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Second Party Opinion

Scatec ASA's Green Financing Framework

Jan. 25, 2024

Location: Norway **Sector:** Energy

Alignment With Principles

Aligned = ✔ Conceptually aligned = O Not aligned = ✘

- ✔ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)
- ✔ Green Loan Principles, LMA/LSTA/APLMA, 2023

See Alignment Assessment for more detail.

Primary contact

Catherine Baddeley
London
+44 20-7176-0459
catherine.baddeley
@spglobal.com

Dark green

Activities that correspond to the long-term vision of a low-carbon climate resilient future.

Our Shades of Green Analytical Approach >

Strengths

Scatec is a pure-play renewable energy company with a comprehensive view of sustainability and robust supply chain practices. Scatec has an ambitious target to achieve net zero across the value chain by 2040. The company actively engages with its suppliers on key sustainability topics such as lifecycle analyses, and will eventually require them to conduct such analyses. Scatec will also soon formalize its conflict-minerals policy. This policy includes traceability audits, which it already carries out.

Scatec has strong awareness and management of physical climate risks, helping it understand and address its exposure, which is high in many of its countries of operation. Scatec has built an internal tool to conduct climate scenario analyses across its assets, which we view positively. Furthermore, it has engaged a third party to conduct physical climate assessments for all its hydropower assets.

Weaknesses

No weakness to report.

Areas to watch

Scatec could make equity investments in pure players. However, Scatec stipulates that this will only be in cases where it has significant operational control via a majority stake or the majority of the voting rights. This will help ensure that the financing continues to be used for green purposes.

Scatec has diverse global operations, including in countries with high exposure to social risks. Although Scatec has experienced some social unrest relating to projects in Honduras, we believe that it has strong policies and practices in place to manage social risks, including those relating to communities.

Eligible Green Projects Assessment Summary

Eligible projects under Scatec's green finance framework are assessed based on their environmental benefits and risks, using Shades of Green methodology.

Renewable energy	**Dark green**
Investments and related expenditures directed to the acquisition, development, construction, operation, and maintenance of solar, wind, and hydropower assets. This includes renewable energy to power hydrogen production.	

Energy storage and other energy solutions	**Dark green**
Investments in energy storage or other solutions relating to renewable energy.	

See Analysis Of Eligible Projects for more detail.

Issuer Sustainability Context

This section provides an analysis of the issuer's sustainability management and the embeddedness of the financing framework within its overall strategy.

Company Description

Scatec and its subsidiaries provide renewable energy solutions worldwide. Scatec is headquartered in Oslo, Norway, and listed on the Oslo Stock Exchange. It develops, builds, owns, and operates solar, wind, and hydropower plants and storage solutions. By the end of September 2023, the company had a total pipeline of projects totaling 10,184 megawatts (MW), comprising solar (52%), wind (22%), hydropower (11%), and green hydrogen (12%). As of Sept. 30, 2023, the company's revenue over the previous 12 months stood at Norwegian krone (NOK) 3,266 million (equivalent to about €289.3 million). The company has operations in 15 countries, with the largest generation capacity in the Philippines (649 MW), followed by Laos (525 MW). Scatec acquired SN Power in 2021, which resulted in notable increases in Scatec's hydropower portfolio.

Material Sustainability Factors

Climate transition risks

Power generation is the largest direct source of GHG emissions globally, making this sector highly susceptible to growing public, political, legal, and regulatory pressure to accelerate climate goals. Public awareness of the urgency for climate action has reached a turning point. In turn, policymakers and regulators push more often for a faster transition to lower-carbon energy, especially as the technologies become more mature and cost competitive. Over the past decade, we have seen multibillion-dollar fines for the most polluting assets, reflecting their weaker economic parameters as taxes increase and they are displaced by new, cleaner technologies. In addition, more stringent decarbonization rules may sometimes restrict players' license to operate. The number of countries announcing pledges to achieve net-zero emissions over the coming decades continues to grow. However, climate-change policies and regulations in the Asian and African countries where Scatec operates are often still in their infancy, perhaps raising uncertainty about their climate transition. With no direct emissions, renewable energy technologies have a vital role to play in reducing the emissions associated with power and heat. This will be vital for limiting the global temperature rise to 1.5 C.

