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
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
September 2019 spin out from TPH as an Investment Business

Committed to establishing our team as the preeminent Energy-focused financial services

Unapologetically focused and committed to the Oil and Gas space, **BUT...**

We also embrace the utility and necessity of decarbonization strategies

Expertise and services extend across Investments, Advisory, Consulting and Insights
Clients Spread Across the Entire Energy Spectrum

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<th>Broad Subsector Coverage</th>
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<td>Diversified Energy</td>
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<td>MLPs &amp; Midstream</td>
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<td>Upstream</td>
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<td>Oilfield Services</td>
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<td>Power &amp; Infrastructure</td>
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<td>Electric Vehicles and Charging Infrastructure</td>
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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
- Why the SEC’s Climate Disclosure Proposal misses the mark
- Where are we at today?
- Strategic Considerations & Recommendations
Part 1 - Level Setting: Reaffirming The Global Importance of Fossil Fuels
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

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IEA site
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.

Source: UN(2019)
https://ourworldindata.org/future-population-growth
Growth Dominated By Areas Currently Experiencing Energy Poverty

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

Source: Gapminder (v6), HYDE (v3.2), UN (2019)
https://ourworldindata.org/future-population-growth
Developing Nations Display Greater Future Population Growth

Population growth rate, 1968

Annual rate of population change from 1950, including UN projections to 2099 based on its median scenario. This takes births, deaths and migration into account.

Child Mortality Increases As Population Growth Increases

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.

Source: UN Population Division (2019 Revision)
https://ourworldindata.org/future-population-growth
Income Trends Indicate A Continued Need for Affordable Energy
Household Income Substantially Lower In Developing Countries

Global Income Distribution 1988 to 2011

- Developed Countries
- Sub-Saharan Africa
- Russia, Central Asia, SE Europe and Middle East & Northern Africa
- Latin America & Caribbean
- Other Asia
- India
- China

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

This visualization is licensed under a CC BY-SA license. You are welcome to share but please refer to its source where you find more information: ourworldindata.org/data/growth-and-distribution-of-prosperity/inequality-between-world-citizens/

Citation to the paper: Global Income Distribution. From the Fall of the Berlin Wall to the Great Recession, Christoph Lakner and Branko Milanovic, World Bank Economic Review, Advance Access published August 12, 2015.

https://ourworldindata.org/global-economic-inequality
Lower Middle Income & Below Will Struggle To Afford Renewable Options

Population by income level, 1960 to 2020
Total population, differentiated by World Bank income level.

Source: Data compiled from multiple sources by World Bank

https://ourworldindata.org/global-economic-inequality
Electricity Prices Rise As Renewable Penetration Increases

Electricity Prices Correlated with Renewable Penetration$^{(1)}$

Recent Commodity Price Changes$^{(2)}$


2. Source: Bloomberg
Energy Costs Decrease As GDP per Capita Increase

Relationship Between Energy Cost and Per Capita GDP

1. Source: ibid
Energy Transition Will Result In Increased Inflationary Pressures

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

- Under 15,000: 9.4%
- 15,000 to 24,999: 8.7%
- 25,000 to 34,999: 8.1%
- 35,000 to 49,999: 11.6%
- 50,000 to 74,999: 16.5%
- 75,000 to 99,999: 12.2%
- 100,000 to 149,999: 15.3%
- 150,000 to 199,999: 8.0%
- 200,000 and over: 10.3%

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

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

- 2020: 37.25 million
- 2019: 33.98 million
- 2018: 38.15 million
- 2017: 39.70 million
- 2016: 40.62 million
- 2015: 43.12 million
- 2014: 46.66 million
- 2013: 45.32 million
- 2012: 46.50 million
- 2011: 46.25 million
- 2010: 46.34 million

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.
Global Energy Has To Come From Somewhere...
Developing Countries Will Rely On Oil & Coal For The Foreseeable Future

Global primary energy consumption by source

Primary energy is calculated based on the 'substitution method' which takes account of the inefficiencies in fossil fuel production by converting non-fossil energy into the energy inputs required if they had the same conversion losses as fossil fuels.


https://ourworldindata.org/energy
Energy Consumption Will Increase With Population Growth

Primary energy consumption, 2020
Primary energy consumption is measured in terawatt-hours (TWh).

