



The Material Shortcomings of ESG Data & The SEC's Climate Disclosure Proposal

Dan Romito, Partner – Pickering Energy Partners

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Introductions:
PEP Is Fully Committed to
the Entire Energy Space



Speaker Introduction



Dan Romito

Dan Romito is a consulting partner at Pickering Energy Partners focusing on quantitative ESG strategy and implementation.

- Dan has advised several hundred private companies, public issuers, and asset managers on how to optimize capital deployment strategies, pursue quality pools of capital and employ ESG-related directives.
- Experience and research on ESG, Index/ETF Ownership and Shareholder Activism has been featured in Harvard Business Review, the Harvard Law School Forum on Corporate Governance, CNBC, Bloomberg, TD Ameritrade Network, Global Investor Magazine, and IR Magazine.
- Developed several key technology solutions focused on investor behavioral analytics platform, ESG Advisory Service, Insight360 Analytics, the Activist Diagnostic, Capital Deployment Scenario Analysis, and the Small Cap Investor Targeting Service.
- Dan received a BA from the University of Chicago, an MBA in Finance from DePaul University, was working on his MS in Mathematics from the University of Chicago prior to COVID-19 (became a proverbial drop-out)
- Professor at Marquette University & board member on the Energy ESG Council















Introduction To Pickering Energy Partners





Clients Spread Across the Entire Energy Spectrum













Broad Subsector Coverage



Diversified Energy



Upstream



Minerals / Commodities / Natural Resources



Alternative Energy



MLPs & Midstream



Oilfield Services



Energy Storage



Electric Vehicles and Charging Infrastructure



Refining



Power & Infrastructure



Renewable Fuels



CCUS



Agenda - Instituting Practicality Back Into The Discussion

Level Setting – Reaffirming the global importance of fossil fuels

The pragmatic overview of the energy transition – good and bad

Where are we at today?

Why the SEC's Climate Disclosure Proposal misses the mark

Strategic Considerations & Recommendations





Part 1 - Level Setting: Reaffirming The Global Importance of Fossil Fuels



Investing In The Energy Transition And Energy Is NOT Mutually Exclusive



- The traditional Energy space must figure out how to participate in a decarbonizing world
- ESG-focused data & assumptions guiding the transition's narrative is infested with data bias
- These shortcomings restrict access to capital to the companies which are best suited to successfully execute the energy transition
- Both ends of the energy spectrum must learn to capitalize on each other's talents to successfully complete the energy transition
- The Energy Transition and ESG narrative will remain overburdened with incompetence as opposed to achievement until a pragmatic balance can be stuck



Net Zero Goals Are Aspirational But Not Necessarily Practical



The world will have ~2B more people by 2050, mostly in developing countries



Energy poverty must be a consideration when assessing the economics, adoption, impact and practically of new energy technology



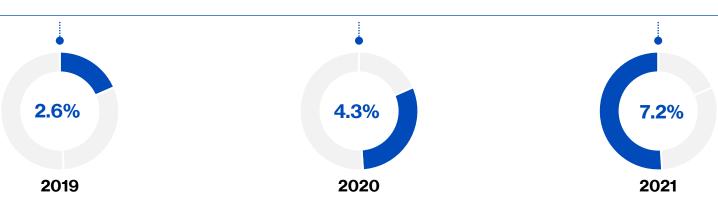
"Governments must work together to implement coherent measures that cross borders"



NO new oil or gas fields after 2021



60% of total car sales will have to be EV by 2030







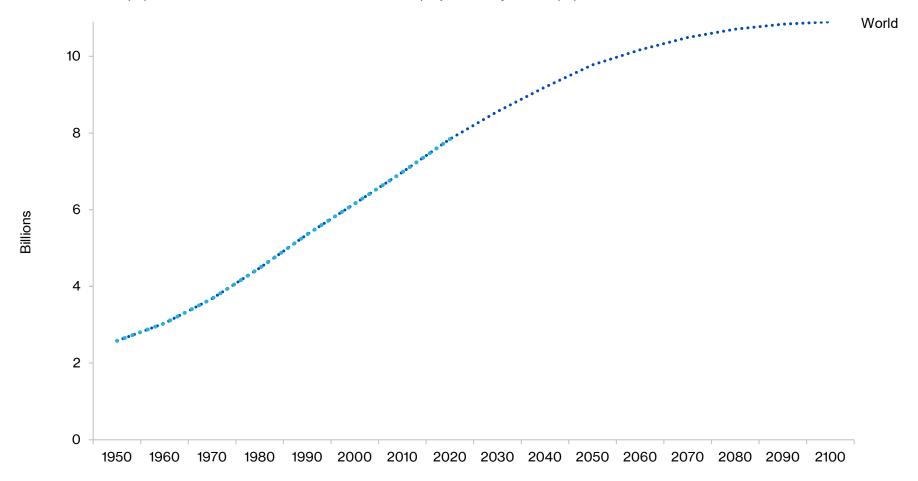
Global Population Trends Indicate The Continued Need For Hydrocarbons



Global Population Anticipated To Hit ~ >10B By 2060

Population projection by the UN, World, 1950 to 2100

Shown is the total population since 1950 and the 'medium variant' projections by the UN population division

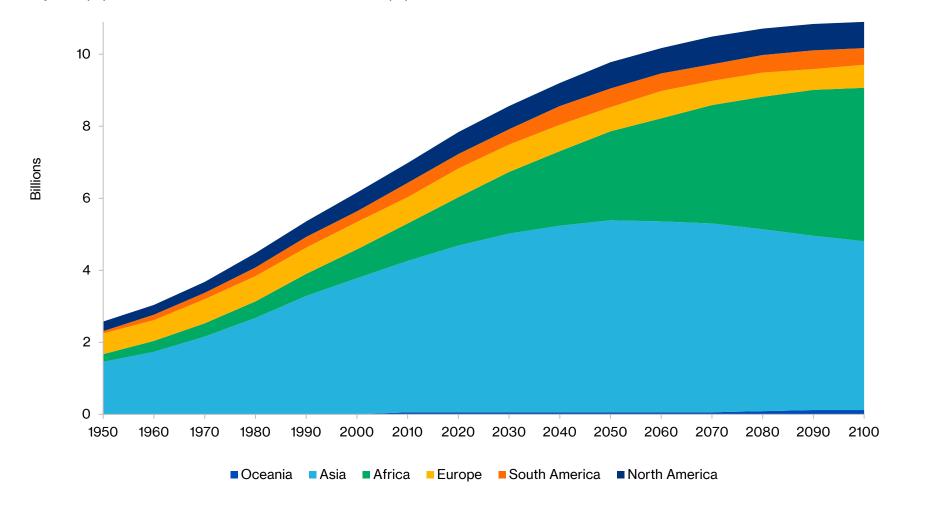




Growth Dominated By Areas Currently Experiencing Energy Poverty

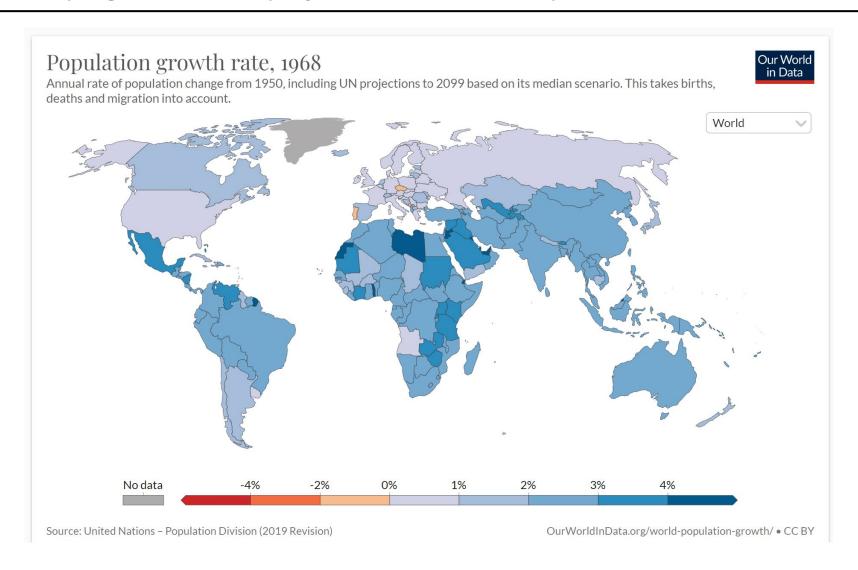
World population by region

Projected population to 2100 is based on the UN's medium population scenario.





