THE CLIMATE BOARD

TCB Digest for Executives

May 9th, 2023

Welcome to the flagship edition of The Climate Board's Weekly Digest for Executives: a summary overview of key climate related events, publications activities, and other insights for cross-functional corporate leaders. Takeaways can be found below the dotted line.

Regulatory/Disclosure Updates:

- WRI GHG Protocol Standards Update Process (May 2, virtual) – Key findings of the World Resource Institute's scope 2 survey presented, with noteworthy findings related to the interplay between more granular reporting requirements and flexibility in interpretation as well as dual reporting, market-based and location-based, as opposed to single number reporting. According to the survey, energy storage is the technology that would benefit the most from additional guidance and clarification.

Industry Events

- Advanced Clean Transportation Expo (May 1-4, LA) - A commercial fleet focused expo, in which there was a strong presence of both US- and foreign-based OEMs with displays of vehicle models ranging from delivery vans to tractor trailers. EV charging and hydrogen fueling infrastructure players, fleet management software solutions providers, government agencies, and financial institutions also had exhibits.
- Bloomberg New Energy Finance Summit (April 24-25, NYC) - A finance focused summit that brought together attendees from the energy, policy, finance, and technology sectors for conversations on technologies driving decarbonization.
- CFA Climate Risk Conference (April 20-21, NYC) – An investor focused event with climate recognized as a fundamental component of financial investment analysis and governance, i.e., risk management. Key panels included the role of policy in the energy transition, governance, and board level expertise as a critical area of focus, regulatory reporting, and time horizons for sustainable impact considering shareholder demands (takeaways here).
- Chatham House Bioeconomy: Supporting nature and tackling climate change (April 20, virtual) – An 'on-the-record' roundtable discussion with experts discussing how the bioeconomy can support environmental and social goods through strong investments, policies, and technologies (takeaways here).
- ESG: In Theory and Practice (April 26, NYC) - A discussion on the role of ESG with perspectives from both academics and a panel of sustainability officers in the energy sector. Hosted by NYU Stern School of Business and Columbia University's Center on Global Energy Policy's Women in Energy and alumni (takeaways here).

Publications

- IEA's Gas Market Report, G2-2023 (May 4) – The IEA (International Energy Association) warns that, despite higher natural gas storage levels due to a mild winter and policy intervention, gas supply in 2023 is expected to remain tight. Presenting a forecast for 2023, the report acknowledges the disruptive potential of future price volatility.
- BCTI's Tackling inequality: An agenda for business action (May 3) – In a flagship report, the Business Commission to Tackle Inequality (BCTI) outlines the potential transformative role the private sector can play in combating inequality.
- WBA's Governance and Climate Insights Report (May 2) – In this report, the WBA (World Benchmarking Alliance) explores how the finance sector has managed the interplay between governance and climate as well as what progress corporations have made on climate-related issues, impact strategies, and corporate policies.
- IEA's Global EV Outlook 2023 (April 26) – The annual Global EV Outlook discussed recent developments and provided key statistics related to electric mobility across the globe (takeaways here).

Other

- Wood Mackenzie (May 1), Oil and gas Majors: venture capital strategies for the energy transition
- BCG (April 25), Decarbonizing Mega Projects in the Middle East

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Takeaways:

CFA Climate Risk Conference:

- Two-day climate risk focused event with a select group of financial analysts and investors. Key takeaways from multiple panels included: 1) climate is an a-political, fundamental component of financial analysis and investment stewardship 2) 'governance' is the critical area of focus for all investors (and particularly activists), who are looking for diversity, independence and relevance - particularly, change management experience in industries which are structurally affected by the energy transition (e.g., transport, energy) and 3) investors are already doing back testing (and triangulation) of data so if a company isn't disclosing, regardless of regulatory requirement, it is to their own disadvantage.
- Select notes from the panels are presented in the following bullets.

Catalyzing Global Support for Systemic Change w Mindy Lubber @ Ceres

- Climate material risk is a critical component of a firm's financial performance and thus, part of the fiduciary duty of a portfolio manager.
- Water is another critical 'externality' that needs to be better understood and incorporated into forecasts.
- Climate is a non-partisan risk that affects both red and blue states - there are currently 10+ bills at state level related to climate change risk and/or ESG investment.
- SEC disclosure rules will focus specifically on climate risk and urgency is needed to ensure coordination with other regulators in order to minimize impact to corporates. Any SEC ruling is likely to be litigated.
- Carbon should have a price – it would be prudent for companies (and investors) to think about how returns on investment will be affected by carbon pricing.

The Role of Asset Owners

- Brian Minns, University Pension Plans Ontario – There has been a foundational shift of portfolios to incorporate climate change frameworks. This transition has necessitated an education of trustees – on the science of climate and economic challenges/implications of climate among other themes, involving non-partisan consultants who engage with each of the Trustees.
- Andrew Siwo, New York State Common Retirement Fund – Think about investing with an understanding of 1) Identification & Assessment of risk 2) Engagement & Advocacy 3) Manager Selection (which is assessed in part by alignment to SDGs).
- Avantika Saisekar, Wafra (owned by the public pension fund of Kuwait) – The focus is on assessing performance in the private & alternatives market with climate analysis an integrated part of decision-making (not an addendum checklist). Their approach to investment includes a proprietary investment scorecard which incorporates transition risk, existence of relevant policies, presence of annual climate scenario planning, among other components.

