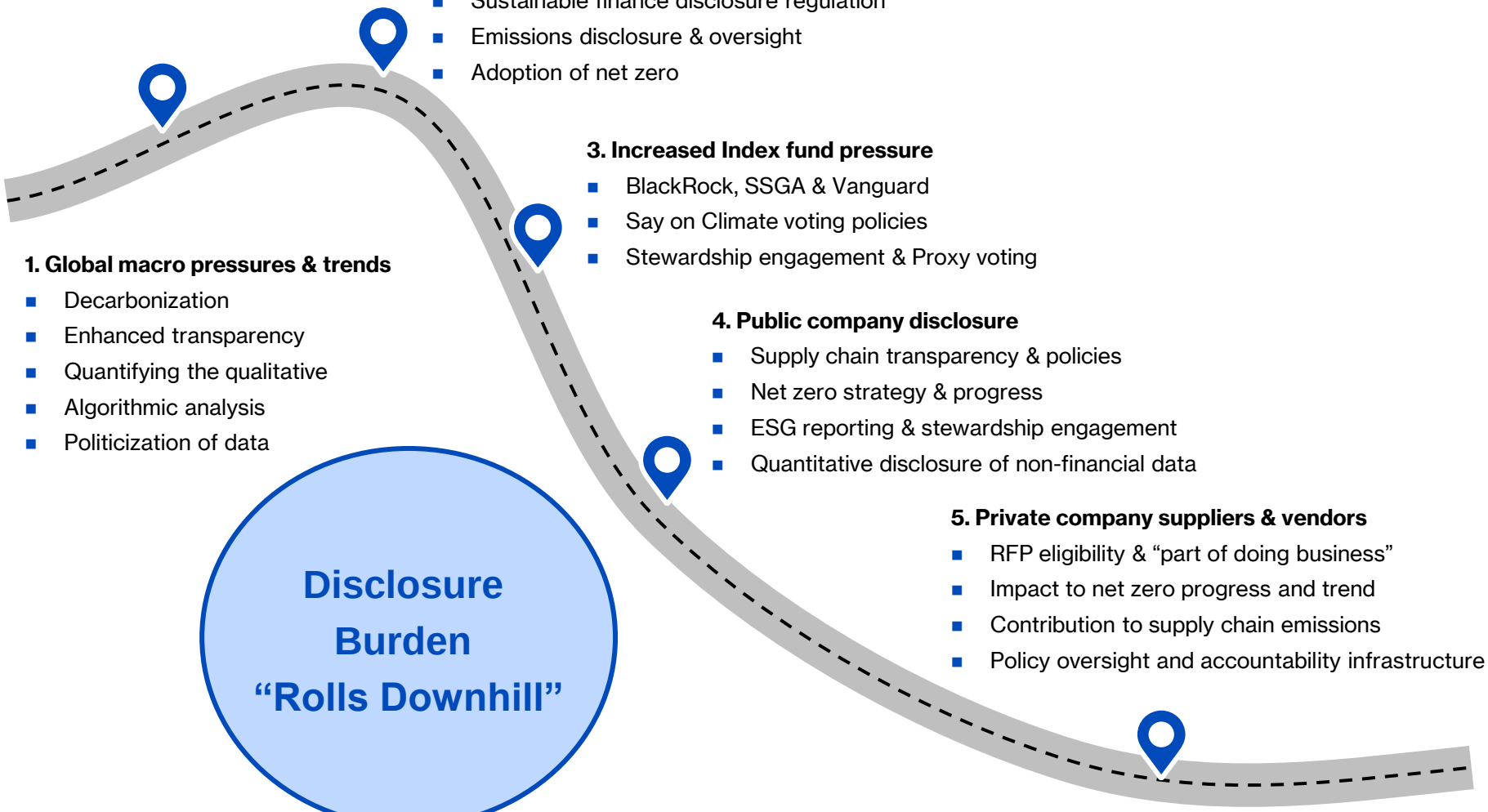


ESG market growth:
28% per year over the last five years

https://corpgov.law.harvard.edu/2021/07/28/managing-esg-data-and-rating-risk/

Regardless If You Like It Or Not, You Are Now Forced To Tell The Story

Macro ESG Trends Disproportionately Impacts Smaller Companies



1. Global macro pressures & trends

- Decarbonization
- Enhanced transparency
- Quantifying the qualitative
- Algorithmic analysis
- Politicization of data

2. Evolution of global regulatory

- SEC climate disclosure mandate
- Sustainable finance disclosure regulation
- Emissions disclosure & oversight
- Adoption of net zero

3. Increased Index fund pressure

- BlackRock, SSGA & Vanguard
- Say on Climate voting policies
- Stewardship engagement & Proxy voting

4. Public company disclosure

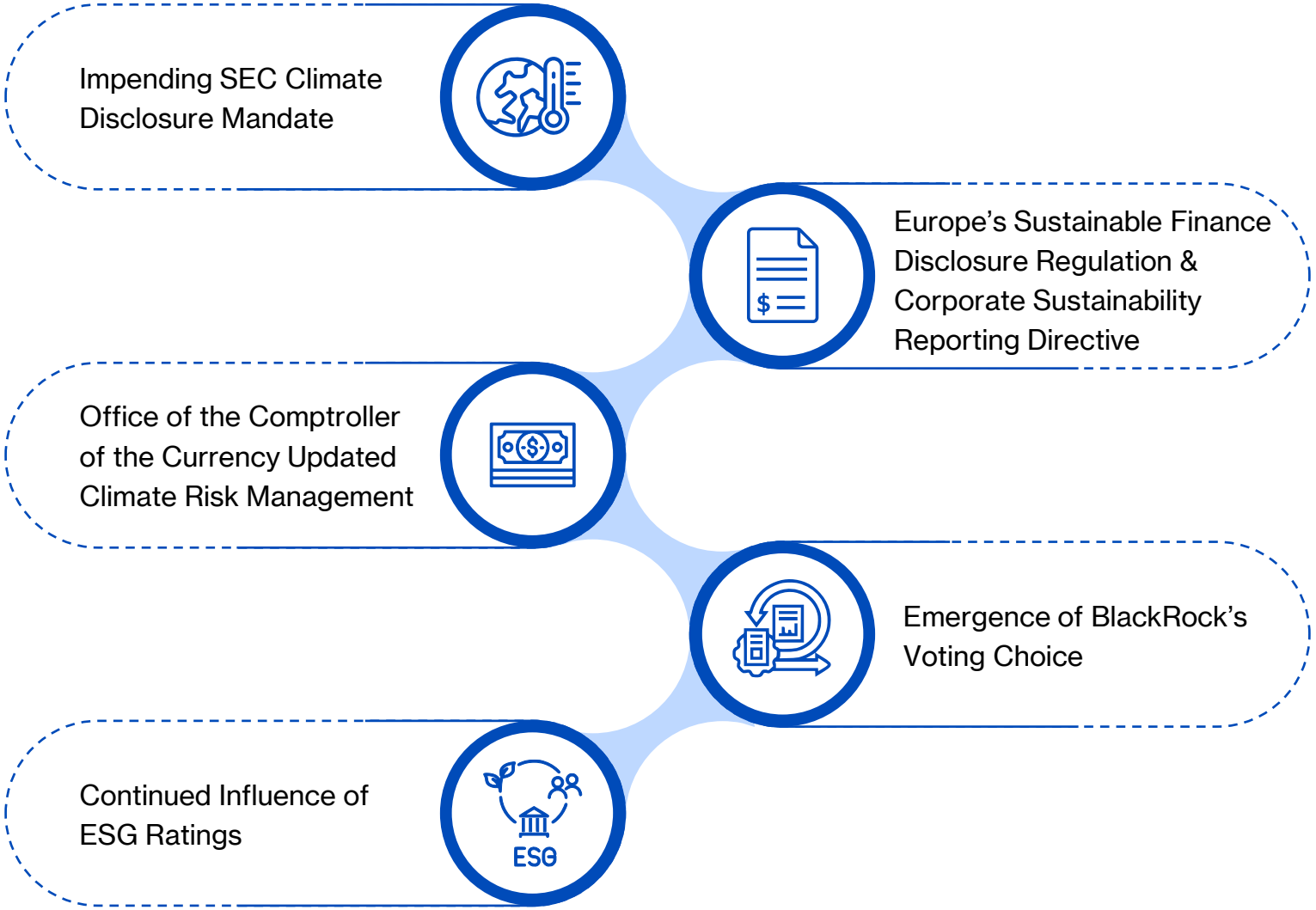
- Supply chain transparency & policies
- Net zero strategy & progress
- ESG reporting & stewardship engagement
- Quantitative disclosure of non-financial data

5. Private company suppliers & vendors

- RFP eligibility & “part of doing business”
- Impact to net zero progress and trend
- Contribution to supply chain emissions
- Policy oversight and accountability infrastructure

Disclosure Burden “Rolls Downhill”

Regulatory & Investor Mandates Focused On Quantitative Disclosure



PEP Execution Aligns ESG Disclosure With Investor Expectations

Recent voting trends center on climate-related disclosure and evaluation

BlackRock Trend:

- Voted against 255 directors in the period ended June 30, 2021, up from 55 in 2020
- **Failed to support the management of 319 companies for climate-related reasons** in 2021, compared with 53 in 2020
- Began expanding the opportunity for certain clients to directly participate in proxy voting decisions in October 2021
- ~25% of BlackRock assets under management with respect to corporate and sovereign issuers are invested for clients in issuers with science-based targets or equivalent
  - Goal is 75% by 2030