Developing Nations Display Greater Future Population Growth

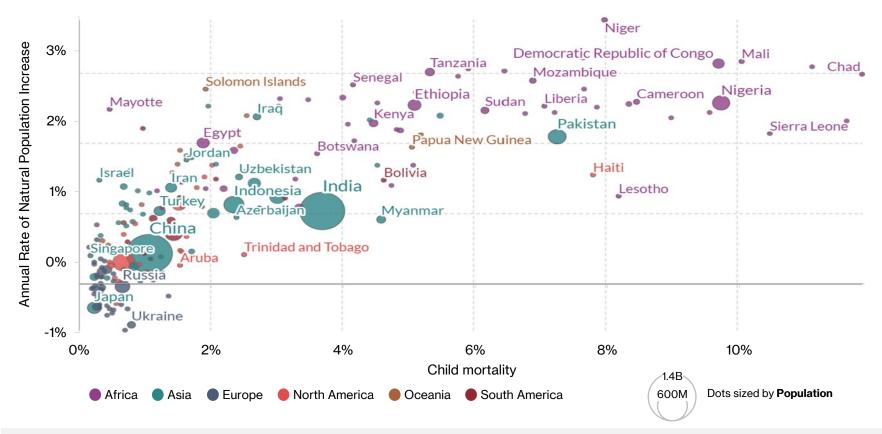




Child Mortality Increases As Population Growth Increases

Population growth rate vs Child mortality rate, 2019

The child mortality rate measures the share of children that are born alive and die before they are five years old. The rate of natural population increase is determined by births and deaths only and migration flows are taken into account.



Child mortality is inversely correlated with population growth, i.e., **Where child mortality is high the population grows fast.**A major reason for this correlation is that the fertility rate is high where child mortality is high



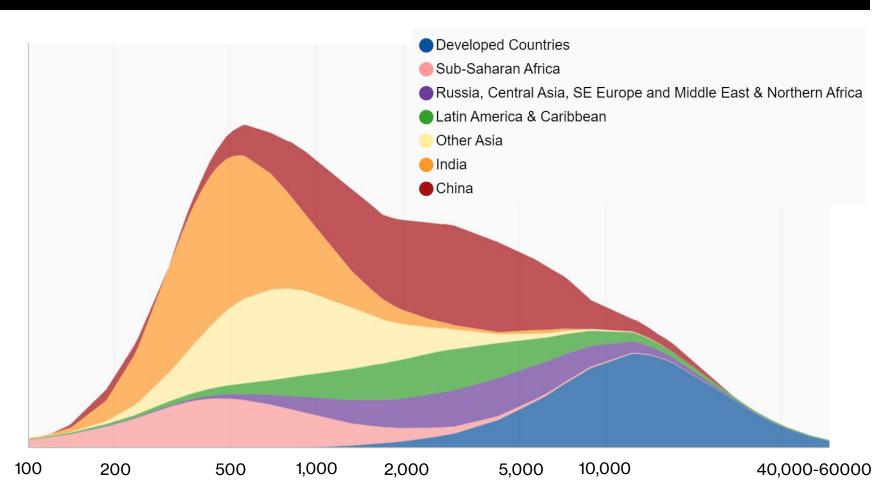


Income Trends Indicate A Continued Need for Affordable Energy



Household Income Substantially Lower In Developing Countries

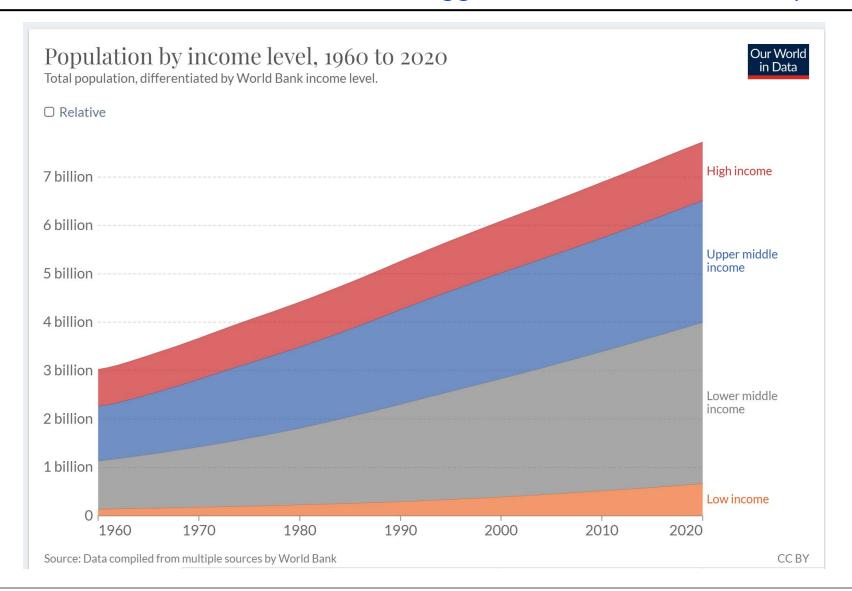
Global Income Distribution 1988 to 2011



Yearly Income per Person (in PPP-adjusted 2005 US\$; on a logarithmic axis)

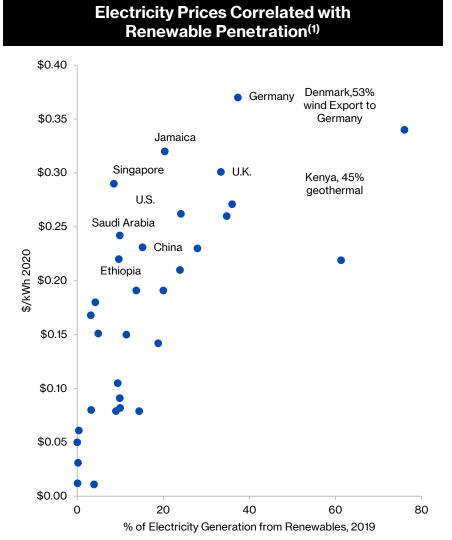


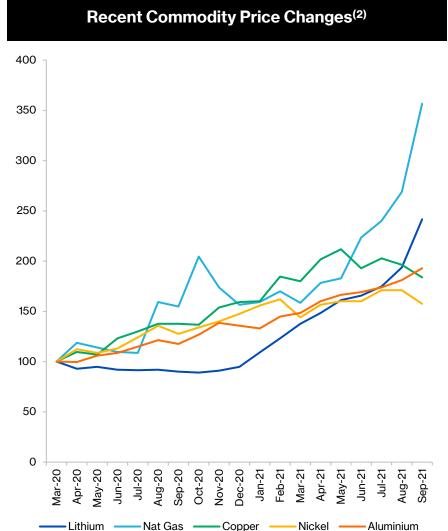
Lower Middle Income & Below Will Struggle To Afford Renewable Options