Source: BP Statistical Review of World Energy; and EIA
Note: Data includes only commercially-traded fuels (coal, oil, gas), nuclear and modern renewables. It does not include traditional biomass.

https://ourworldindata.org/energy
The Top 10% Account For Nearly Half Of The Globe’s Carbon Footprint

The One Percent’s Huge Carbon Footprint

Estimated global CO₂ emission share by income groups

```
Top 1%  Next 9%  Middle 40%  Lower 50%
Emission share (in %)
15  32  43  10
Average annual CO₂ emissions per person (in tons)
48  12  4  1
```

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

Source: Carbonbrief
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.

### 20 Firms produced a third of global CO₂ emissions

<table>
<thead>
<tr>
<th>Company</th>
<th>CO₂ Emissions (Billion tonnes of carbon dioxide equivalent produced)</th>
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<tbody>
<tr>
<td>Saudi Aramco</td>
<td>59.26</td>
</tr>
<tr>
<td>Petrobras</td>
<td>43.35</td>
</tr>
<tr>
<td>BHP Billiton</td>
<td>43.23</td>
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<tr>
<td>Sonatrach</td>
<td>41.90</td>
</tr>
<tr>
<td>Total SA</td>
<td>35.66</td>
</tr>
<tr>
<td>PetroChina</td>
<td>34.02</td>
</tr>
<tr>
<td>Royal Dutch Shell</td>
<td>31.95</td>
</tr>
<tr>
<td>Petroeos de Venezuela</td>
<td>23.12</td>
</tr>
<tr>
<td>Royal Dutch Shell</td>
<td>22.65</td>
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<tr>
<td>Peabody Energy</td>
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<td>PetroChina</td>
<td>15.63</td>
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<tr>
<td>ConocoPhillips</td>
<td>15.39</td>
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<tr>
<td>Abu Dhabi National Oil Co</td>
<td>15.23</td>
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<tr>
<td>Kuwait Petroleum Corp</td>
<td>13.84</td>
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<td>Iraqi National Oil Co</td>
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<tr>
<td>Total SA</td>
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<tr>
<td>Total SA</td>
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<tr>
<td>BHP Billiton</td>
<td>9.80</td>
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<tr>
<td>Petrobras</td>
<td>8.68</td>
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</tbody>
</table>

Source: Richard Heede at the Climate Accountability Institute via the Guardian
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.

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

https://ourworldindata.org/energy
The U.S. Is Not As Reliant On Coal As One May Think

Share of primary energy from coal, 2020

Source: Our World in Data based on BP Statistical Review of World Energy (2021)
Note: Primary energy is calculated using the 'substitution method' which takes account of the inefficiencies energy production from fossil fuels.
Population growth is anticipated to predominately come from developing countries. Developing countries lack the infrastructure to support renewable reliance. Household income throughout developing countries cannot currently support renewable penetration. Electricity prices rise as renewables penetration increases. Energy costs decrease as GDP per capita increases.

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
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

- **IEA estimates**: $150T of investment required by 2050

- **Perspective**: $400B capital deployed during U.S. shale boom
  - Largest year ever for energy capex (2014) – $900B
  - The importance of **capital discipline** moving forward

- **Monetary & Fiscal Policy**: Zero consideration of government deficits, tax policies and voluntary developments
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.

Part 3: What Is The Status Of The Energy Transition Today?
Net Zero Targets Increasingly Influencing Market Perception

- **Net zero targets**: 11% (S&P 1500) vs 25% (S&P 500)
- **Companies have ESG (CSR/Sustainability/HSE)-linked compensation**: 22% (S&P 1500) vs 30% (S&P 500)
- **Energy companies have net zero targets**: 17% (S&P 1500) vs 41% (S&P 500)
- **Energy companies have ESG (CSR/Sustainability/HSE)-linked compensation**: 54% (S&P 1500) vs 59% (S&P 500)
- **Tech companies have net zero targets**: 13% (S&P 1500) vs 26% (S&P 500)
- **Tech companies have ESG (CSR/Sustainability/HSE)-linked compensation**: 18% (S&P 1500) vs 30% (S&P 500)

Source – Pickering Energy Partners Internal Analysis
Current Climate Actions Are Setting Energy Up To Fail

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

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

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Current Climate Actions Are Setting Energy Up To Fail