State Street Trend:

- Announced in 2021 they will launch a targeted engagement campaign with the most significant emitters in their portfolio to **encourage disclosure aligned with our expectations for climate transition plans,** which covers 10 areas including decarbonization strategy, capital allocation, climate governance, and climate policy
- **Beginning 2023, SSGA will "hold companies and directors accountable** for failing to meet these expectations."
- Capital allocation alignment:
  - Integration of climate considerations
  - Capital expenditure on low carbon strategies
  - Carbon pricing
  - Investments in decarbonization

Vanguard Trend:

- "We use engagements to better understand **public company boards' oversight of climate risks and opportunities,** their climate mitigation plans, and whether their disclosures are effective, comprehensive, and provide shareholders with decision-useful information, including progress on the goals companies have set"
- Adopting the "Say on Climate" Approach
  - **Annual disclosure of greenhouse gas emissions & progress on goals**
  - Disclosure of the company's strategic plan for reducing future emissions and managing climate-related risks
  - The right for shareholders to cast recurring votes on the company's climate plan or report

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i. https://www.ssga.com/library-content/pdfs/asset-stewardship/disclosure-expectations-for-effective-climate-transition-plans.pdf , *ii.* https://www.ssga.com/library-content/pdfs/asset-stewardship/guidance-on-climate-related-disclosures.pdf , *iii.* https://corporate.vanguard.com/content/dam/corp/advocate/investment-stewardship/pdf/policies-and-reports/inv_stew_2021_annual_report.pdf , *iv.* https://corporate.vanguard.com/content/dam/corp/advocate/investment-stewardship/pdf/perspectives-and-commentary/INSSAYC_052021.pdf

BlackRock Has Made Stakeholder Engagement Much More Difficult

BlackRock Voting Choice Represents A Deep Stakeholder Roster

650

global funds

$1.8T

of index equity assets

95%

of institutional index equity

60M

people participating in retirement accounts

BlackRock Clients Now Possess Four Potential Voting Options

Clients can exercise total control over voting

Clients can choose to leave all other voting decisions to the manager's discretion

Clients can choose from a slate of third-party policies

Clients can rely on BlackRock's judgment to vote

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Source - https://www.BlackRock.com/corporate/about-us/investment-stewardship/BlackRock-voting-choice

Proxy Voting Increasingly Influenced By Access & Quality Of ESG Data

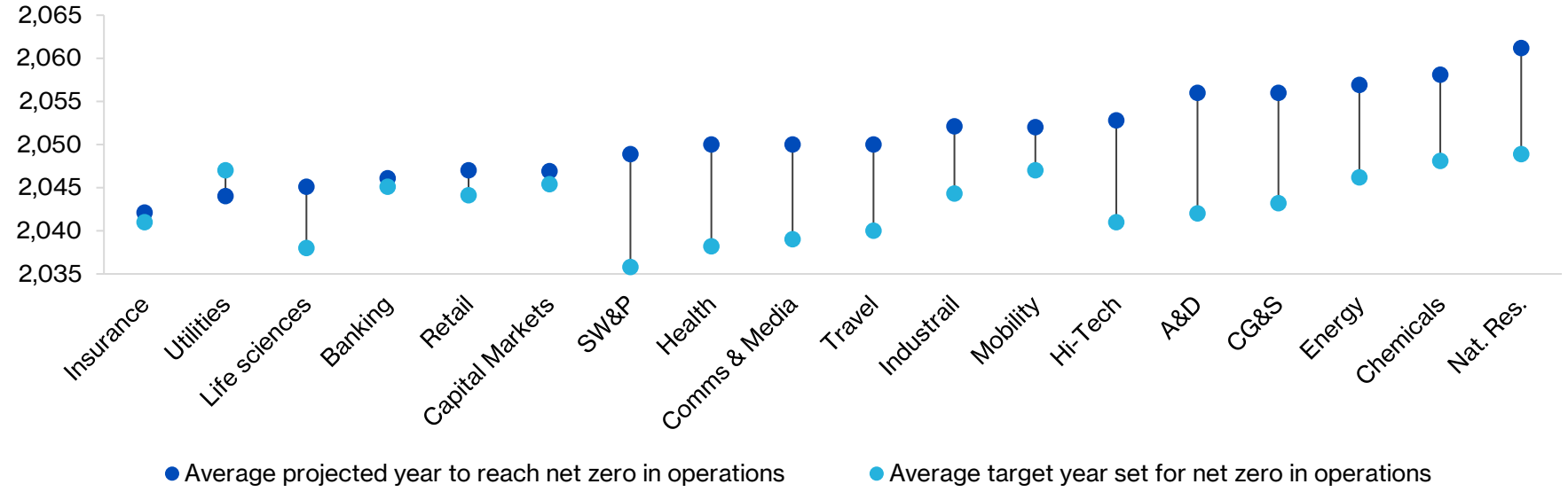
	Changes from 2022
ISS	▪ Companies in the **Climate 100+ Focus Group** ("high emitting companies") must adequately disclose climate risks **(TCFD recommended)** and have reduction targets covering 95% of its Scope 1 and 2 emissions ▪ Board Gender Diversity now applies to **all U.S. companies** and requires at least one woman ▪ Exculpation Provisions will be voted on a case-by-case basis ▪ Transparency on Political Spending and Lobbying Congruency will be voted on a case-by-case basis
Glass Lewis	▪ Companies in the **Climate 100+ should provide thorough climate risk disclosures** (TCFD recommended) and boards should have oversight ▪ Board Gender Diversity is now 30% within the Russell 3000 index and a minimum of one otherwise ▪ Minimum of one director from an underrepresented community on the board at companies within the Russell 1000 index ▪ Board Oversight of E & S Issues must be explicitly disclosed if in Russell 1000 index and tracking of E & S issues will apply to all companies in the Russell 3000 index ▪ Will generally recommend voting against exculpation proposals eliminating monetary liability for breaches of the duty of care for certain corporate officers ▪ Closely watching Cybersecurity

The Pursuit of Net Zero Is More Important Than Achieving Net Zero

Net Zero Achievement (Broadly Speaking) Is Not Likely To Happen

Net zero by industry

Emissions scope 1&2; consensus pathway scenario for average company projected year of achievement



More than 90 percent of large companies that have stated commitments to reaching net-zero emissions will miss such goals at their current pace, according to a new report.

News • Carbon & Climate

Nearly all companies will miss net-zero targets by 2030, unless emissions reduction rates double: report

Accelerating energy price hikes and supply insecurity are pushing carbon commitments out of reach, even as more companies are setting decarbonisation goals, data shows.

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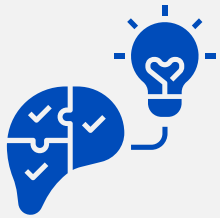
https://thehill.com/policy/energy-environment/3717821-few-corporations-on-pace-to-reach-long-term-net-zero-emissions-targets-research/

https://newsroom.accenture.com/news/nearly-all-companies-will-miss-net-zero-goals-without-at-least-doubling-rate-of-carbon-emissions-reductions-by-2030-accenture-report-finds.htm#:~:text=NEW%20YORK%3B%20Nov.,Accenture%20(NYSE%3A%20ACN).