Physical climate risks

Due to the fixed nature of the assets, generators have more exposure to physical climate risks than in other sectors. For stakeholders, extreme weather events, including wildfires, hurricanes, and storms, are becoming more frequent and severe and can result in power outages for large numbers of users. As water is often a significant resource for hydropower generation, drought can impair operations. In turn, these dynamics, coupled with regulatory pressure to preserve security of supply, are driving players to enhance the resilience of the assets. Physical climate risks generally involve significant financial losses for operators due to repairs, but, more importantly, exposure to extreme power-price spikes or claims from customers due to business disruption. We expect these dynamics to continue but vary regionally depending on regulatory responses. According to the World Bank, many of the countries where Scatec has operations are highly vulnerable to physical risks such as floods, cyclones, droughts, and landslides.

Biodiversity and resource use

Renewable power generation, which is increasing to meet climate goals, requires large areas of land that often encompass sensitive habitats, where it can alter ecosystems, harm threatened species, and compete with other valuable land uses (for example, agriculture). This is especially pertinent for hydropower plants, which, if not properly managed, may pose biodiversity risks, such as habitat disruption, modified water flow, and hindrances to fish migration.

Waste and recycling

End-of-life management of power plants--the dismantling, recycling, and/or processing of waste--exposes companies to financial, reputational, and/or litigation risks if not properly planned and provisioned.

Impact on communities

The need for renewable power development relating to climate goals intensifies the materiality for stakeholders. Moreover, sites with high renewable potential are often in or near communities including indigenous groups, which can prompt strong local opposition.

Issuer And Context Analysis

All the project financing categories aim to address some of Scatec's material sustainability factors. Both the renewable energy and energy storage and other energy solutions project categories aim to address climate transition risks. On the other hand, the framework introduces risks such as physical climate risks, biodiversity risks, and risks relating to local communities. However, the energy storage and other energy solutions project category partially addresses physical climate risks. For example, stored energy will be useful when adverse weather conditions prevent electricity generation from renewable assets.

Scatec has integrated eligible projects into its robust sustainability strategy. Under this strategy, Scatec focuses on becoming a leader in developing, building, owning, and operating renewable energy assets, including those to produce green hydrogen. More specifically, the company intends to invest between NOK500 million and NOK750 million annually in renewable energy projects. Furthermore, Scatec has ambitious targets to get to net zero across its value chain by 2040. In 2022, scope 3 greenhouse gas (GHG) emissions constituted around 99% of total emissions due to an increase in the purchase of components for solar projects currently under construction. The company's short-term goal is to reduce scope 3 GHG emissions by 55% per kilowatt hour (kWh) and absolute scope 1 GHG emissions by 95% by 2030 from the base year, 2019.

Scatec's long-term targets comprise a reduction of scope 3 GHG emissions by 97% per kWh by 2040 and absolute scope 1 and 2 GHG emissions by 99% between 2030 and 2040. Additionally, the company's short- and long-term targets are validated by the Science Based Targets initiative in line with strong market practices. We take a positive view of the fact that Scatec has carried out lifecycle assessments to identify emission hotspots, and has initiatives in place to tackle these emissions. For example, Scatec aims to increase the use of recycled materials such as recycled steel. Furthermore, to manage scope 3 emissions, Scatec has strong supplier practices, including engagement on relevant topics like lifecycle assessments. To manage its own emissions, Scatec aims to electrify all its maintenance vehicles and install electric-vehicle charging points across its power plants**.** The company's disclosures are comprehensive; its ESG Performance Report 2022 is verified by a third party with limited assurance.

Physical climate risk is key for Scatec due to its geographical diversity and the fixed nature of its assets. Scatec has operations in 15 countries, including the Philippines, Malaysia, Brazil, and South Africa, which have high exposure to physical climate risks such as heavy precipitation, floods, and storms. To address these risks, Scatec has conducted extra flood assessments, and constructed all sites with an enhanced flood design that reduces the risk of a complete loss of production. In 2022, it conducted a climate risk assessment for all projects, particularly its hydropower assets. We take a positive view of the fact that Scatec has worked to build internal tools and skills to analyze physical climate risks under the Representative Concentration Pathway (RCP) 4.5 and RCP 8.5 scenarios.

Scatec addresses biodiversity risks in the construction of new projects through environmental and social impact assessments. Renewable energy projects have environmental benefits, but

they can have a negative impact on biodiversity, particularly hydropower projects. To identify project-related risks and impacts, Scatec conducts environmental and social risk assessments, and biodiversity considerations are part of Scatec's environmental and social due diligence for all new projects. In addition to assessments conducted by third-party experts, Scatec introduced an environmental and social screening tool in 2022 that includes a review of biodiversity conditions in the early stages of development, for all projects. Furthermore, Scatec commits to comply with IFC Performance Standards, and we take a positive view of the company's intention to carry out biodiversity offsets to compensate for the adverse effects on flora and fauna where it cannot mitigate the project impact.

