



Responsible Cleantech

Thematic Engagement Biannual Report – March 2022
Executive Summary – Approved for Public Disclosure

EXECUTIVE SUMMARY

The Issue at Hand

Just like the products it aims to replace or make more efficient, cleantech requires space and natural resources. Companies have a responsibility to respect local communities’ human rights and consider the environmental impacts in and around sites where raw materials are sourced, where products are made, and/or where renewable energy is generated. Similarly, the cleantech supply chain relies on human resources. The labour rights of workers in mines and factories need to be respected, including healthy and safe working conditions, freedom of association and collective bargaining, and avoidance of child and forced labour. Furthermore, the recycling of products such as solar photovoltaic (PV) systems, wind turbines and vehicle batteries has received less attention than the benefits of these technologies. It is advantageous to promote circular business models for recovering materials when products reach the end of their life cycle. These products are truly sustainable only if all stages in the value chain are environmentally and socially sustainable. Sustainalytics’ Responsible Cleantech engagement addresses both the environmental and social implications of the growth of selected cleantech domains – solar panels, wind turbines, battery electric vehicles and hydrogen – and aligns with multiple Sustainable Development Goals, namely: SDG 7 Affordable and clean energy, SDG 8 ‘Decent work and economic growth’, SDG 9 ‘Industry, innovation and infrastructure’, SDG 12 ‘Responsible consumption and production’, and 13 ‘Climate action’.



Developments and Engagement Efforts from September 2021 to March 2022

The Responsible Cleantech thematic engagement program started with a baseline report in September 2020. This third biannual report accounts for the progress made between September 2021 and March 2022. Furthermore, this report marks the midpoint of the second year of this thematic engagement as well as the point where all engaged companies have passed the overall score threshold from the Low to the Medium category. According to plan, Sustainalytics shifted the focus from onboarding companies to developing the dialogue with the engaged companies. It was possible to increase the number of engagement calls significantly, i.e., from 12 in the previous round to 18 this round.

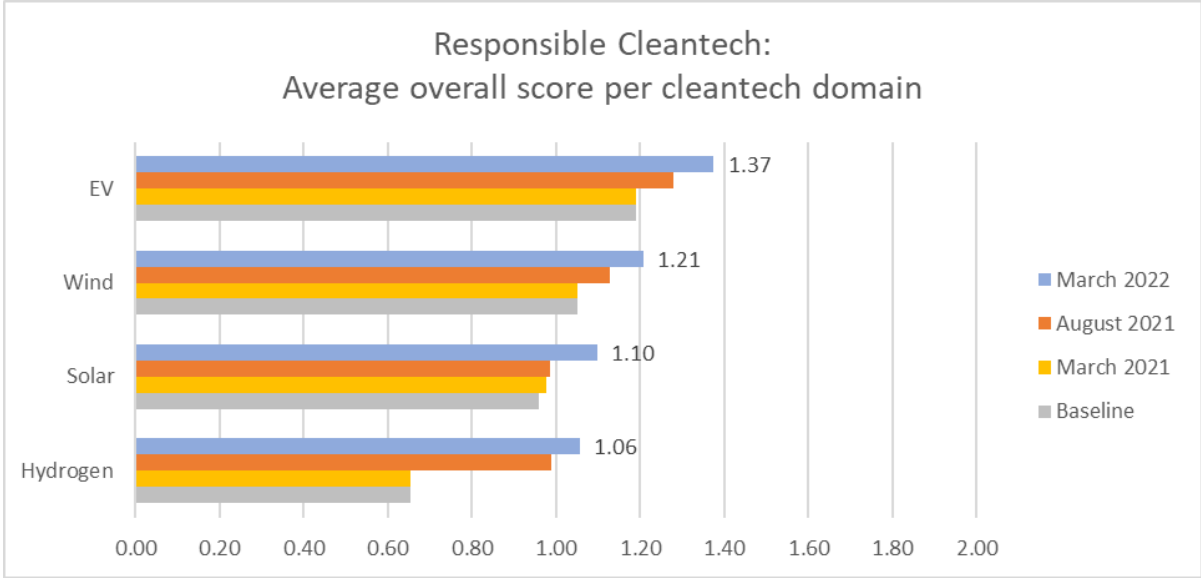
There has been active dialogue with the following 18 companies: Daqo New Energy, First Solar, Ford Motor, Gurit, Hanwha Solutions, Honda Motor, Hyundai Mobis, Johnson Matthey, LONGi Green Energy Technology, Nordex, Plug Power, Schneider Electric, SunPower, Tesla, TPI Composites, Vestas Wind Systems, Volkswagen, and Xinjiang GoldWind Science & Technology.