Greenwashing: A Risk for Investors, A Risk for Transition w Jill Fisch @ UPenn Law School

- Causes of greenwashing accusations may be bucketed in the following 3 categories:
  - Outright Fraud - outright lying about activity.
  - Misleading information - select disclosure of performance which eliminates critical information.
  - Lack of agreement on what 'green and 'ESG' are - Gary Genslar's view that purchasing an ESG fund/product should be as transparent and easy as buying milk is tainted by the milk industry's own labeling of milk e.g. fat free may actually have less than 1% fat, 2%, full fat, almond milk, oat milk etc. – and even the litigation between mill lobby against oat and almond in what may be deemed 'milk.'

The Four Pillars of Progress w Linda-Eling Lee Global Head of ESG & Climate Research at MSCI Inc.

- Proponent of Scope 3 reporting and specifically understanding a company's location of facilities. Currently triangulating metrics and disparate info to help inform ESG related insights in lieu of actual disclosure.
- While not all firm's disclose Scope 1 & 2, despite in certain markets where it is mandatory, estimations of Scope 1 & 2 are now quite good so can be easily triangulated for a corporate from an inside and outside perspective.
- Despite Scope 3's noisiness due the 15 different categories, this too will soon be triangulated so it's only in a company's best interest to start managing.
- For many corporates, the most readily disclosed aspect is business travel, but this is not the most important metric to be disclosed.

Creating Sustainable, Long-Term Value w Jennifer Grancino CEO @ Engine No. 1

- ESG has become a political theater, so stay away from the acronym and focus on governance as the key issue that is material and financial because ultimately, *managing climate risk is a governance issue.*
- Governance is where it all starts and measuring governance is not an easy score. It is key to understand how a CEO is managing a company and addressing the risk.
- It is critical that the Board can assess the CEO's. In order to determine what competence is needed on Board, one must understand what challenges a company is facing – for example for an industry in transformation it would be critical to have change management experience.

- The core job of Boards is to serve as fiduciary and manage risk, so there is a need for Boards to be willing to pivot based on learning/listening from diverse perspectives and openness to listen to challenges.
- Assessing the 'E' - using Scope 1 & 2 emissions, comparing across peers, and using a carbon price – is industry nuanced: certain companies should be looking to be looking to Scope 3 to manage strategy.
- In terms of diversity, Engine No. 1 looks to disclosures and performance.
- For Engine No. 1, it is keen to understand strategies and work with boards to transition. They are prioritizing capital and climate with a focus on investment opportunities where companies aren't pricing in transition.
- Car manufacturers – changing business model is a multi-year process e.g., electric vehicles & teams, build plants, permitting & supply chain, etc.
- For smaller companies, *it is critical to talk to other people and industry peers to understand whether on the right track.*

Seizing Opportunities in Uncertain Times w Valarie Grant PM @ Nuveen's TIAA CREFF Growth & Income Strategy fund and Jean Rogers, Head of Sustainability at Blackstone

- Key advice to companies on disclosures would be to determine key data points relevant to your strategy and be prepared to track against that data.
- The level of R&D investment over time is an important indicator to track. Also need to see R&D vs assets, including intangibles to determine whether they include patents.
- Broader investment focuses on inclusive growth and economic growth that benefits large segments of the environment (equity compounders) — looking for companies with exposure to across markets & regions that have potential to make an impact.
- Focus on Board diversity - racial & ethnic background but also diversity of skill set and background.

Chatham House Bioeconomy: Supporting nature and tackling climate change:

- Private capital investment in nature-based solutions is currently limited by perceptions of high investment risk, but the use of such solutions in the forest sector could help bridge the financing gap.
- Land-use modeling exercises would help to quantify market, environmental and social outcomes for future demand and technology scenarios in the bioeconomy.

ESG: In Theory and Practice

Hosted by NYU Stern School of Business and Columbia University's Center on Global Energy Policy's Women in Energy

Key Note: Alison Taylor, Clinical Associate Professor, Stern School of Business

Shared preview of her research on the role of the chief sustainability officer.

People have many different definitions for ESG. It's not just an emerging investment discipline; people are using the term to drive various goals.

- Importantly, she finds that many organizations are not thinking of ESG as a strategic imperative, but rather a box to check.

Primary challenges with ESG:

1. Balancing the two disparate opinions around ESG – the anti-ESG movement and on the opposite end of the spectrum, those who go too far and say that nothing a company does is good enough.
2. Everyone is doing the same thing – Companies are publishing sustainability reports and trying to align with their peers. But she sees a lack of strategic differentiation, and of companies focusing on the things they can influence.
3. Companies are including everything in their materiality assessment, instead of having a strategic focus.
4. We need a better discussion around reputational risk – "You don't manage reputational risk by managing reputational risk, you manage reputational risk by managing your ethical obligations, your operational risks, and your other issues."
   a. Additionally, she mentioned that industries that have a bad reputation for something often know a the most about a subject because they've had to learn. (For example, food and clothing manufacturers often have a bad reputation for supply chain oversight, but they also know the most about this)
5. We're asking too much of CSOs – who often feel overwhelmed by unrealistic demands and have little power or influence over an organization to achieve these goals.