Electricity Prices Rise As Renewable Penetration Increases



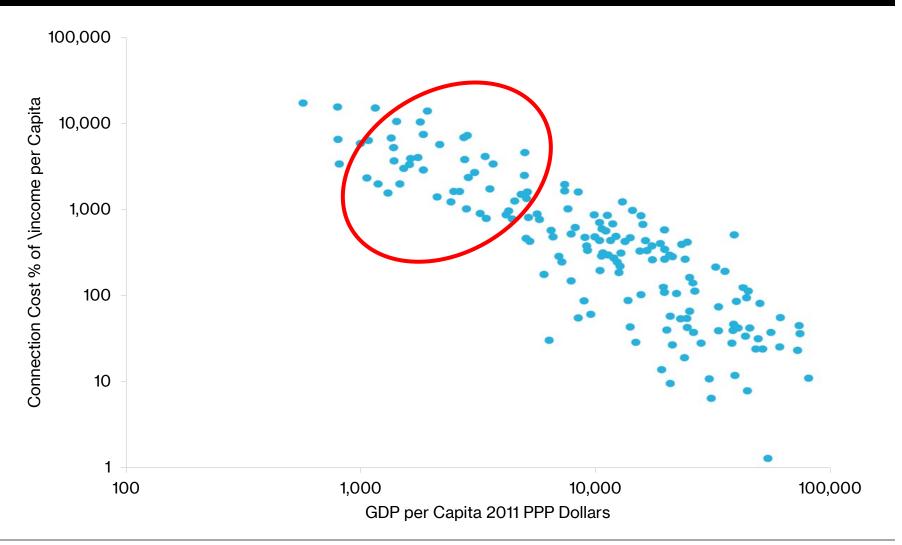




2. Source: Bloomberg

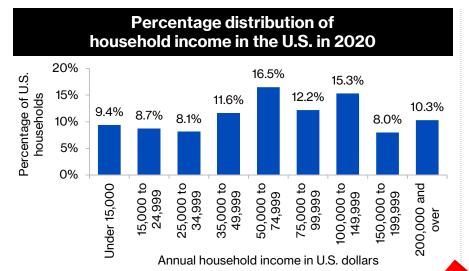
Energy Costs Decrease As GDP per Capita Increase

Relationship Between Energy Cost and Per Capita GDP⁽²⁾

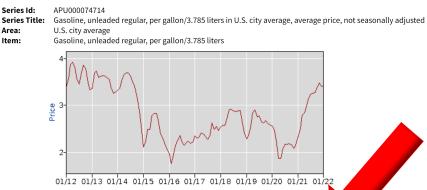




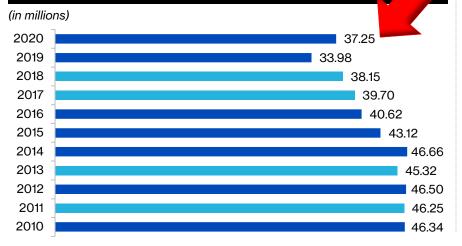
Energy Transition Will Result In Increased Inflationary Pressures



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

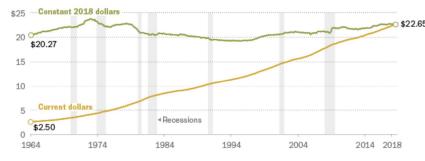


Number of people living below the poverty line in the United States from 1990 to 2020



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



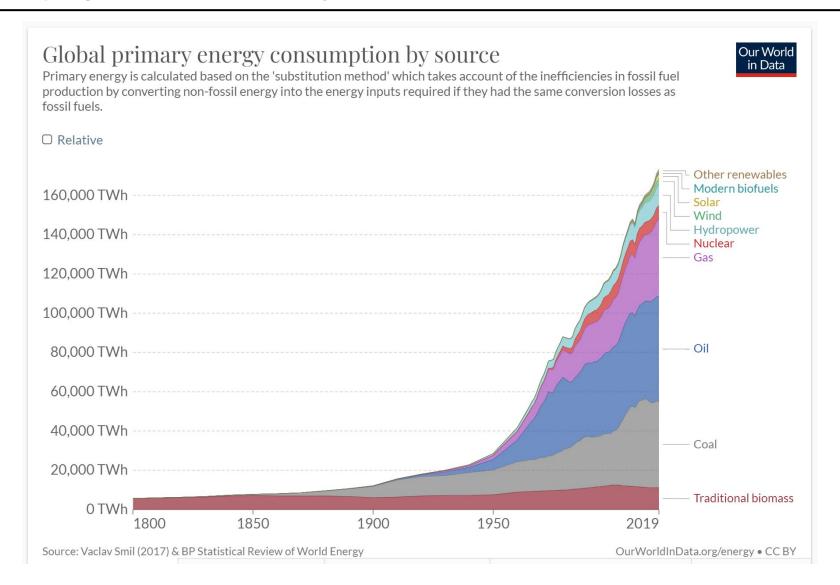




Global Energy Has To Come From Somewhere...