Data from the Climate Action 100+ Benchmark shows that

- **52%** of the world’s largest emitters had net-zero goals, but only
- **20%** had short and medium-term emissions reduction targets and only
- **7%** had targets aligned with the Paris Agreement goals

Net Zero, Efficient Capital Deployment & The Pursuit of Innovation

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

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

Reporting Frameworks constantly changing & increasingly complex
- Evolution of the PRI
- Influence of TCFD
- Emergence of VRF
- Rise of ISSB
- Revisions of GRI
Too Many ESG Perspectives Jockeying For Ratings/Data Supremacy

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Yes  No

Source: SquareWell
(1) Although full review of all rated companies is conducted annually, company information such as involvement in controversies is updated on a daily basis, which could lead to a score change any time during the year.
(2) Includes private companies
Low Score Correlations Exhaust Valuable Resources, Namely Sanity

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

### Limited Correlation Among Data Providers*

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<thead>
<tr>
<th></th>
<th>Refinitiv</th>
<th>Morningstar</th>
<th>Inrate</th>
<th>Bloomberg</th>
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<tr>
<td>Refinitiv</td>
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<tr>
<td>Morningstar</td>
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<td>Inrate</td>
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<td>71%</td>
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<td>MSCI</td>
<td>42%</td>
<td>46%</td>
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<td><strong>Average correlation</strong></td>
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*Limited Correlation Among Data Providers*
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

Energy Companies Have Lower MSCI Scores

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<tr>
<th>Sector</th>
<th>AAA</th>
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<th>BBB</th>
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Sector Comparison

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<th>Industrials</th>
<th>Materials</th>
<th>Tech</th>
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<tr>
<td>Top 5 “E” Topics for Energy</td>
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<tr>
<td>Carbon Emissions</td>
<td>18%</td>
<td>12%</td>
<td>5%</td>
<td>12%</td>
<td>2%</td>
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<tr>
<td>Biodiversity</td>
<td>13%</td>
<td>5%</td>
<td>1%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>Toxic Emissions &amp; Waste</td>
<td>10%</td>
<td>9%</td>
<td>6%</td>
<td>13%</td>
<td>0%</td>
</tr>
<tr>
<td>Opportunities in Clean Tech</td>
<td>2%</td>
<td>0%</td>
<td>10%</td>
<td>4%</td>
<td>12%</td>
</tr>
<tr>
<td>Water Stress</td>
<td>1%</td>
<td>10%</td>
<td>0%</td>
<td>11%</td>
<td>2%</td>
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</tbody>
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Top 5 “S” Topics for Energy

<table>
<thead>
<tr>
<th></th>
<th>Energy</th>
<th>Utilities</th>
<th>Industrials</th>
<th>Materials</th>
<th>Tech</th>
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<tbody>
<tr>
<td>Health &amp; Safety</td>
<td>13%</td>
<td>3%</td>
<td>10%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>Community Relations</td>
<td>9%</td>
<td>1%</td>
<td>1%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Labour Management</td>
<td>1%</td>
<td>0%</td>
<td>15%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Human Capital Development</td>
<td>0%</td>
<td>12%</td>
<td>1%</td>
<td>0%</td>
<td>20%</td>
</tr>
<tr>
<td>Privacy &amp; Data Security</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>0%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Weight of “G”

<table>
<thead>
<tr>
<th></th>
<th>AAA</th>
<th>AA</th>
<th>A</th>
<th>BBB</th>
<th>BB</th>
<th>B</th>
<th>CCC</th>
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<tbody>
<tr>
<td>Governance</td>
<td>34%</td>
<td>35%</td>
<td>46%</td>
<td>33%</td>
<td>40%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Issue</th>
<th>Average Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Carbon Footprint</td>
<td>7.9%</td>
</tr>
<tr>
<td>Carbon Emissions</td>
<td>4.6%</td>
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<tr>
<td>Raw Material Sourcing</td>
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<table>
<thead>
<tr>
<th>Issue</th>
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</thead>
<tbody>
<tr>
<td>Privacy &amp; Data Security</td>
<td>29.0%</td>
</tr>
<tr>
<td>Labor Management</td>
<td>16.8%</td>
</tr>
<tr>
<td>Product Safety &amp; Quality</td>
<td>1.1%</td>
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<tr>
<td>Human Capital Development</td>
<td>1.0%</td>
</tr>
<tr>
<td>Supply Chain Labor Standards</td>
<td>0.9%</td>
</tr>
<tr>
<td>Consumer Financial Protection</td>
<td>0.6%</td>
</tr>
<tr>
<td>Opportunities in Nutrition &amp; Health</td>
<td>0.2%</td>
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</table>