Net Zero Difficulties Will Promote The Emergence Of The Offset Market



Net zero targets skepticism

Risks of the offset market

Supply economics

The Pursuit Of Net Zero + Capital Discipline > Achieving Net Zero

Net Zero

=

Operational Efficiencies

+

Offsets

Net Zero

=

Capex and R&D

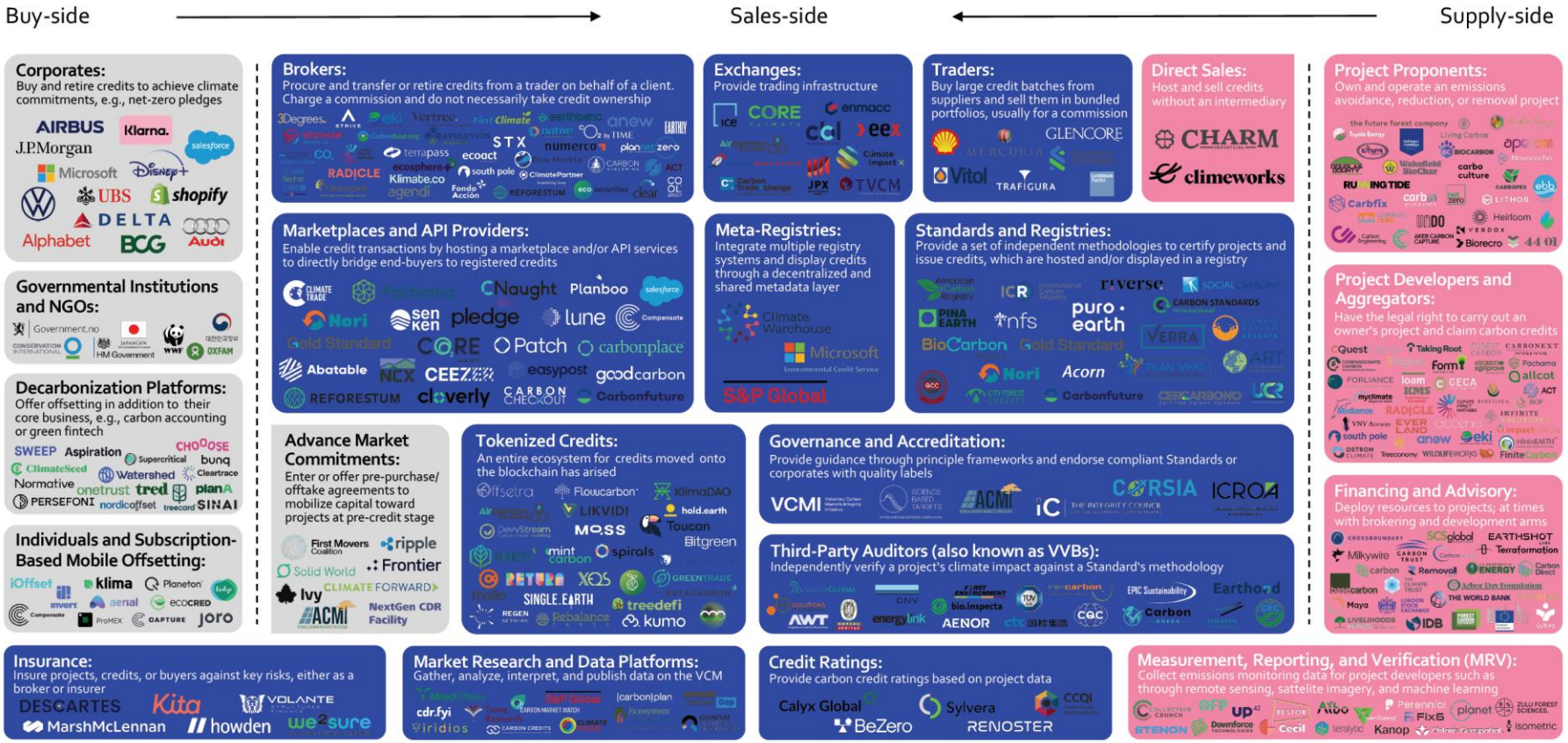
V.

Offset Liability

?

Will companies be pressured to attain a net zero target at the expense of value creating innovation?

The Voluntary Carbon Market Remains “The Wild West”



https://puro.earth/puro-standard-carbon-removal-credits/

How To Address & Thrive Within The ESG Landscape

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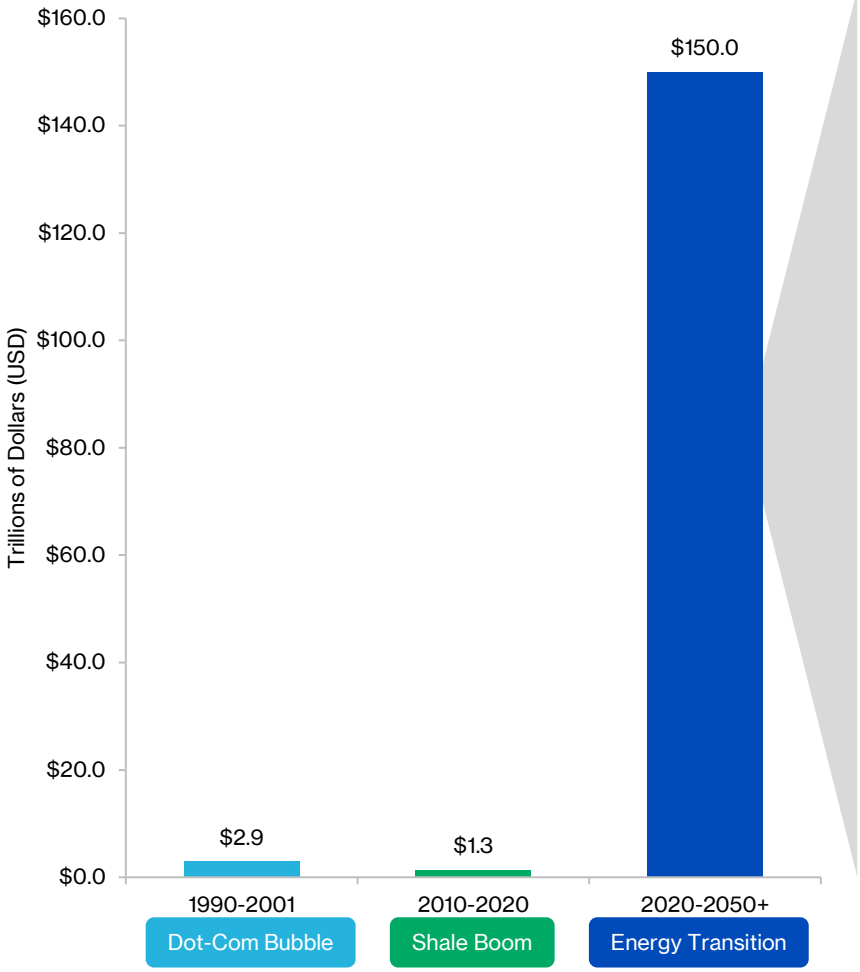
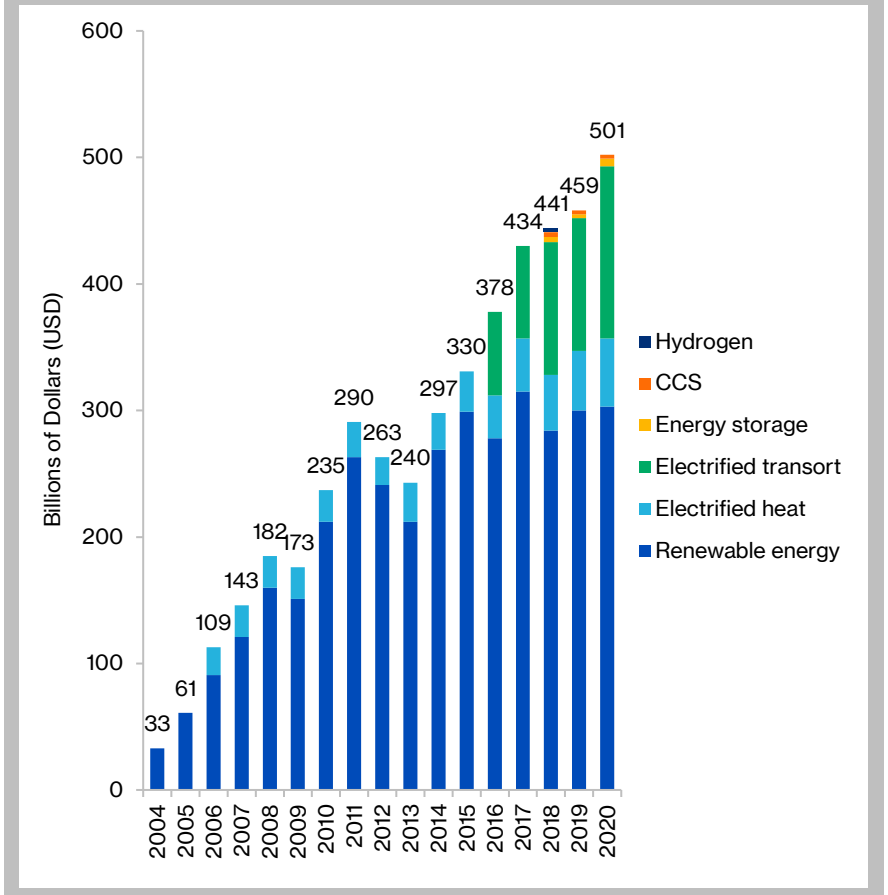
The Energy Transition Will Require 50x The Capital Of The Dot-Com Era

The Energy Transition in Context



$150 Trillion is a 10x increase in global investment from 2020 every year for the next three decades.



Source: CNNfn and Birinyi Associates, Rystad Energy, BloombergNEF, and the International Renewable Energy Agency (IRENA)