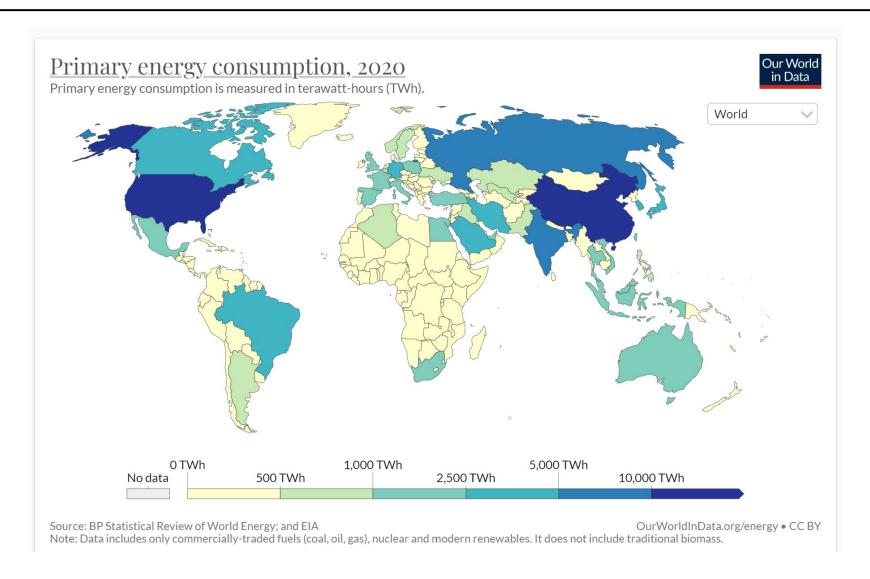


Developing Countries Will Rely On Oil & Coal For The Foreseeable Future



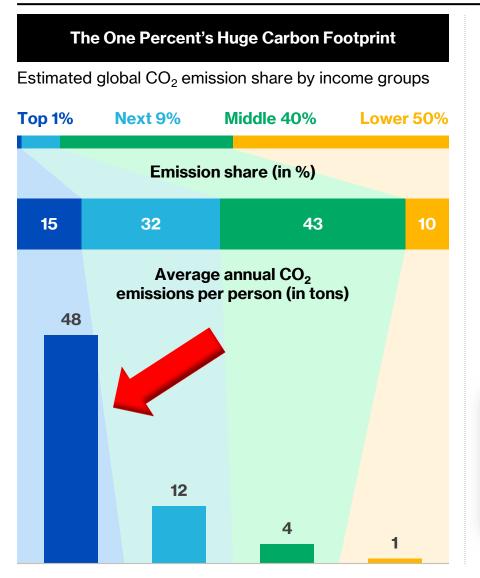


Energy Consumption Will Increase With Population Growth

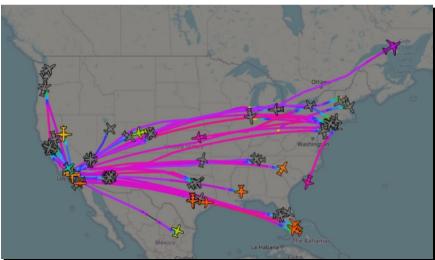




The Top 10% Account For Nearly Half Of The Globe's Carbon Footprint



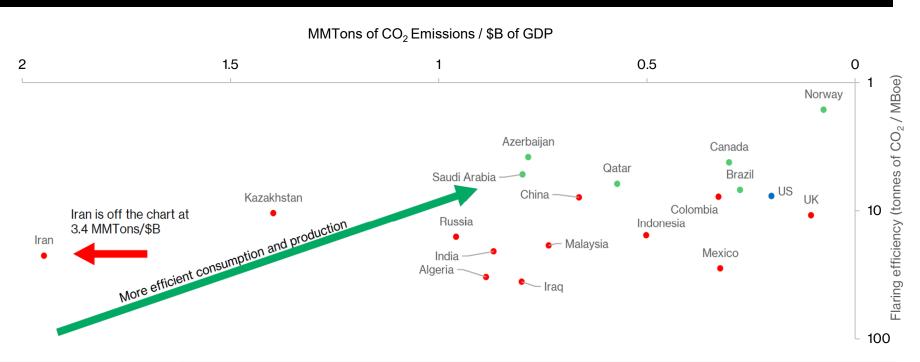
Flight map showing over the 140+ private jets that left LA after Super Bowl LVI within the first 5+ hours after the game ended



Rising use of private jets sends CO2 emissions soaring

United States, UK & Norway Are The Cleanest Producers

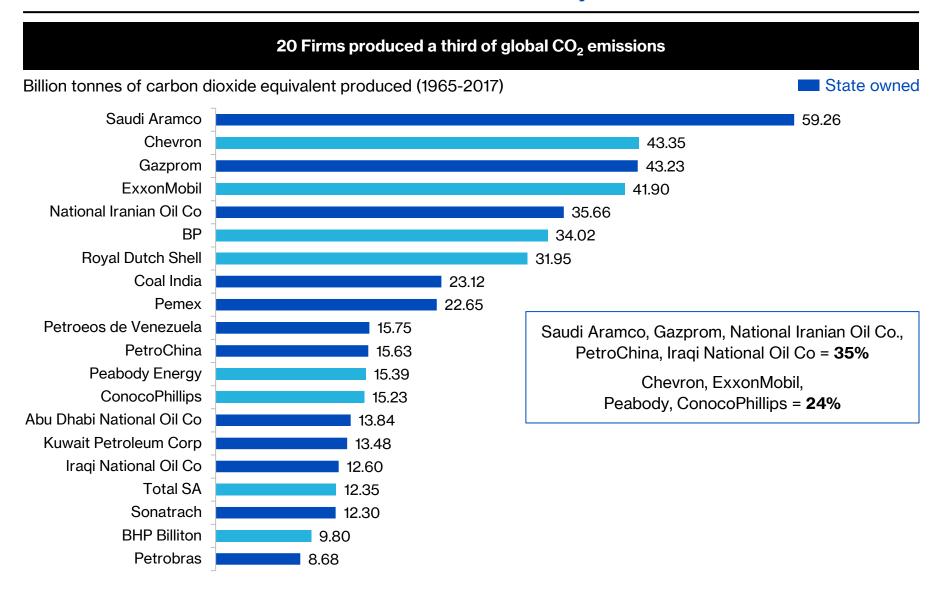




- We have bellwether nations that should be imitated Norway leads the pack as the cleanest producer with the cleanest economy. Canada, Brazil, US, Qatar, Azerbaijan, and Saudi Arabia follow as relatively clean producers with cleaner economies
- The energy transition can start by cleaning our current 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.

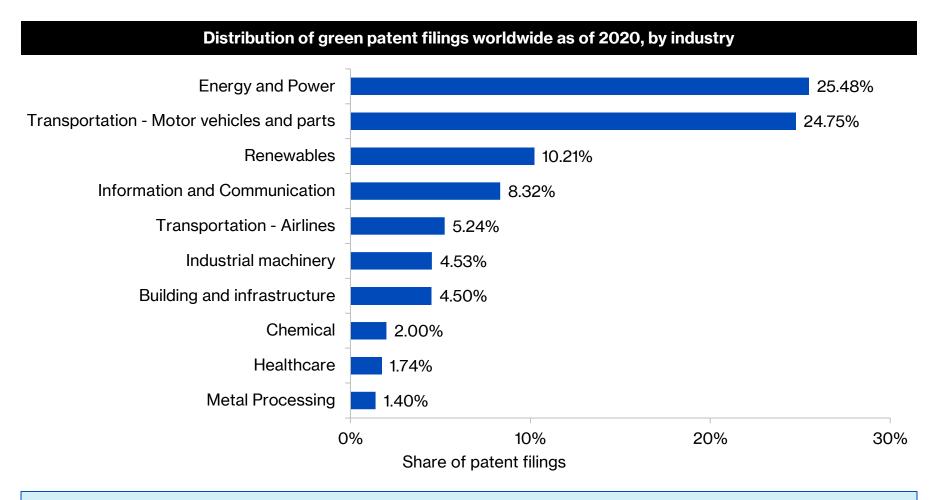


Some Of These Countries Do Not Necessarily Share Our Values...





Restricting Capital To Fossil Fuel Companies Is Counter-Productive



Despite destroying value for over decade, the Energy space remains perhaps best positioned in terms of capitalization to execute the transition

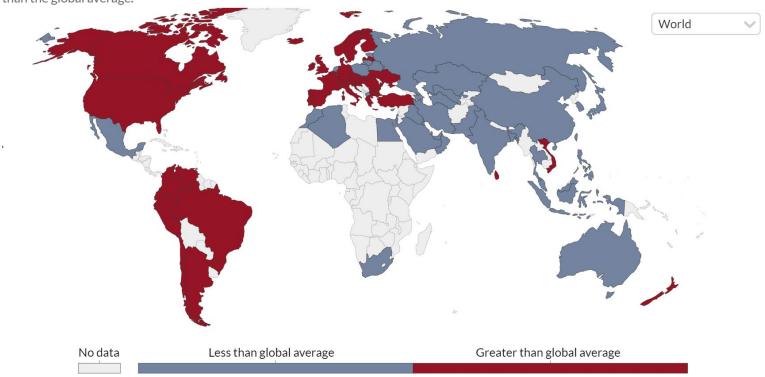


Low Carbon Strategies Already Penetrating North America

Which countries get more of their energy from low-carbon sources than the global average?, 2020



Shown is whether countries get greater or less of their primary energy from low-carbon energy sources – renewables and nuclear – than the global average.