<table>
<thead>
<tr>
<th>Issue</th>
<th>Average Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance</td>
<td>40.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Issue</th>
<th>Average Weight</th>
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</thead>
<tbody>
<tr>
<td>Carbon Emissions</td>
<td>14.0%</td>
</tr>
<tr>
<td>Biodiversity &amp; Land Use</td>
<td>13.9%</td>
</tr>
<tr>
<td>Toxic Emissions &amp; Waste</td>
<td>13.0%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Issue</th>
<th>Average Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health &amp; Safety</td>
<td>13.0%</td>
</tr>
<tr>
<td>Community Relations</td>
<td>13.0%</td>
</tr>
<tr>
<td>Labor Management</td>
<td>0.3%</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Issue</th>
<th>Average Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance</td>
<td>33.0%</td>
</tr>
</tbody>
</table>

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

Source: SquareWell, Refinitiv/Lipper and MSCI ESG Research LLC as of Dec. 31, 2020

<table>
<thead>
<tr>
<th>Research Process</th>
<th>MSCI</th>
<th>Vigeo Eiris</th>
<th>Sustainalytics</th>
<th>Other</th>
<th>Total AUM (ESG EFTs)</th>
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</thead>
<tbody>
<tr>
<td>Amundi AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$6,259,229,441</td>
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<tr>
<td>BlackRock</td>
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<td>$1,029,485,878</td>
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<td>Credit Suisse AM</td>
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<td>First Trust Advisors</td>
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<td>$1,999,312,383</td>
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<td>Invesco</td>
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<td>$7,120,431,799</td>
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<td>Legal &amp; General IM</td>
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<td>$1,354,956,961</td>
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<td>Lyxor AM</td>
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<td>$2,276,798,452</td>
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<td>UBS AM</td>
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<td>$6,886,701,114</td>
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<td>Vanguard</td>
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<td>$4,565,560,641</td>
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<tr>
<td><strong>Total AUM</strong></td>
<td><strong>$69,150,330,803</strong></td>
<td><strong>$1,029,485,878</strong></td>
<td><strong>$47,725,273,786</strong></td>
<td><strong>$55,911,212,740</strong></td>
<td><strong>$85,220,078,465</strong></td>
</tr>
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</table>
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:

- the oversight and governance of climate-related risks by the company's board and management;
- how climate-related risks identified by the company have had or are likely to have a material impact on its business and consolidated financial statements;
- how climate risks affect its strategy, business model and outlook;
- 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

1. 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.

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

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

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

5. 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

**Starting From Scratch**
- Where Do I Begin?
- What & How Do I Prioritize?
- How Can I Establish a Solid Foundation for Future
- Purely Qualitative Narrative

**We Have A Sustainability Report…Now What?**
- Pinpoint material gaps & vulnerabilities in reporting and disclosures
- Understanding the evolving competitive bell curve of disclosure expectations
- Establish Bottom-Up Economic Reality

**Achieving Due Credit**
- Gain Control of the Desired ESG Narrative
- Showcase Progression For Material Metrics
- Establish algorithmic literacy
- Ensure Portfolio Construction Reflects ESG Disclosure / Map Material Non-Fundamental Data

---

**Crawl**

**Walk**

**Run**
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

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 Chairman 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

- Strategic Directives
- Strengths, Vulnerabilities
- Data Mapping
- Data Verification & Audit
- Data Consolidation
- Data Capture
The Energy Transition **cannot** happen without the material participation of conventional Energy

Energy companies attempting to access quality pools of capital without a comprehensive ESG strategy is **increasingly more difficult**

ESG strategies lacking **trending quantitative data** are generally considered weak, incomplete and lazy

There is an influential contingent of Energy detractors **obsessed with vilifying** the space as opposed to partnering in attempt to find solutions

Energy companies must figure out how to remain competitive in a world increasingly **obsessed with decarbonization**
Questions & Discussion