Three Distinct Categories Are Beginning To Explicitly Define Fund Flows

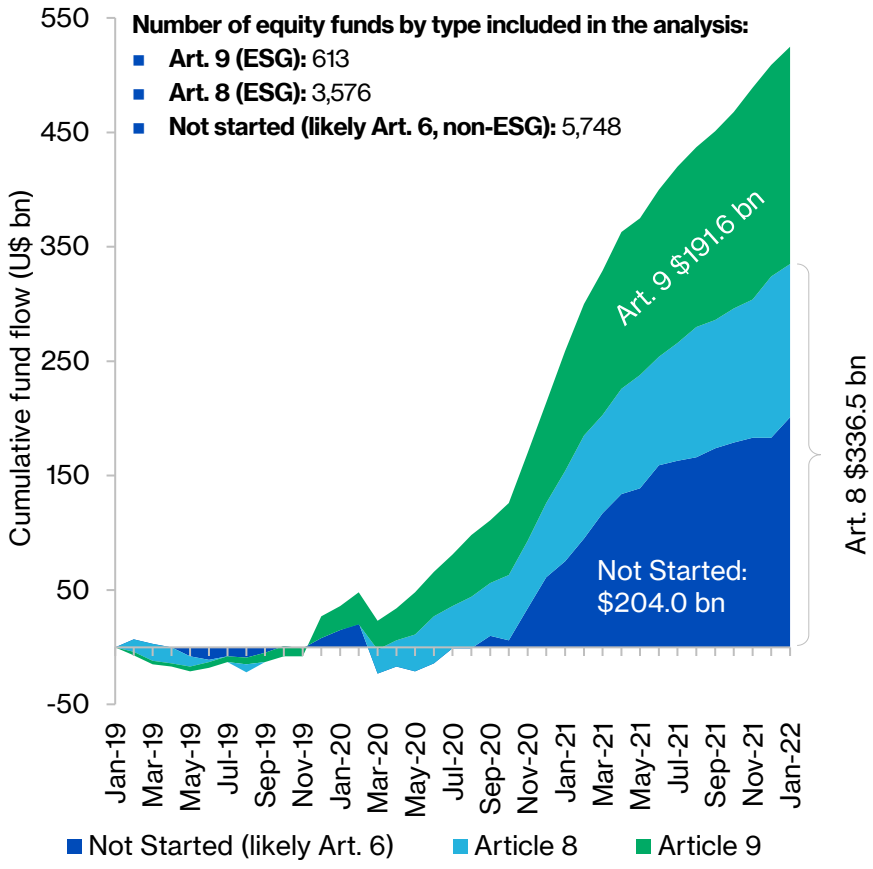
Article 6	Article 8	Article 9
Article 6 **covers funds which do not integrate any kind of sustainability into the investment process** and could include stocks currently excluded by ESG funds such as tobacco companies or thermal coal producers.	An Article 8 Fund under SFDR is defined as "a Fund which promotes, among other characteristics, environmental or social characteristics, or a combination of those characteristics, provided that the companies in which the investments are made follow good governance practices."	An Article 9 Fund under SFDR is defined as **"a Fund that has sustainable investment as its objective or a reduction in carbon emissions as its objective."** There are a number of different requirements for Funds that promote a sustainable investment objective.

Level of details in disclosure →

SFDR Article 8 Funds Increasingly Dominating European Fund Flows

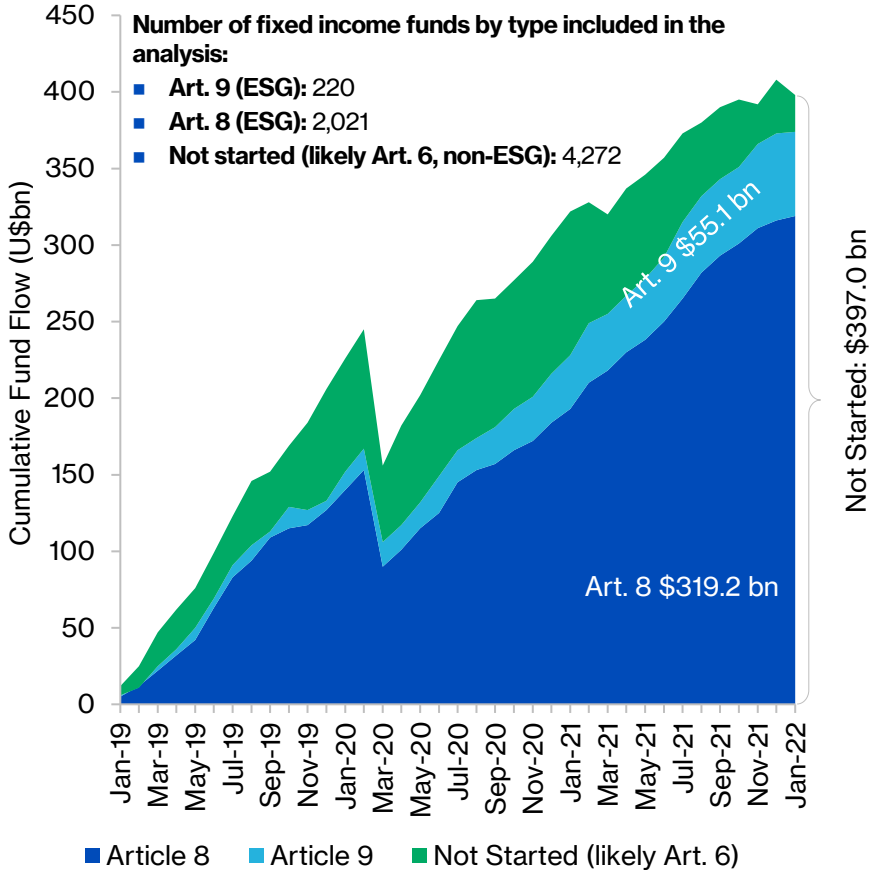
Cumulative fund flow of Article 8 & 9 Equity funds have outgrown non-ESG counterparts by >2x

Cumulative fund flow of European Equity funds by type (U$ bn), Jan 2019 – Jan 2022



Article 8 & 9 Fixed Income cumulative flows have grown since '19, albeit to a lesser degree than non-ESG peers

Cumulative fund flow of European Income funds by type (U$ bn), Jan 2019 – Jan 2022



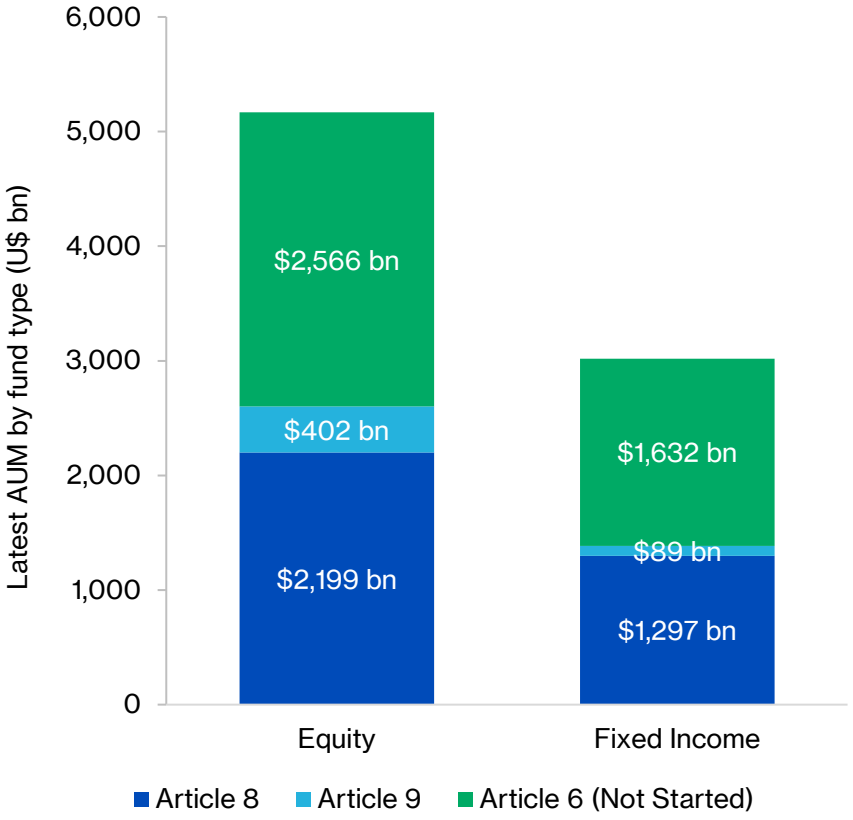
Pickering Energy Partners

Source: Morningstar, Goldman Sachs Global Investment Research

Article 8 “Mentalities” Are Trickling Into US Capital Flows

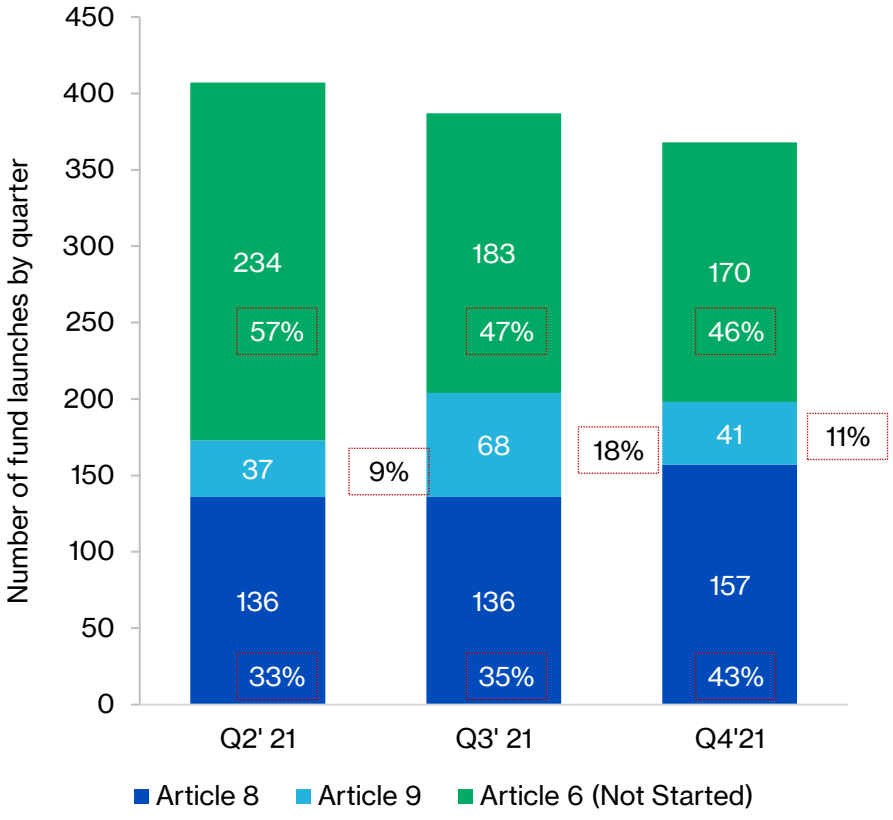
Article 8 & 9 funds account for ~$4tn USD...