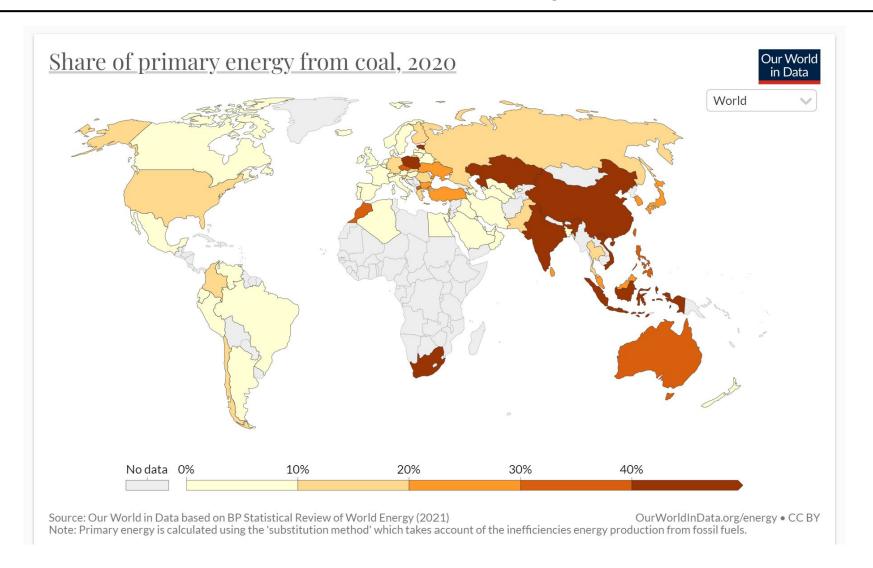


Source: Our World in Data based on BP Statistical Review of World Energy

Note: Primary energy is calculated using the 'substitution method' which takes account of the inefficiencies energy production from fossil fuels.



The U.S. Is Not As Reliant On Coal As One May Think





Summing Up The Global Energy Paradigm

Energy costs decrease as GDP per

Capita increases

Electricity prices rise as renewables penetration increases



Population growth is anticipated to predominately come from developing countries

Household income through out developing countries cannot currently support renewable penetration



Developing countries lack the **infrastructure** to support renewable reliance

Key considerations:

As developing countries increasingly experience population growth, who will they rely on for affordable energy?

What is the geo-political impact of those decisions?

How do those decisions impact the pursuit of decarbonization strategies?





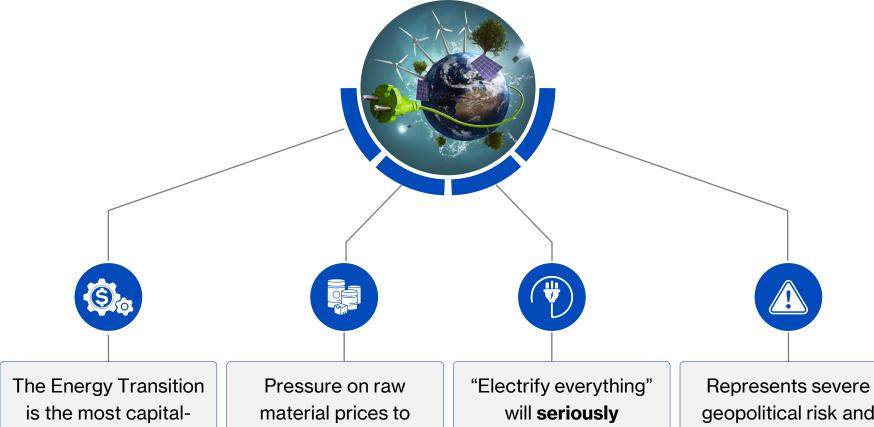




Part 2 – Economic Reality: The Pragmatic Overview of the Energy Transition



Energy Transition Will Disproportionately Impact The Developing World



The Energy Transition is the most capital-and **resource-intensive** undertaking in the history of mankind

Pressure on raw
material prices to
facilitate incremental
supply

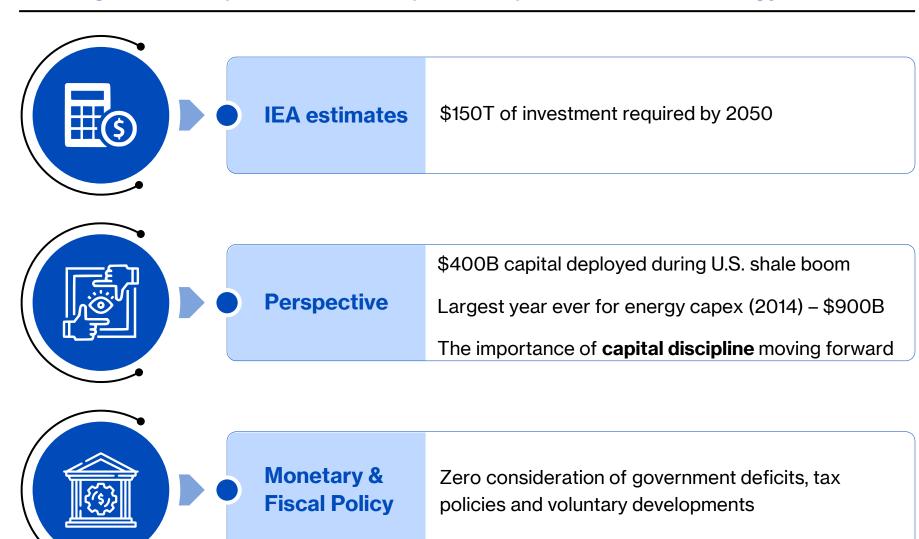
"Electrify everything"
will seriously
pressure commodity
prices, namely nickel,
cobalt and lithium

Represents severe geopolitical risk and coerces governments

NOT to work together seamlessly

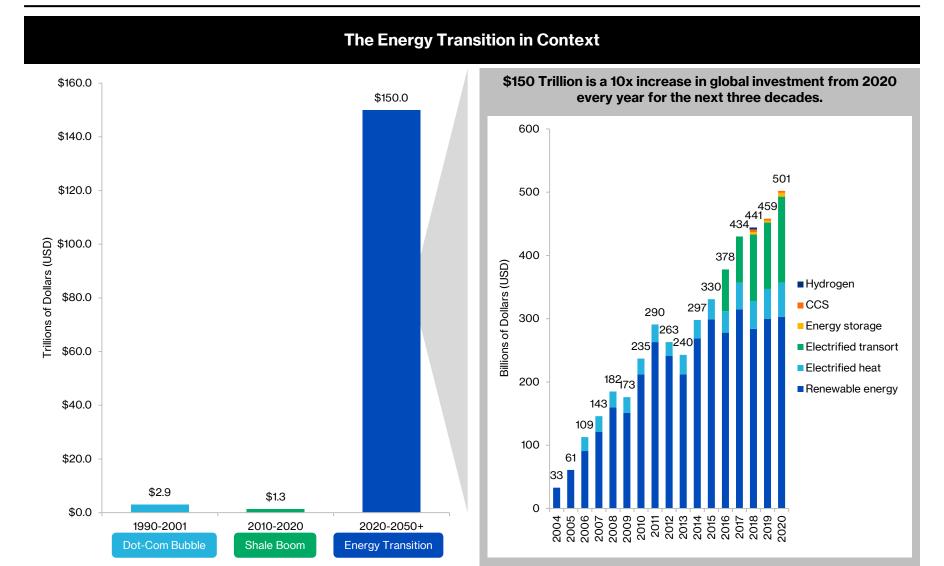


Putting Into Perspective The Capital Required For The Energy Transition





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



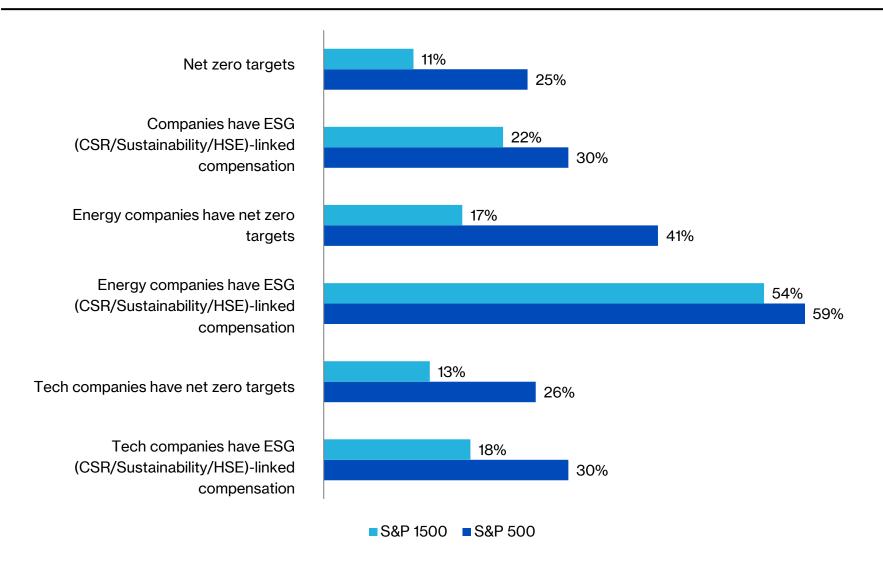




Part 3: What Is The Status Of The Energy Transition Today?