Based on her research, she sees the role of the CSO changing. This is driven in part by:

1. Polarization and ESG backlash – pushing companies to rethink what they're saying about their ESG priorities to avoid greenwashing and focus on what they can impact.
2. Evolution of sustainability reporting frameworks – and a focus on how sustainability drives financial reporting and how sustainability works with risk, compliance, governance, and ethics.

How the CSO role is changing:

- Evolving to a more strategic role with more power and influence
- Close working relationship with c-suite

- These shifts are most evident in organizations that are undergoing business transformations in response to existential threats – forcing them to innovate. These are often companies in more controversial sectors.

Moving forward, companies should:

1. Find the right strategy – focus on things they can impact and address the most existential threats or challenges to their business.
2. Have the right emphasis – avoid greenwashing and exaggerated claims – stakeholder management needs to be strategic and occur across the organization, not just with the CSO.
3. Have a close collaboration between CEO, CFO, and CSO – engage CSOs more fully with investors – have these conversations together.
4. Have the right people and support – put CSOs in the c-suite, align sustainability with company strategy.

IEA EV Outlook 2023:

Executive Summary Synthesis

1. Electric car sales break new records with momentum expected to continue through 2023:

a. Electric car sales grew to over 10 million in 2022 (14% of new cars sold). By market size:
   - China accounted for 60% of global electric car sales in 2022.
   - Europe – 15% year-on-year (YOY) increase in electric car sales.
   - America, electric cars make up 8% of market share – 55% YOY increase.

b. 14 million in sales expected by the end of 2023 (35% YOY increase).
   - 18% total car sales across the 2023 full calendar year
   - Although EV sales are generally low outside of major markets, 3x+ increase in electric sales were seen in India, Thailand, and Indonesia as a collective.
     - Thailand, 3% of car sales were EVs, India and Indonesia 1.5%
     - India, USD 3.2 billion incentive programme brought USD 8.3 billion in investment.

2. Landmark EV policies are driving the outlook for EVs closer to climate ambitions:

- Under the IEA Stated Policies Scenario (STEPS), the EV share of car sales will be 35% in 2030, countries' EV market share under STEPS in 2030:
  - China 40%, Europe 25%, US 20% (up from 10% in 2021)
- Oil demand from road transport will peak around 2025 in STEPS.
- Battery manufacturing capacity announced on track to meet the demand for EVs in a net zero emissions by 2050 scenario.

3. As spending and competition increase, more affordable models come to market:

- USD 425 billion was spent on EVs in 2022 (50% YOY increase)
  - 10% of spending can be attributed to government support, 90% consumers.
- VC investments has reached USD 2.1 billion, 30% YOY increase.
  - Investments focusing on batteries and critical minerals.
- SUVs make up 60% EV options in China and Europe and an even greater share in the US.
  - SUVs require batteries 2-3x larger than smaller cars.
  - The number of EV car models has doubled since 2018, reaching 500 in 2022.
  - There is a need for original equipment manufacturers outside of China.

4. Focus expands to electrification of more vehicle segments as electric cars surge ahead:

- Two or three-wheelers are the most electrified market segment.
    - Over half of India's three-wheeler registrations in 2022 were electric.
- 66,000 electric buses and 60,000 medium- and heavy-duty trucks were sold in 2022 representing 4.5% and 1.2% of sales respectively.
    - 27 governments have pledged to reach 100% ZEV bus and truck sales by 2040.

5. EV supply chains and batteries gain greater prominence in policymaking:

- Lithium-ion battery demand increased 65% YOY to 550 GWh in 2022.
    - 60% of lithium, 30% of cobalt, and 10% of nickel demand was for EV batteries.
    - Lithium-iron-phosphate and sodium-ion battery supply chains see expansion.
- China exports 35% of electric cars, up from 25% in 2021.
- Europe's Net Zero Industry Act: in 2030 almost 90% of battery demand to be met by EU manufactures, India: Production Linked Incentives, United States: Inflation Reduction Act.
- North America: USD 52 billion in supply chains
    - 50% battery manufacturing, 20% battery components, 20% EV manufacturing

Webinar Q&A

- Governments are changing their policies for three reasons:
    1. Environmental
    2. Preparing industry for the shift towards electrification
    3. Uncertainty around oil supply security

- Purchase price parity, acknowledging that mineral prices have a large impact on costs, is estimated to take place in North American and European market in the mid-2020s. Purchase price parity has already been achieved in small car segments in China. For SUVs and pickups purchase price parity is likely to come later in the mid-2030s.

- "We are not suggesting here that this is a desired outcome just to replace one vehicle with another, but policy makers will need to find more integrated solutions here that are in line with modern mobility concepts for urban areas," Timer Gül, Head of Energy Technology Policy, IEA.

Thank you,

TCB Team

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