Breakdown of AUM in the EU, Jan 2022



...and are taking up a growing portion of new fund launches

Breakdown of new fund launches in the EU, Q2’ 21 – Q4’ 21

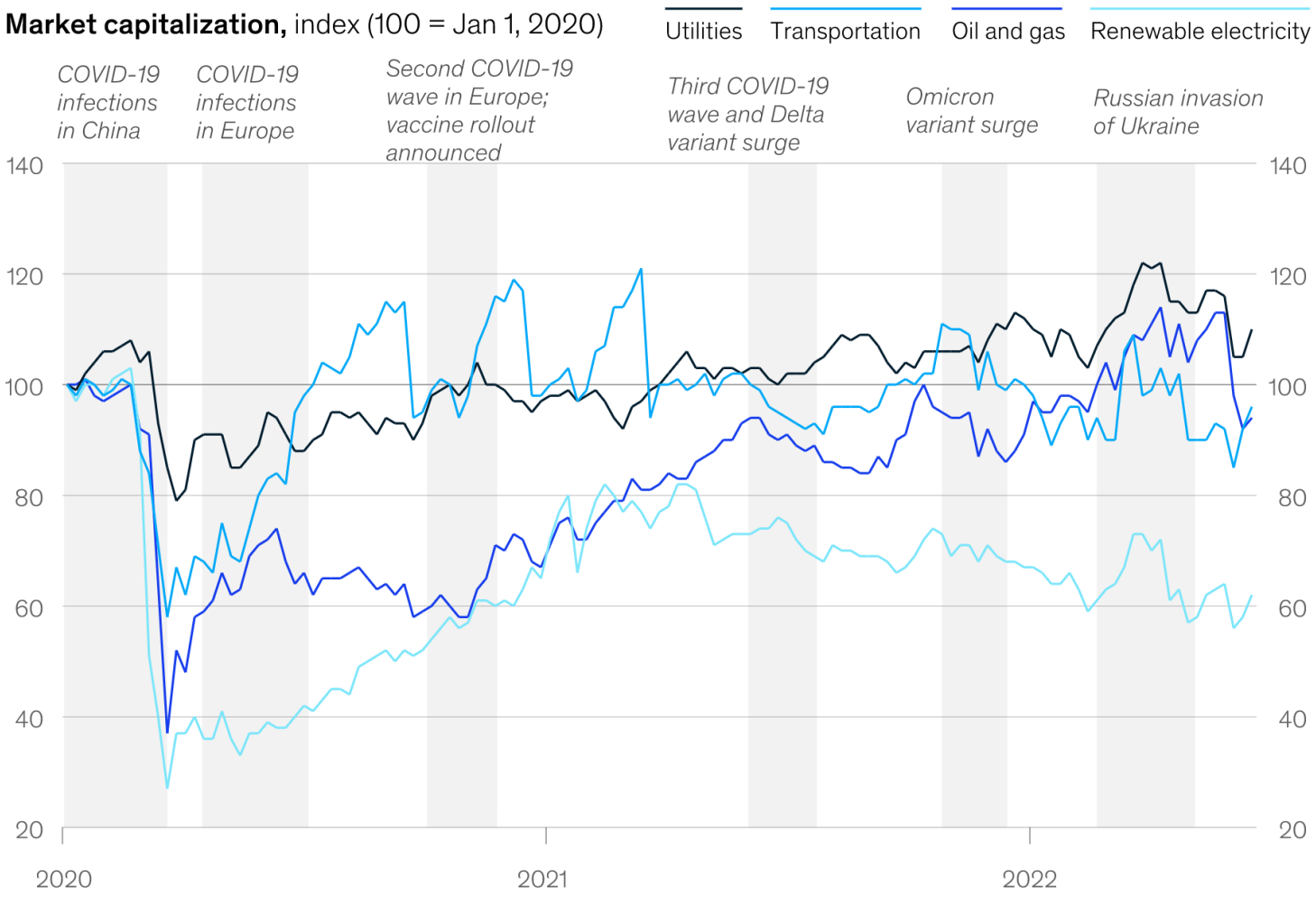


As a % of total number of new funds in the quarter

Pickering Energy Partners

Source: Morningstar, Goldman Sachs Global Investment Research

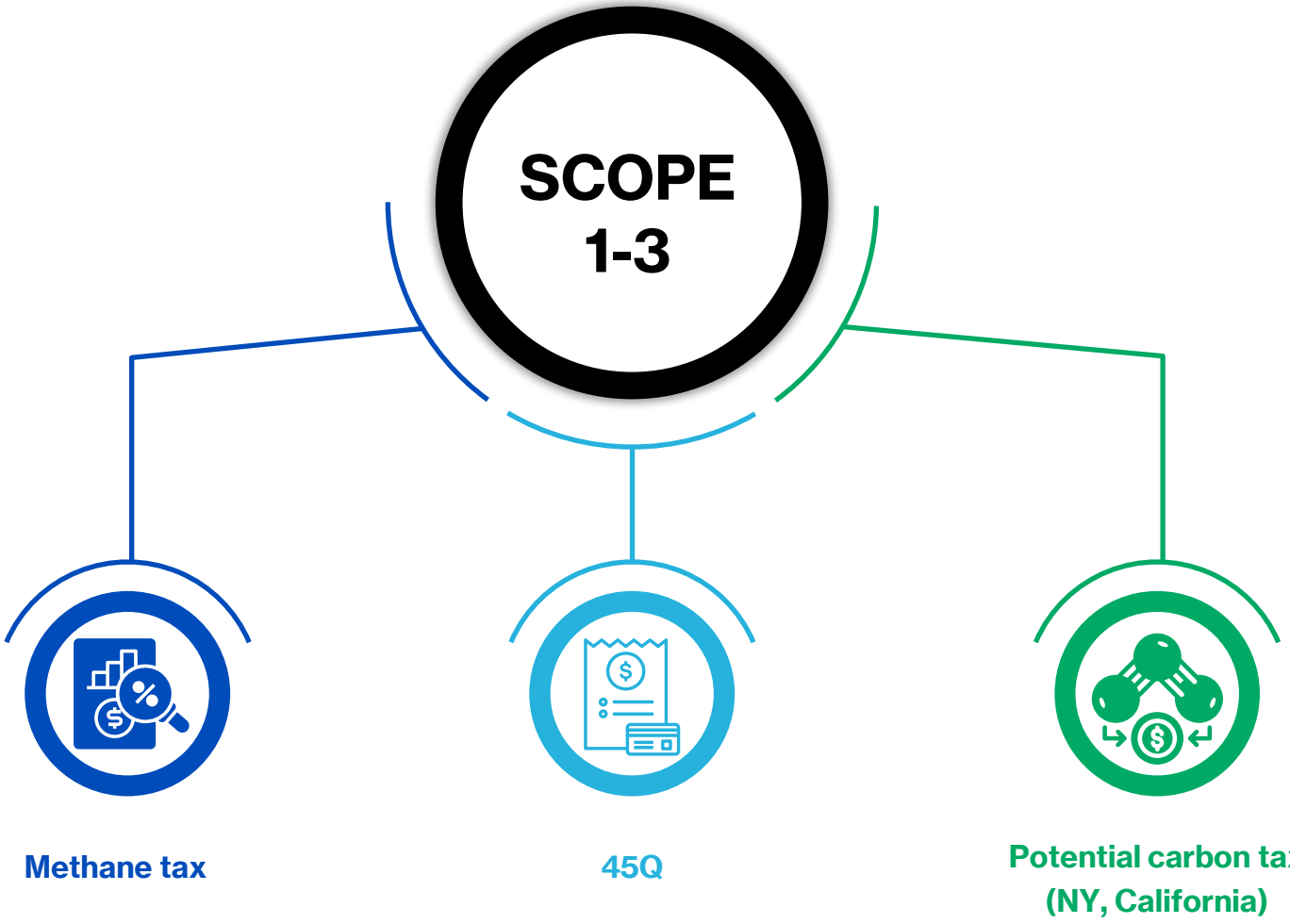
Oil & Gas Valuation Has Remained Stable Over The Last 3 Years



Note: As of July 1, 2022; predefined S&P sector indexes.
Source: Preqin analysis of infrastructure funds expectations