Scatec helps increase renewable energy generation in South Africa, where the grid relies heavily on fossil fuels (86.97%). Scatec has made its largest investment in the Kenhardt solar and battery projects in South Africa, amounting to 540 MW of solar power and 225 MW of battery storage. In the past 10 years, Scatec has been delivering clean energy to South Africa, which is one of its key markets, representing 6% of Scatec's total operation capacity and 43% of its new construction capacity as of September 2023.

Scatec operates in countries with high exposure to social risks and where the construction of new projects may have negative impacts on Scatec's relationships with local communities. Although the company experienced social unrest in connection with its solar projects in Honduras in 2015, there has been no evidence of major community opposition since. We view as positive that Scatec resolved the issue through the establishment of a community house as a place for neutral dialogue, including forums, meetings, and a social program, along with the active engagement of Scatec's social team. Furthermore, to maintain good relations, Scatec holds regular meetings with local leaders and representatives in the communities closest to its project sites, and executive management monitors the material matters that the communities raise on a bi-weekly basis. On the other hand, social risks along the supply chain relate to human rights, and Scatec manages the sourcing of conflict minerals through robust procurement policies, including supplier due diligence based on OECD guidelines, regular audits, suppliers' development programs, and a draft conflict-mineral policy. Although Scatec is yet to formally finalize this policy, we understand that it already uses it in practice.

Alignment Assessment

This section provides an analysis of the framework's alignment to Green Bond and Green Loan principles.

Alignment With Principles

Aligned = ✔ Conceptually aligned = O Not aligned = ✘

- ✔ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)
- ✔ Green Loan Principles, LMA/LSTA/APLMA, 2023

✔ Use of proceeds

All the framework's green project categories are shaded green, and the issuer commits to allocate the net proceeds issued under the framework exclusively to eligible green projects. Please refer to the "Analysis Of Eligible Projects" section below for more information on our analysis of the environmental benefits of the expected use of proceeds.

Scatec will allocate the net proceeds from instruments issued under the framework to finance or refinance eligible green projects, which include those relating to renewable energy, energy storage, and other energy solutions. Scatec may allocate some proceeds to investments in shares of pure-play companies that generate a minimum of 90% of their revenue from green activities. The risk that these pure-play companies become no longer eligible, or use the financing for activities not considered to be green, is limited by the fact that Scatec will have significant operational control of the companies. Although Scatec stipulates that the lookback period to refinance operational expenditure is three years, in line with market practice, there will be no limitation on the look-back period for capital expenditure. This could limit the impact of some projects or refinanced assets that were originally financed many years ago. Scatec will disclose the proportion of proceeds used for financing versus refinancing.

✔ Process for project evaluation and selection

The framework outlines the process to select and approve eligible projects and assets. The Green Finance Committee manages the selection process, with all decisions made on a consensual basis. All projects and assets need to meet the eligibility criteria outlined in the framework in order to be financed. Scatec will carry out an environmental and social impact assessment for all projects to identify and manage their potential environmental and social risks. We take a positive view of the fact that Scatec clearly outlines an exclusion list, including fossil fuel-energy generation; projects that entail the ownership of diesel generators as back-up sources of electricity; and stand-alone projects involving highly polluting activities such as oil and gas production, mining, and nuclear energy generation, among others.

✔ Management of proceeds

Scatec will use a green financing register to track and monitor the allocation of proceeds issued under the framework. Furthermore, in the case that projects and assets are sold, or no longer in line with the framework's eligibility criteria, Scatec will, to the extent possible, replace them with other eligible assets and projects. Scatec will manage unallocated proceeds in line with its liquidity policy. We take a positive view of the fact that the framework's exclusion criteria also apply to the unallocated proceeds.

✔ Reporting

Scatec commits to public annual allocation and impact reporting until full allocation. However, in the case that the only green financing instruments outstanding are bank or private debt, Scatec may only report directly to the relevant lenders. The impact reporting will, to some extent, be based on aggregated data, with calculations made on a best-estimate basis. Metrics may include annual energy generation (megawatt hour [MWh] or gigawatt hour); capacity of plants constructed or rehabilitated (MW or GW); GHG emissions avoided (tons of carbon dioxide equivalent); and capacity of electricity storage installed (MWh). We take a

positive view of the fact that Scatec will carry out a post-issuance review, including limited assurance on the allocation of proceeds across the project categories.

Analysis Of Eligible Projects

This section provides details of our analysis of eligible projects, based on their environmental benefits and risks, using the Shades of Green methodology.