Net Zero Targets Increasingly Influencing Market Perception

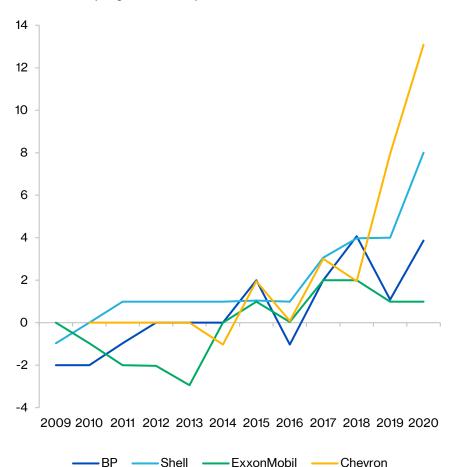




Current Climate Actions Are Setting Energy Up To Fail

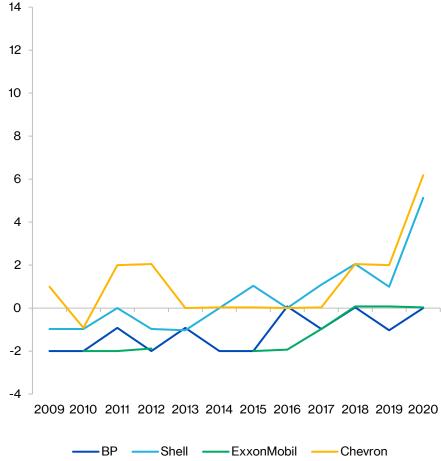
Fossil fuel companies have also been making more pledges to cut emissions

Score for climate pledges in business plan



The oil-and-gas majors' climate actions have not matched up to their pledges yet

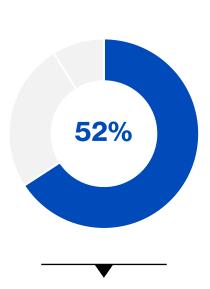
Score for climate actions in business plan



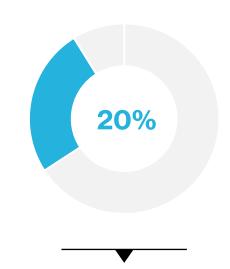


Current Climate Actions Are Setting Energy Up To Fail

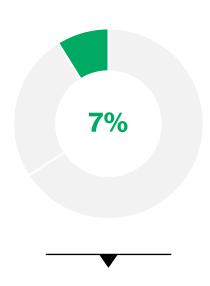
Data from the Climate Action 100+ Benchmark shows that



Of the world's largest emitters had net-zero goals, but only



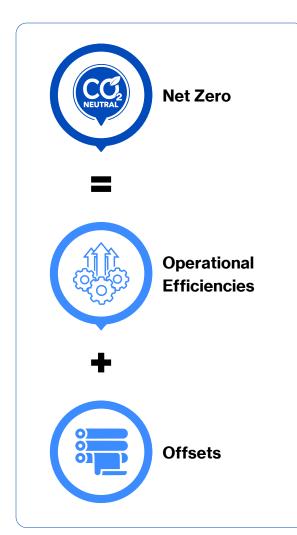
had short and mediumterm emissions reduction targets and only

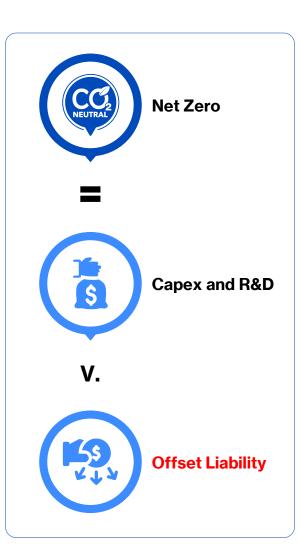


had targets aligned with the Paris Agreement goals



Net Zero, Efficient Capital Deployment & The Pursuit of Innovation









Efficiently Navigating the ESG Landscape Is Increasingly Complex

ESG data is uncorrelated, biased and incredibly influential

- ~6,500 unique data points exist in the ESG ecosystem
- Data is littered with a variety of biases:
 - Time, size, algorithmic, confirmation, belief perseverance



Influential evaluation methodologies remain subjective and opaque

- Uncorrelated data sets across providers
- Inconsistent rating weightings
- Data sets still in their relative infancy

Reporting Frameworks constantly changing & increasingly complex

- Evolution of the PRI
- Influence of TCFD
- Emergence of VRF
- Rise of ISSB
- Revisions of GRI

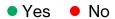
Shifting regulatory landscape ups the strategic ante

- SEC incessant focus on greenwashing
- Increased regulation focus on climate reporting and human capital management metrics
- The impact of EU's SFDR within the US



Too Many ESG Perspectives Jockeying For Ratings/Data Supremacy

Research Process	Sustainalytics	MSCI	ISS ESG	V.E. (Moody's)	S&P ESG	Refinitiv	FTSE Russell	CDP	RepRisk	Arabesque
Team Size	200+	270+	180+	120+	100+	150+	-	150+	100+	35
Coverage	12,000+	14,000+	6,000+	5,000+	7,000+	9,000+	7,000+	9,000+	170,000+ ⁽²⁾	7,000+
Rating Cycle	Annual ⁽¹⁾	Annual ⁽¹⁾	Annual ⁽¹⁾	Annual ⁽¹⁾	Annual ⁽¹⁾	Weekly	Annual	Annual	Daily	Daily
Rating Made Public	•	•	•	•	•	•	•	•	•	•
Indices Supplied	Solactive, STOXX, S&P	MSCI, Bloomberg	STOXX, Solactive	Euronext	S&P, DJSI	Refinitiv	FTSE	Euronext, STOXX	FTSE, DowJones, S&P	S&P





Low Score Correlations Exhaust Valuable Resources, Namely Sanity

Limited Correlation Among Data Providers*								
	Refinitiv Morningstar Inrate Bloomberg							
Refinitiv								
Morningstar	76%							
Inrate	23%	30%						
Bloomberg	75%	71%	12%					
MSCI	42%	46%	32%	31%				
Average correlation	46%							

- The majority of ESG data providers display relatively lower correlations
- Our research indicates data providers are more focused on establishing competitive uniqueness as opposed to empirical research
- Investors tend to utilize a variety of data providers in a mosaic fashion as opposed to relying on a single provider
- Regulators, particularly in Europe, are beginning to investigate and act on the opaqueness of rating agency methodology