Turning ESG Risks Into Opportunities

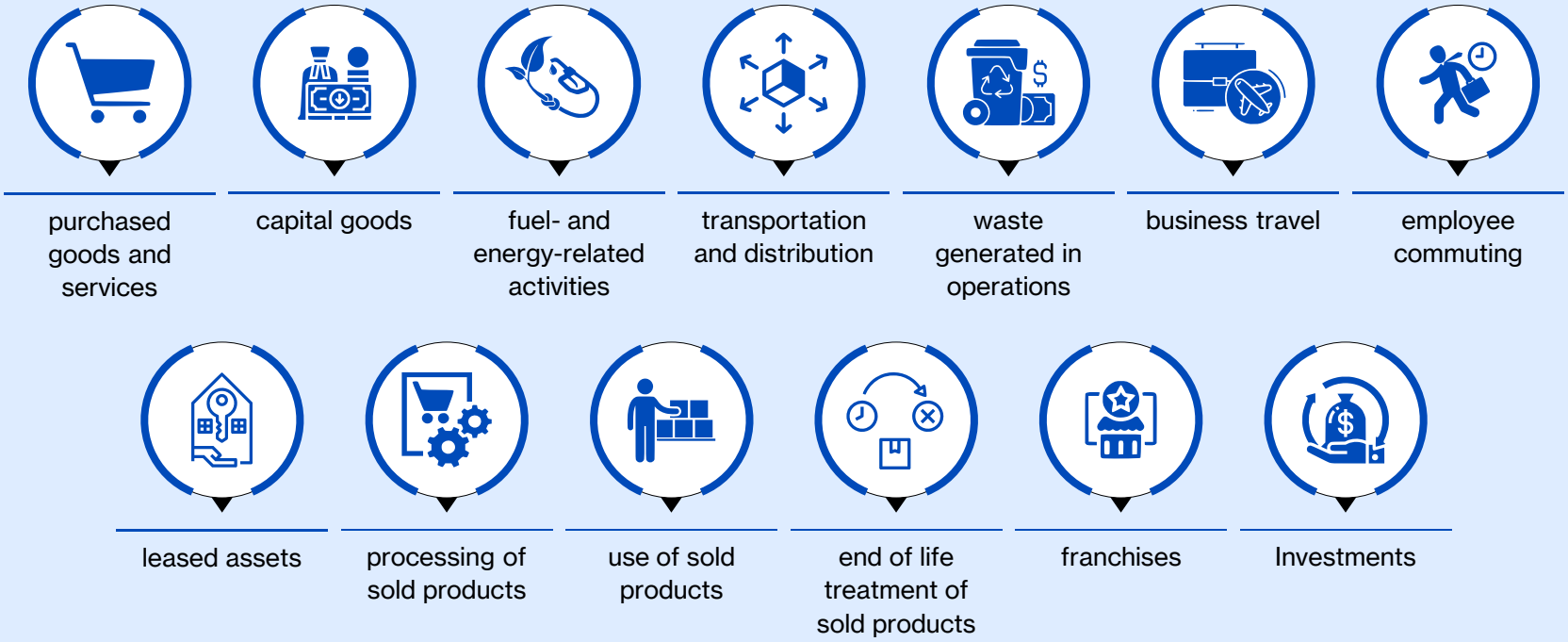
ESG Data & Reporting Will Now Impact Financial Liabilities



The Attempt To Implement A Carbon Tax Is Inevitable

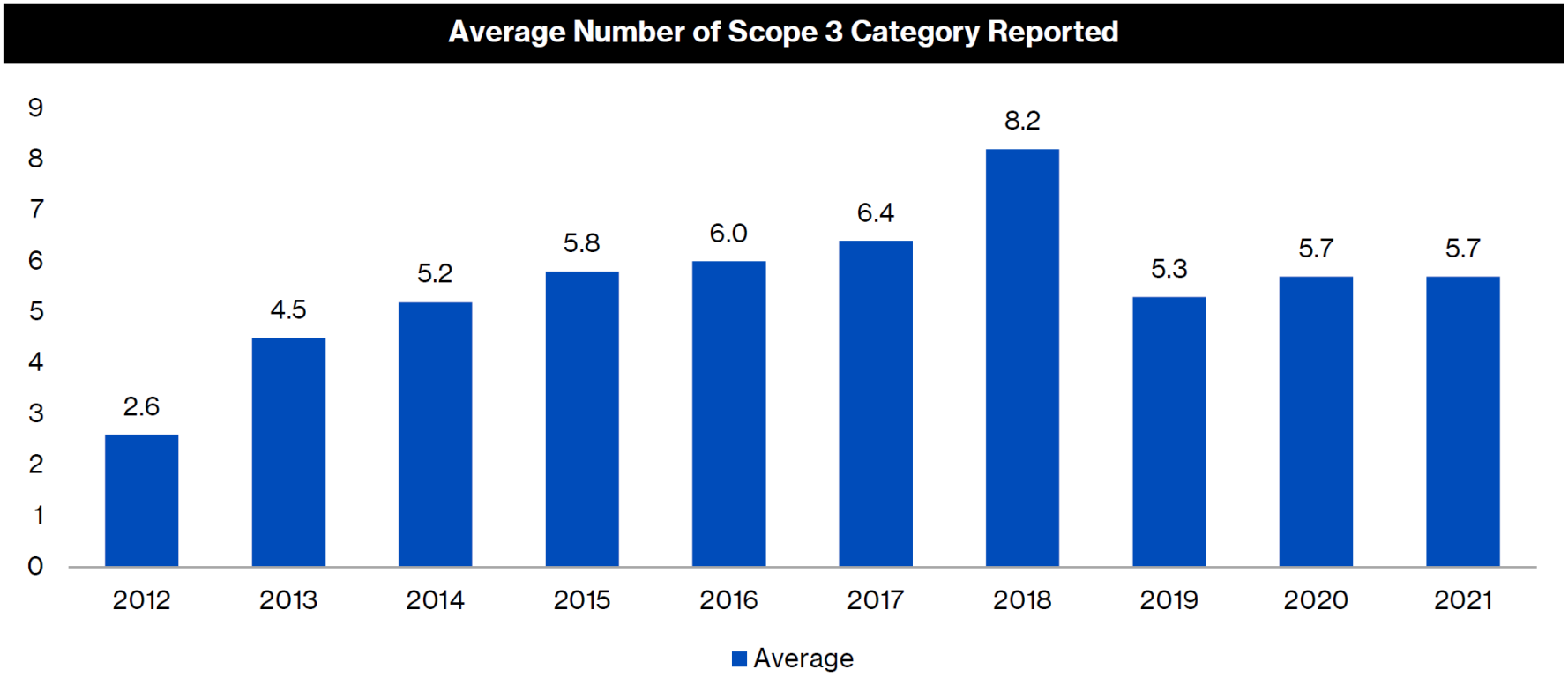
The current SEC Climate Disclosure Mandate is anticipated to pass before the end of 1Q23

Large filers mandated to report Scope 3



Public companies will be forced to utilize their private partners to aggregate emissions data

Current Scope 3 Reporting Is Misleading, Inconsistent & Flawed



https://www.wri.org/update/trends-show-companies-are-ready-scope-3-reporting-us-climate-disclosure-rule

Inflation Reduction Act Methane Tax Increases 66% By 2026

- Each facility > 25,000 metric tons CO2e per year (EPA Subpart W & MM)
  - $900 / metric ton of methane in 2024
  - $1,200 / metric ton of methane in 2025
  - **$1,500 / metric ton of methane in 2026+**
- Measurement
  - Currently reported using inventories and **emissions factors**
  - **2024 EPA will require methane emissions (and calculation of methane tax) are based on empirical data**
- Impacts ~8,000 petroleum and natural gas facilities

Facility Designations	Waste Emissions Thresholds
Offshore/Onshore natural gas production	0.2% of natural gas sent to sale
Offshore/Onshore petroleum production facilities	10 metric tons of methane per million barrels of oil
Non-production facilities (i.e., gathering, processing, boosting and LNG facilities)	0.05% of natural gas sent for sale from or though the facility
Natural gas pipelines, compression, transmission, and storage	0.11% of natural gas sent for sale from or through the facility

The Clean Air Act Requires EPA To Set Air Quality Standards

EPA has set national air quality standards (NAAQS) for six common air pollutants (i.e., “criteria pollutants”):

1. Nitrogen dioxide (NO2)
2. Ozone (O3)
3. Sulfur dioxide (SO2)
4. Particulate matter (PM)
5. Carbon monoxide (CO)
6. Lead (Pb)

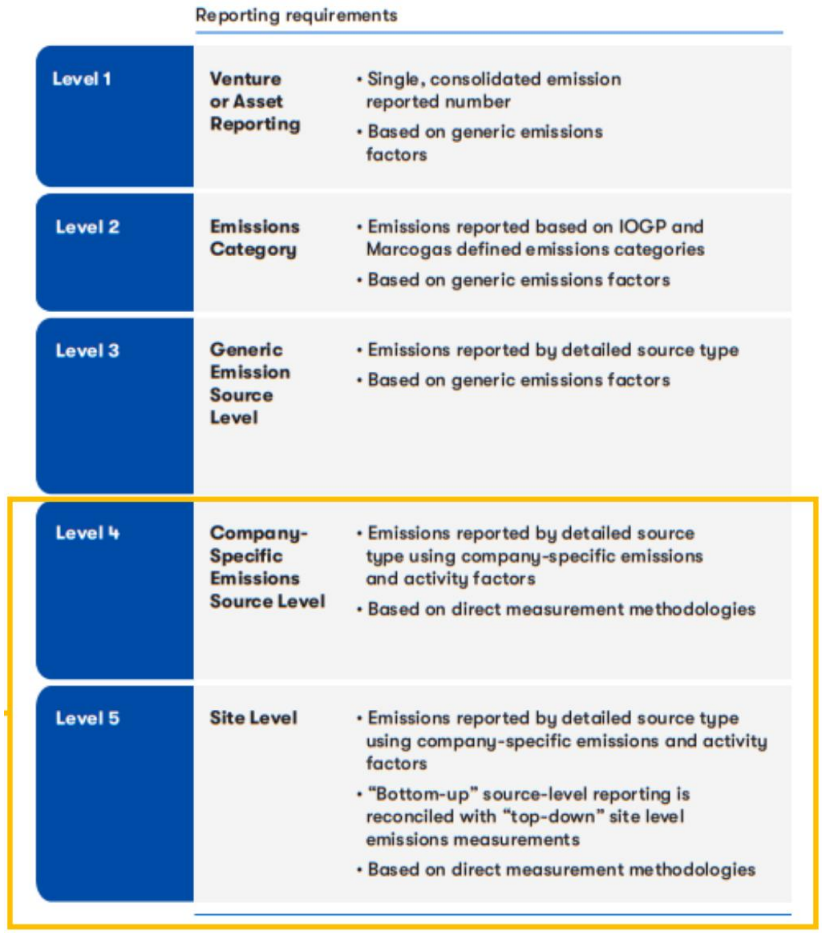
Investor frameworks increasingly requesting at least NOx, SOx, VOCs

https://19january2017snapshot.epa.gov/learn-issues/learn-about-air_.html
https://www.epa.gov/outdoor-air-quality-data/interactive-map-air-quality-monitors