As only a few of the engaged companies published new sustainability reporting before the closing date of this report, the engagement calls were mostly used to inquire more about progress opportunities with respect to programs and targets, performance accounting and industry collaboration. Tangible positive environmental and social impacts remain challenging to measure and even more challenging to claim. Most of the time the engagement helps reinforce broader developments and complimentary efforts of other stakeholders. Yet, the Responsible Cleantech engagement's outputs have been plentiful (including many conference calls and content-related emails) and there are various noteworthy positive outcomes to account for, such as:

- In the solar domain, international concerns about forced labour risks in China's Xinjiang Uyghur Autonomous Region have posed a challenge due to the solar industry's reliance on China for crystalline silicon. The engaged companies, including some in China, do not tolerate forced labour in their own operations and there are opportunities in the engagement to get companies to expand their supply chain due diligence efforts.
- In the wind domain, momentum for creating a circular economy for the composite blades is increasing. Original equipment manufacturers (OEMs), specialized suppliers and technical universities have been teaming up to discover commercially viable solutions.
- In the EV domain, the procurement departments of various manufacturers are really stepping up when it comes to assessing and addressing sustainability risks, especially in the supply chains of battery materials such as '3TG', aluminium, cobalt, lithium, manganese and nickel.
- In the hydrogen domain, the most discussed material has been platinum, which is applied in both electrolyzers to produce green hydrogen from water and fuel cells to produce electricity from hydrogen. Due to the high financial cost of this precious metal, it has been easier to make a business case for circular product design and recycling. There is also increased attention for the mines' environmental and social performance.

In addition to the company engagements, Sustainalytics attended various relevant webinars and spoke with subject matter experts. These events provide avenues to bring relevant expertise into the dialogue and harness synergies where they exist. This engagement's efforts to cross-pollinate the various cleantech domains and to leverage existing multi-stakeholder initiatives could drive further improvement of all companies including the more advanced ones. With the Responsible Cleantech thematic engagement now well into its second year, we have come to appreciate the value of engaging not just laggards but also leaders. Once strategy and reporting have been well established, the hard work continues with implementation, turning aspirations into accomplishments with tangible environmental and social impacts.

Throughout the engagement, Sustainalytics assesses the engaged companies on five key performance indicators (KPIs) that cover governance, operational management, supply chain management, circularity, and stakeholder engagement. A scoring scale from 0.00 up to 2.00 is used for this purpose. The chart below illustrates how the EV domain continues to lead, followed by the wind domain. The solar domain reduced its backlog (mainly resulting from one company having published its first sustainability report). The hydrogen domain is singled out here for the first time. The underlying scores at the company level mainly serve to structure the dialogues.



Next Steps

To inform the agendas of the next round of engagement calls, Sustainalytics will assess the new sustainability reporting that is becoming available for the majority of the engaged companies. We can continue to focus on overall improvement for laggards and dig deeper into specific topics with leaders. Sustainalytics would also like to carve out some more significant time to leverage existing multi-stakeholder initiatives, getting more companies to commit and influence their suppliers all the way up to the mines. The theme was meant to be holistic from the outset, so there will also be opportunities to address other topics such as Science-Based Targets, the need for a circular economy and navigating the workforce of automobile manufacturers through the transition. As a way of concluding the second year of the Responsible Cleantech theme, we will identify at least one specific improvement for each company to deliver in the third year.

About Morningstar Sustainalytics

Morningstar Sustainalytics is a leading ESG research, ratings, and data firm that supports investors around the world with the development and implementation of responsible investment strategies. For 30 years, the firm has been at the forefront of developing high-quality, innovative solutions to meet the evolving needs of global investors. Today, Morningstar Sustainalytics works with hundreds of the world's leading asset managers and pension funds who incorporate ESG and corporate governance information and assessments into their investment processes. The firm also works with hundreds of companies and their financial intermediaries to help them consider sustainability in policies, practices, and capital projects. With 17 offices globally, Morningstar Sustainalytics has more than 1,200 staff members, including more than 500 analysts with varied multidisciplinary expertise across more than 40 industry groups. For more information, visit www.sustainalytics.com.

Copyright ©2022 Sustainalytics. All rights reserved.

The information, methodologies, data and opinions contained or reflected herein are proprietary of Sustainalytics and/or its third party intended for non-commercial use and may be made available to third parties only in the form and format disclosed by Sustainalytics. They are provided for informational purposes only and (1) do not constitute investment advice; (2) cannot be interpreted as an offer or indication to buy or sell securities, to select a project or make any kind of business transactions; (3) do not represent an assessment of the issuer's economic performance, financial obligations nor of its creditworthiness (4) are not a substitute for a professional advise; (5) past performance is no guarantee of future results.

These are based on information made available by the issuer and/ or by third parties, subject to continuous change and therefore are not warranted as to their merchantability, completeness, accuracy, up to dateness or fitness for a particular purpose. The information and data are provided "as is" and reflect Sustainalytics' opinion at the date of their elaboration and publication. Sustainalytics nor any of its third-party suppliers accept any liability for damage arising from the use of the information, data or opinions contained herein, in any manner whatsoever, except where explicitly required by law. Any reference to third party names is for appropriate acknowledgement of their ownership and does not constitute a sponsorship or endorsement by such owner. A list of our third-party data providers and their respective terms of use is available on our website. For more information, visit <http://www.sustainalytics.com/legal-disclaimers>.

Sustainalytics may receive compensation for its ratings, opinions and other deliverables, from, among others, issuers, insurers, guarantors and/or underwriters of debt securities, or investors, via different business units. Sustainalytics has put in place adequate measure to safeguard the objectivity and independence of its opinions. For more information visit [Governance Documents](#) or contact compliance@sustainalytics.com

Sustainalytics
info@sustainalytics.com
www.sustainalytics.com