Poor Data Quality & Inherent Scoring Bias Affects Energy Transition Too



Algorithmic bias



Size bias



Sector bias



Confirmation bias



Timing bias



Framing bias



Uncorrelated ESG data sets



Anchoring bias



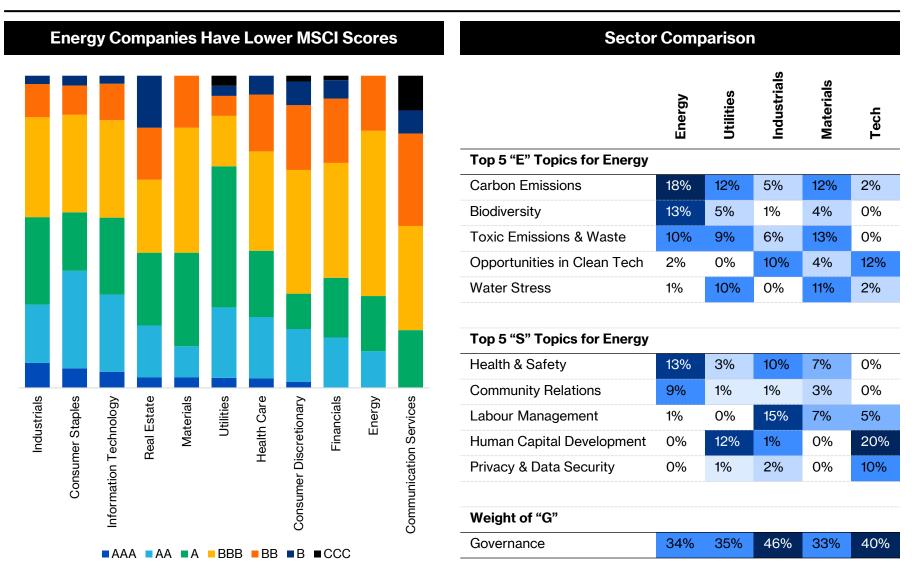
Black box "proprietary" methodologies



Lack of empirical inclusion



Ratings Methodologies Too Reliant On Top Down Instead Of Bottom Up





ESG-Related Data for the Energy Space is Skewed & Biased

- 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
- The adversities resulting from the methodologies employed by rating firms are more substantial for Energy than any other sector



Environmental				
Issue Average Weight				
Product Carbon Footprint	7.9%			
Carbon Emissions	4.6%			
Raw Material Sourcing	0.4%			

Social					
Issue	Issue Average Weight				
Privacy & Data Security	29.0%				
Labor Management	16.8%				
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%				

Governance				
Issue	Average Weight			
Governance	40.7%			



Issue	Average Weight
Carbon Emissions	14.0%
Biodiversity & Land Use	13.9%
Toxic Emissions & Waste	13.0%

Issue	Average Weight
Health & Safety	13.0%
Community Relations	13.0%
Labor Management	0.3%

issue	Average Weight
Governance	33.0%

Algorithmic Bias A Critical But Overlooked Component Of Strategy



Investors are inundated daily with **unstructured data** in the form of news stories, investor presentations, research, and social media.



It is **impossible to derive insights** from all of this information without the use of natural language processing (NLP) algorithms.

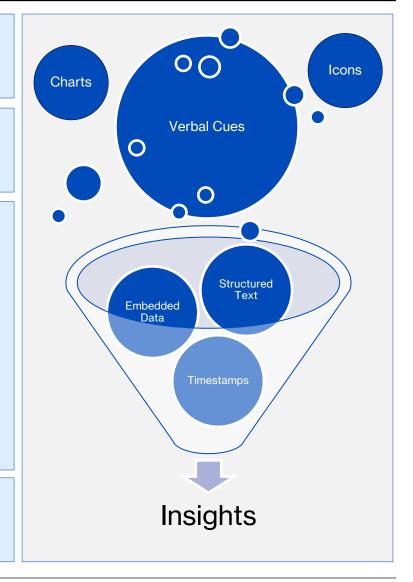


There are many challenges in natural language processing, stemming from not only what is being reported but **how it's** being reported.

- If humans struggle to understand language, so do machines.
- Machine Learning does not perform well if it is fed incomplete or wrong data
- NLP tools struggle to interpret charts and graphs. If reporting is very graphic heavy, the machines will miss a lot of the content.
- Algorithms display difficulty in achieving scale in analysis



Decision precision and transparency of the rationality is an area best **controlled by subject matter experts**, rather than by machines.





Rating Agencies & Data Increasingly Influencing Portfolio Construction

Research Process	MSCI	Vigeo Eiris	Sustainalytics	Other	Total AUM (ESG EFTs)
Amundi AM					\$6,259,229,441
BlackRock	•		•	•	\$43,159,713,145
BNP Paribas AM		•			\$1,029,485,878
Credit Suisse AM	•				\$1,205,691,791
DWS Investments	•				\$9,362,196,860
First Trust Advisors				•	\$1,999,312,383
nvesco				•	\$7,120,431,799
Legal & General IM				•	\$1,354,956,961
_yxor AM				•	\$2,276,798,452
UBS AM	•				\$6,886,701,114
Vanguard	•		•	•	\$4,565,560,641
Total AUM	\$69,150,330,803	\$1,029,485,878	\$47,725,273,786	\$55,911,212,740	\$85,220,078,465





Part 4: The SEC's Climate Disclosure Proposal Misses the Mark

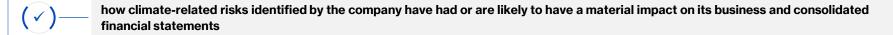


SEC Climate Disclosure Proposal Is Likely To Pass

- Scope 1 & 2 emissions calculation now require 3rd party attestation
- Take effect fiscal year 2023 / SEC Filings 2024
- Endorses 'TCFD' Reporting Framework
- Impacts periodic reporting (i.e., 10K, 10Q) & registration documents (i.e., S-1, S-3)

Key strategic considerations / proposal requirements include:







outline processes for identifying, assessing and managing climate-related risks and whether any such processes are integrated into the company's overall risk management system or processes;

Scope 1 and 2 greenhouse gas ("GHG") emissions, separately disclosed, expressed in absolute terms (not including offsets) both:

- by disaggregated constituent greenhouse gases and in the aggregate, and
- in terms of intensity;
- Scope 3 GHG emissions and intensity, if material, or if the company has set a GHG emissions reduction target or goal that includes its Scope 3 emissions; and
- to the extent applicable, details on the company's public climate-related targets or goals (including any use of carbon offsets or renewable energy certificates ["RECs"] to achieve such targets and goals), transition plan, use of scenario analysis and/or use of internal carbon pricing.