Site Level “Bottom-Up” Reporting Is Probably Around The Corner

- **EU to Impose Carbon Border Tax on Imported Products**
  - In December 2022, the European Council and Parliament reached a provisional agreement on a Carbon Border Adjustment Mechanism (CBAM) that will impose a tax on products imported into the EU, beginning with certain “high-carbon” products.
  - The CBAM will require reporting-only beginning in October 2023, and will focus on the following industry sectors: iron and steel, cement, fertilizers, aluminum, electricity, and hydrogen.
  - It will also cover certain precursors and downstream products related to those industries.
  - The reporting period will extend for three years, until 2026, after which the CBAM will be applied to goods in the initial sectors.
  - The agreement also sets a goal of applying the CBAM to all goods covered by the ETS by 2030.
- **Emergence of Oil & Gas Methane Partnership 2.0 (OGMP 2.0)**
  - OGMP is a comprehensive, measurement-based reporting framework for oil and gas
  - Member companies report on all material sources of methane from both operated and non-operated assets across all segments of the value chain
  - Companies commit to achieving Gold Standard reporting within three years for operated assets and five years for non-operated assets

The Oil & Gas Methane Partnership 2.0 (OGMP 2.0)



The “IRA” Expands The 45Q Tax Credit

First introduced in 2008, Section 45Q of the Unites States Internal Revenue Code provides a tax credit for CO2 storage.

The policy is intended to incentivize deployment of carbon capture, utilisation and storage (CCUS), and a variety of project types are eligible

The 2022 changes to 45Q provide up to USD 85 per tonne of CO2 permanently stored and USD 60 per tonne of CO2 used for enhanced oil recovery (EOR) or other industrial uses of CO2, provided emissions reductions can be clearly demonstrated.

The credit amount significantly increases for direct air capture (DAC) projects to USD 180 per tonne of CO2 permanently stored and USD 130 per tonne for used CO2.

In addition, the 2022 changes reduce the capacity requirements for eligible projects:

- 18,750 tonnes per year for power plants (provided at least 75% of the CO2 is captured)
- 12,000 tonnes per year for other facilities
- 1,000 tonnes per year for DAC facilities.

Finally, the 2022 changes include a seven-year extension to qualify for the tax credit, meaning that projects have until January 2033 to begin construction.

https://www.iea.org/policies/4986-section-45q-credit-for-carbon-oxide-sequestration

Carbon Taxes Likely To Be Implemented At The State Level

25 states that are promising or may have potential for carbon taxes

	Promising	Potential
No legal or ideological constraints	CT, DC, HI, IL, MD, MA, NY, WA	DE, FL, NM, RI, VT, VA
Promising/Potential but with legal constraints	CA, NY, NJ, OR	CO, MI, NH
Promising / potential but with ideological constraints	NC, SC	AR, WI

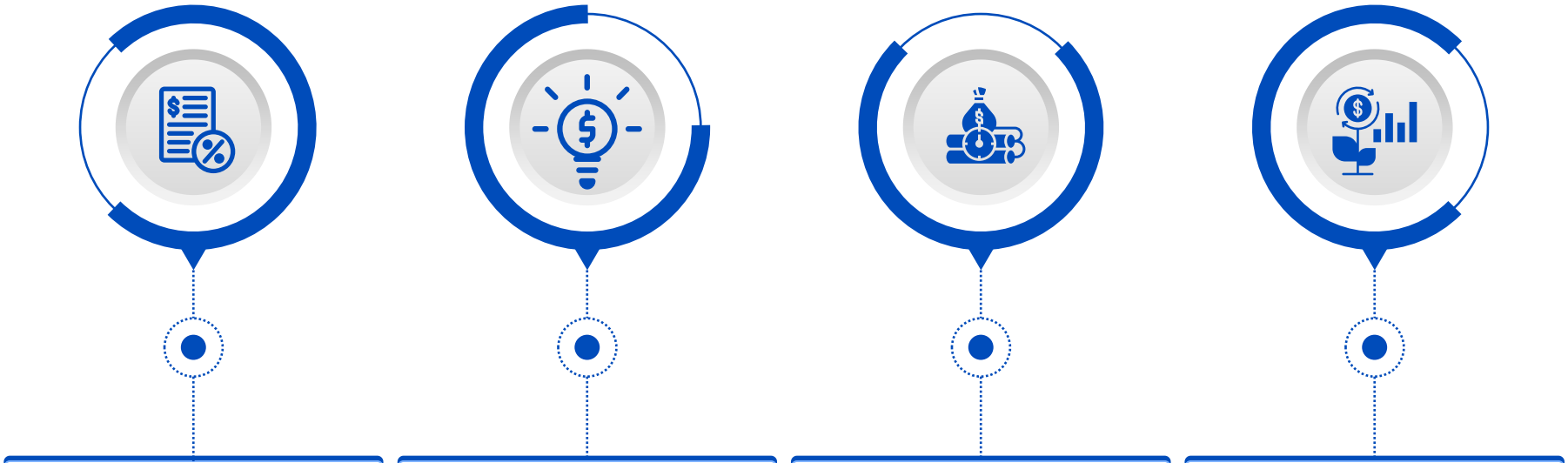
The other 26 states display a lower likelihood of passing a carbon tax

Pickering Energy Partners

https://www.carbontax.org/states-_-new/#:~:text=No%20U.S.%20state%20has%20a%20carbon%20tax.

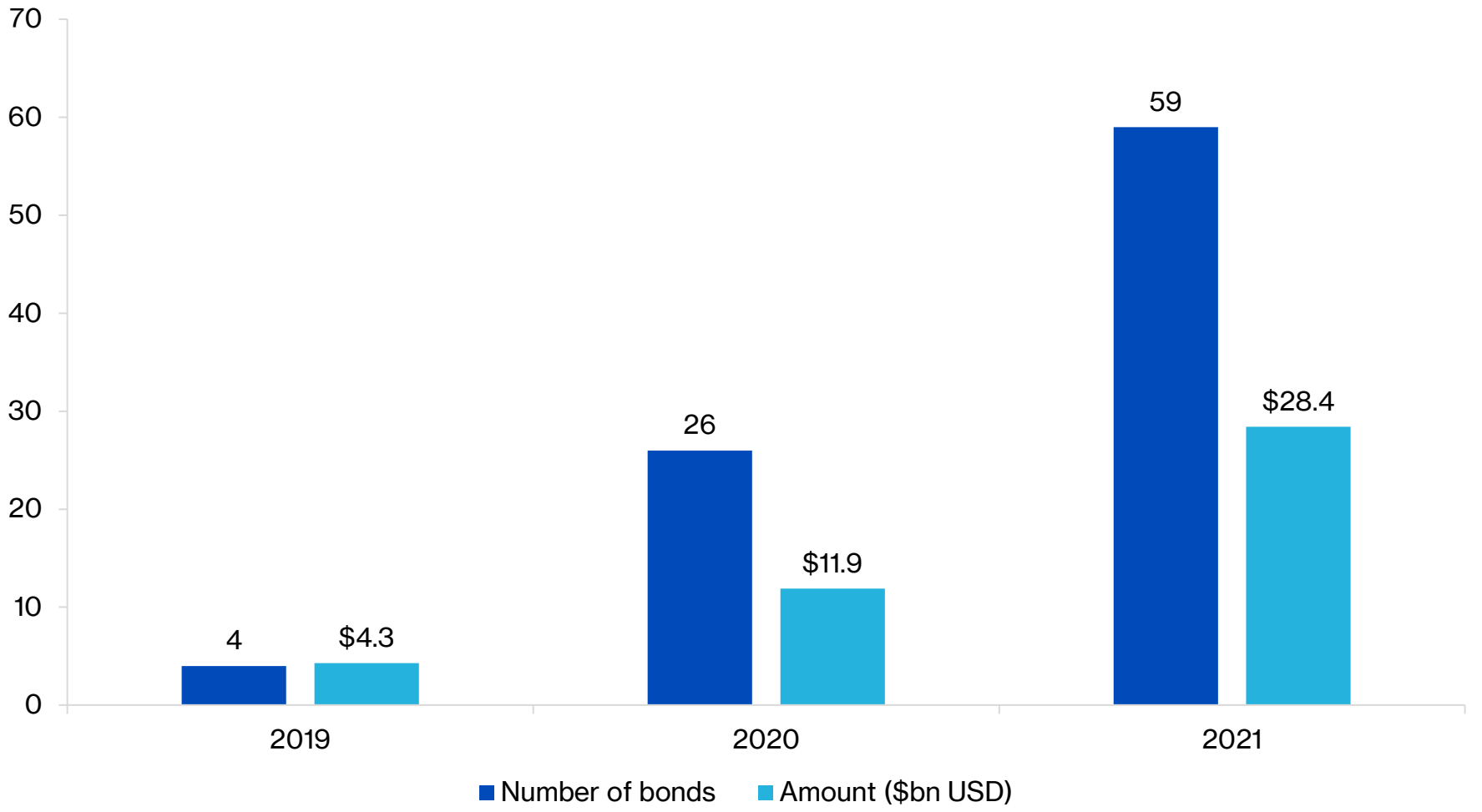
ESG Increasingly Impacting Cost of Capital