Unintended Consequences of SEC's Climate Disclosure Proposal



Regulatory mandates of this nature **will act as a deterrent** for future companies to go public and/or remain publicly traded, thereby negatively impacting technological innovation



These measures will lead to an incredible number of **frivolous lawsuits**, ultimately harming investors and taking attention away from creating functional solutions



Regulation addressing climate issues should center on implementing a variety of **positive incentives** which encourage incremental innovation, efficiency, and results



Precedent indicates that **market forces are materially more effective**, efficient, and impactful in creating solutions than regulatory



The reallocation of resources to monitor climate has the potential to **destabilize the credibility** of the U.S. capital markets



Private Companies Will Feel The Burden of Climate Disclosure As Well



Proposed to take effect fiscal year 2023 / SEC Filings 2024



Large filers mandated to report Scope 3













purchased goods and services

capital goods

fuel- and energy-related activities

transportation and distribution

waste generated in operations

business travel

employee commuting



leased assets



processing of sold products



use of sold products



end of life treatment of sold products



franchises



Investments



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

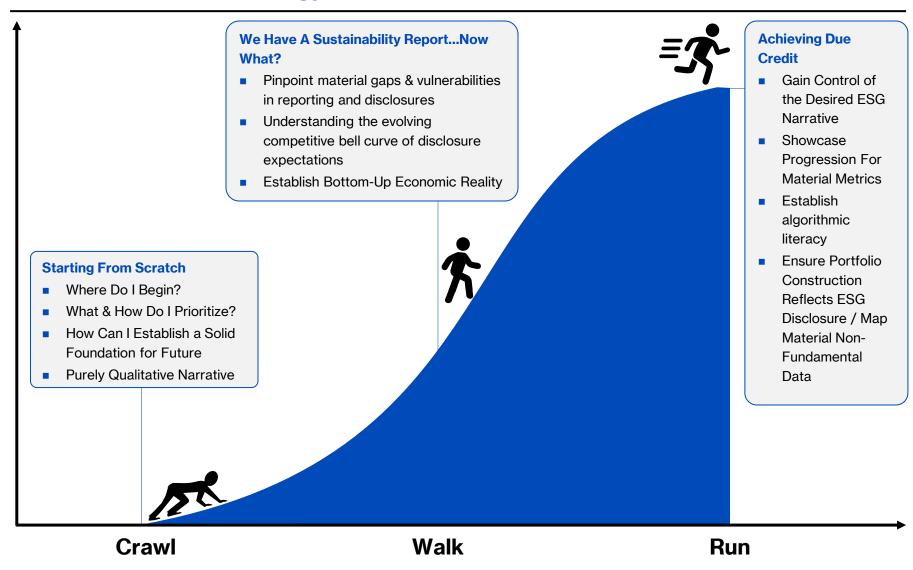




Part 5: Recommended Action Items & Strategic Considerations



One ESG Size & Strategy Does Not Fit All





ESG Becoming a Key Emphasis in Large-Scale M&A



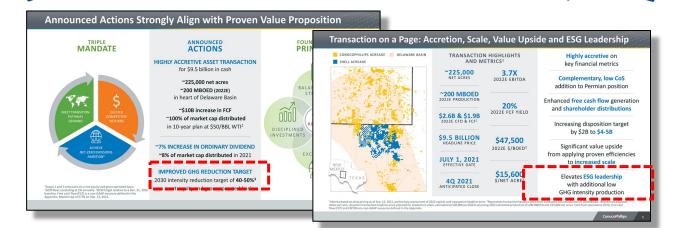
Public disclosures around large-scale energy M&A have increasingly highlighted ESG attributes and rationale

ConocoPhillips Announces Significant Enhancement to Multi-Year Plan with All-Cash Permian Asset Acquisition; Increases Ordinary Dividend; Improves 2030 **Emissions Intensity Reduction** Target SEPTEMBER 20, 202 apital allocation priorities and its commitment to playing a valued role in the energy transition. Materials \$9.5 billion in cash. The assets include -225,000 net acres and producing properties located entirely in Tex as well as over 600 miles of operated crude, gas and water pipelines and infrastructure. Estimated 2022 representing a -7% increase and a current dividend yield of 3%. The dividend is payable assets we're adding improve our ability to generate returns that are consistent with what investors demand

Repeated ESG Emphasis in Press Release, Presentation and Commentary

"In addition to enhancing our base plan, this transaction also enhances our ability as an E&P company to have a valued role in energy transition by accelerating progress on our Triple Mandate. The objectives of the mandate are to responsibly produce energy to meet transition demand, generate compelling returns on and of capital, and achieve our Paris-aligned targets and 2050 net zero ambition. The assets we're adding are consistent with our low cost of supply strategy, which is designed to position our portfolio as the most likely to be developed as the energy transition progresses and the need for oil and gas is reduced over time. The assets we're adding improve our ability to generate returns that are consistent with what investors demand through cycles. And the assets we're adding will bring more low GHG intensity barrels to our mix. This deal hits on all the objectives of our mandate"

- Ryan Lance, COP Chaiman and CEO (Sep 20, 2021)

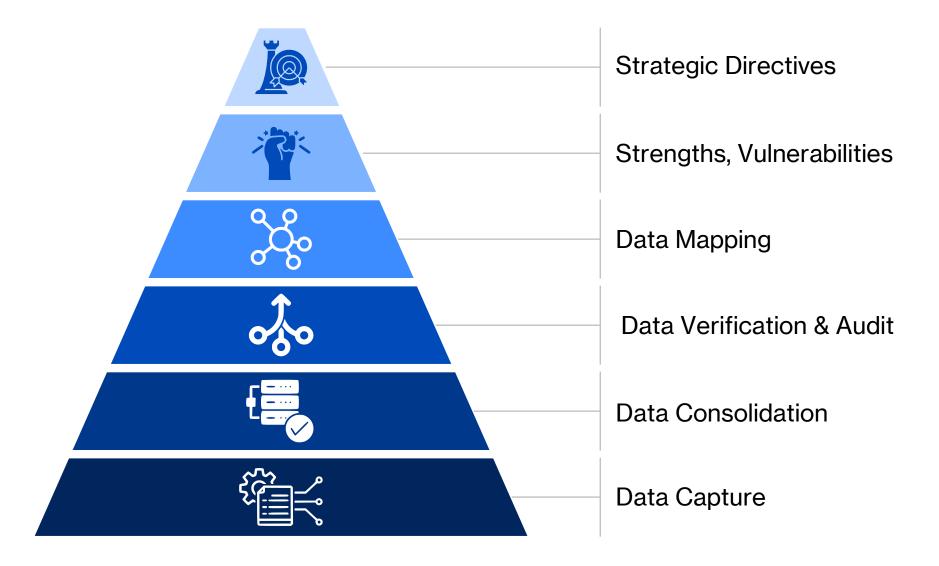


Thoughtful Preparation of Key ESG Announcement Criteria is Critical to the Value Maximization Strategy



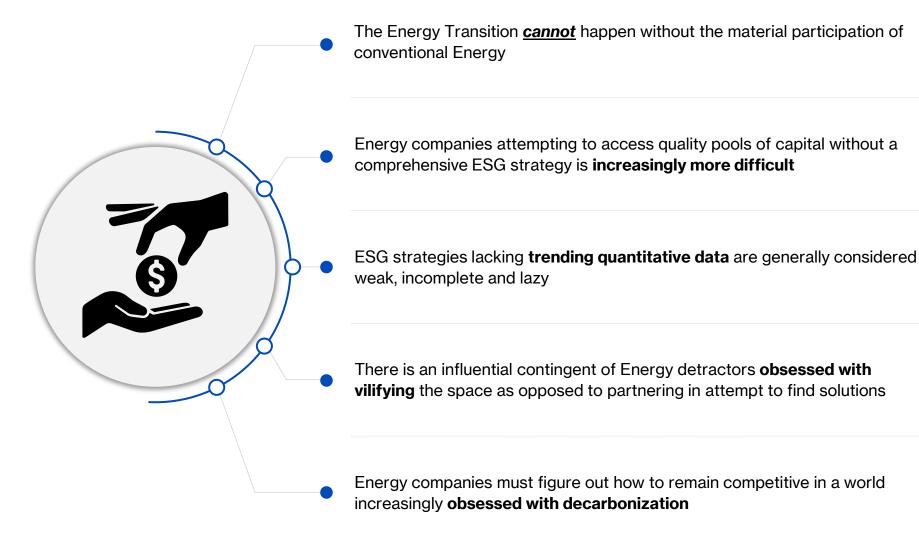
Sources: Company disclosures

Utilizing Data Management To RETAKE Control Of The Narrative





Fossil Fuel Investments Are Part Of Energy Transition Investments







Questions & Discussion