Participation Is Not Possible Without Trending Data



The Issuance Of “SLB’s” Has Exploded

Sustainability-linked bonds globally



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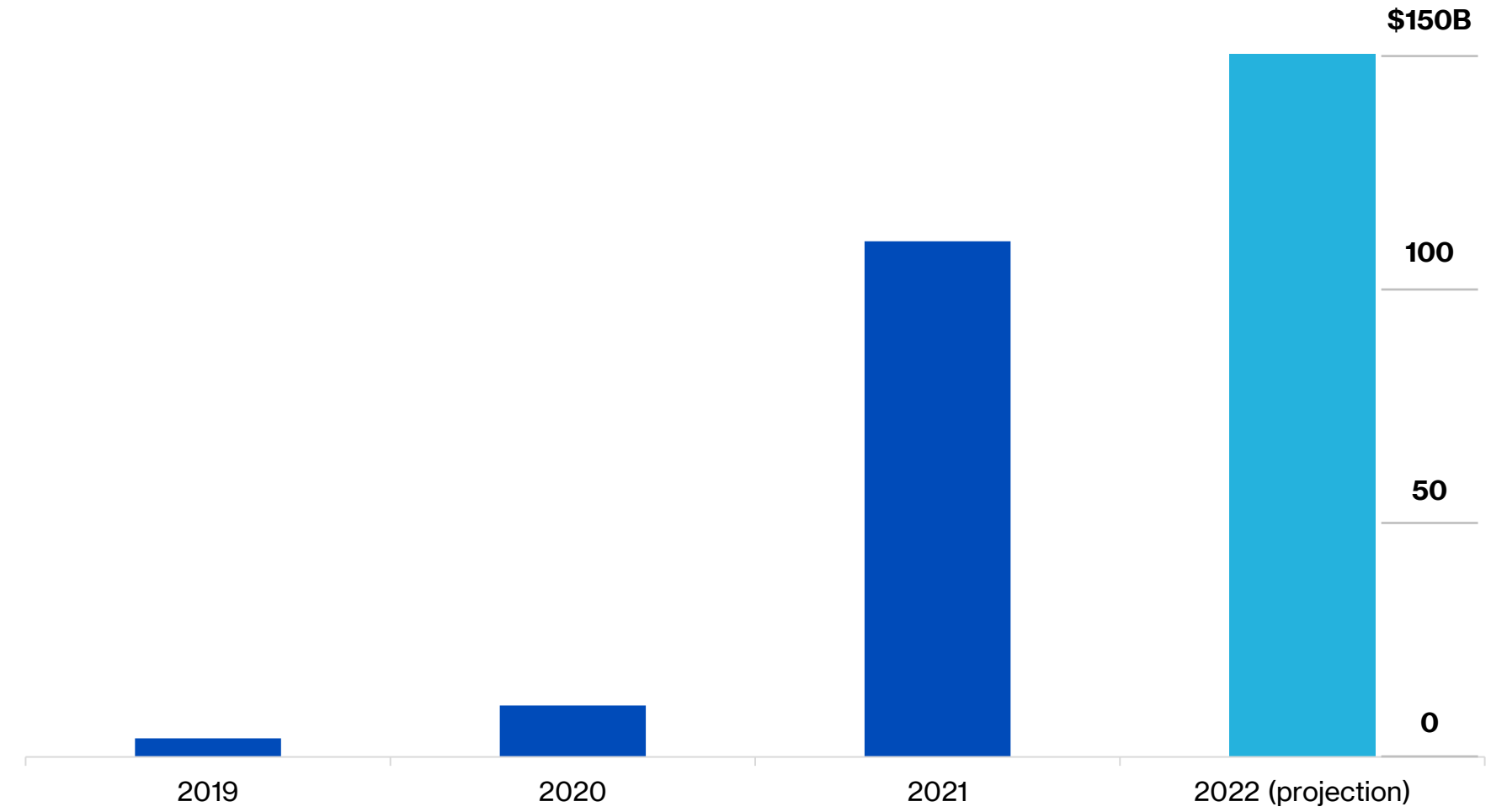
Source: Bloomberg

Global Issuance Of Sustainability Linked Bonds Not Anticipated To Slow

Global sales of sustainability-linked bonds seen hitting new record



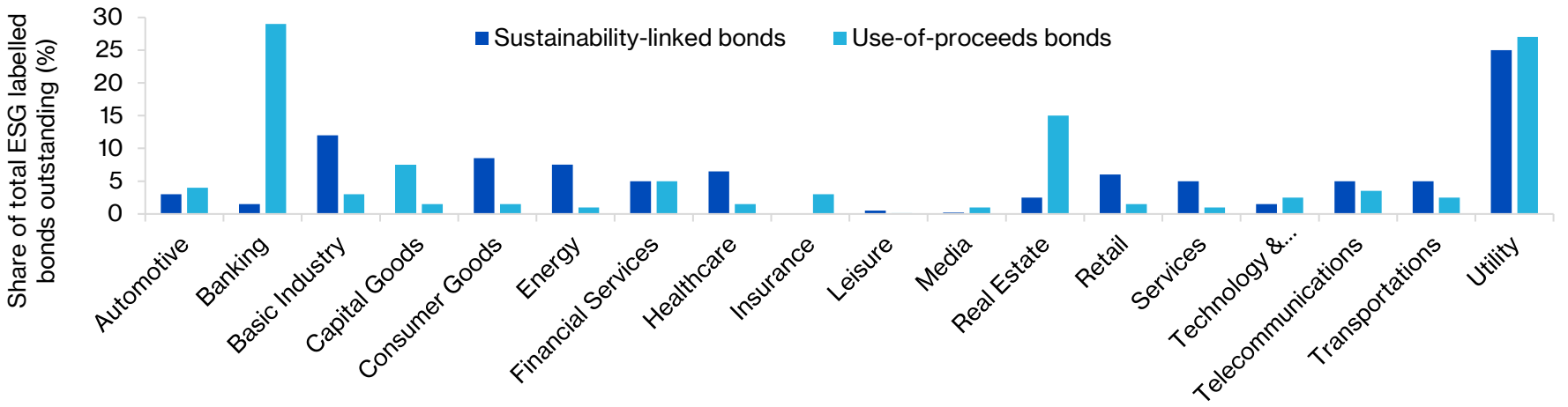
Pickering Energy Partners

Source: Bloomberg

Note: 2019-2021 data is full year issuance globally from corporations and governments. 2022 is forecast from Moody's Solutions

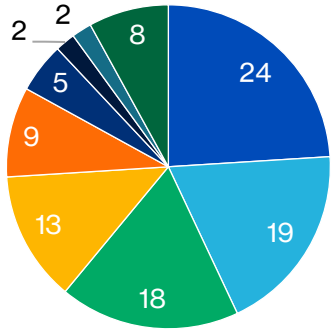
Most Industries Currently Not Taking Advantage Of SLBs

Industries' share of total sustainable bonds outstanding, by instrument

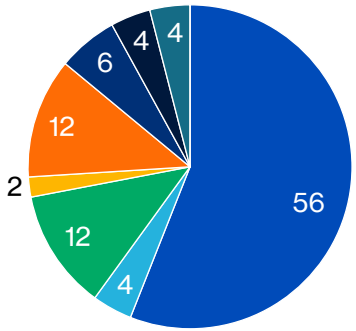


Issuance by nonfinancial corporate sector, 2020 (%)

Sustainability-linked bonds



Green bonds



Utilities Materials Industrials Consumer staples Consumer discretionary Communications Energy Technology Healthcare

Pickering Energy Partners

Date as of Dec. 31m2020

Source: Bloomberg, S&P Global Rating

Action Items:
Highlighting Critical Strategic Considerations

Playing Offense Is Going To Be The Best Defense!

The world needs oil and gas for the foreseeable future – empirical evidence indicates the U.S. is one of the most efficient and safest producers, but that data point is commonly not part of the conventional narrative

Existing data sets do not reflect economic reality and the only way to remedy this is to proactively message, report and showcase quantitative trends for material non-fundamental data points

Maintaining high degrees of capital discipline should coincide with how ESG-related financial considerations impact capital deployment & strategy

- Tax credits
- Addressing and minimizing future potential liabilities
- Optimizing cost of capital