Scatec expects to allocate the majority of the proceeds to refinancing projects, while it will direct a minority of the proceeds to financing new projects. Of the new projects, over the three years following the issuance, Scatec expects to allocate around 70% of new financing to solar and energy storage, 20% to wind, and 10% to renewable energy supporting green hydrogen production.

Activities that correspond to the long-term vision of a low-carbon climate resilient future.

Our Shades of Green Analytical Approach >

Overall Shades of Green Assessment

Based on the project category shades of green detailed below, and our consideration of the environmental ambitions in Scatec's Green Finance Framework, we assess the framework Dark Green.

Green project categories

Renewable energy

Assessment	Description
Dark green	Investment activities and related expenditures directed toward the acquisition, development, construction, operation, improvement, and maintenance of electricity generation facilities that produce electricity from: • Solar power • Wind power • Hydropower • Hydrogen

Analytical considerations

- Renewable energy, such as solar, wind, and hydro energy, is key to a low-carbon and climate-resilient future, and these projects are shaded dark green. Potential environmental risks, including the impact on local biodiversity, are well managed through environmental and social impact assessments and plans to mitigate these risks. Potential green hydrogen projects can be related to different parts of green fuel value chains and green ammonia. This includes renewable energy assets to power green hydrogen production and the processing to end products. Given hydrogen production will be based entirely on renewable energy, and that the risk of hydrogen leakage is limited due to its conversion to fuel and ammonia, we also assess these projects as Dark green.
- Renewable energy projects can be either connected to the grid or stand alone. However, we take a positive view of the fact that the latter will not involve highly polluting activities such as oil and gas production and mining, meaning that the risk of locking in such polluting activities is limited. Also excluded from the use of proceeds are projects that include diesel generators as a back-up source of energy.
- Green hydrogen is in line with the LCCR future due to its low emissions and potential applications in otherwise difficult-to-decarbonize industrial processes and transportation, as well as its energy storage potential. While hydrogen leakage risks are limited for Scatec's planned projects, since the hydrogen will be converted directly into green ammonia or other green hydrogen

derivatives (e.g. methanol, kerosene), these risks are important to monitor and manage. Furthermore, green hydrogen production requires sufficient water supplies, introducing potential physical climate risks related to droughts and water availability. Green fuels that the hydrogen may be converted into include methanol or kerosine, and the kerosine may be used for sustainable aviation fuel. Other environmental risks associated with the end use of products, including on-field ammonia emissions when it is used as a fertilizer, are important to manage.

- Hydropower dams can have high GHG emissions. Scatec is managing this by setting a lifecycle emissions intensity limit of 100 grams of carbon dioxide equivalent per kWh for all new projects. This in line with the EU Taxonomy's technical screening criteria for hydropower, which we view positively in our assessment.
- All construction projects can have adverse local environmental effects. It is positive that Scatec's public environmental policy clearly outlines how it manages such environmental effects, including those relating to climate, biodiversity, waste, and water risks. In particular, Scatec carries out environmental and social impact assessments for all projects, resulting in environmental and social action plans to mitigate any residual risks. Scatec elaborates on the management of environmental risks in its sustainability reporting. For example, Scatec developed an environmental and social screening tool in 2022 that includes a review of biodiversity conditions and inclusion of considerations in the early stages of development for all projects.
- Scatec has developed internal physical climate risk expertise and has built an internal tool that it will apply to all new projects. The tool uses regional data from the World Bank Climate Change Knowledge Portal and considers relevant hazards, such as extreme heat and increased rainfall, in high-emission and intermediate-emission scenarios. Furthermore, the environmental and social impact assessments also cover physical climate risks such as flood risk.
- Scatec's supplier-management processes are solid. The company has a target to reduce scope 3 GHG emissions, including from the supply chain, by 97% per kWh by 2040 compared to 2019 levels. It aims to achieve this by encouraging, and eventually requiring, suppliers to carry out lifecycle assessments, and, where possible, replace fossil fuels with low-carbon electricity, among other actions. Furthermore, the company engages with suppliers on such topics and encourages them to set their own emission-reduction targets. We expect that this will help Scatec manage the embodied emissions associated with the materials it uses in its projects.

Energy storage, and other energy solutions

Assessment	Description
Dark green	Investments in energy storage and other energy solutions to accommodate the build-out and integration of renewable energy.

Analytical considerations

- Energy storage solutions can help mitigate the volatility of renewable energy systems, including solar, against climate risks, such as extreme changes in weather. These investments therefore contribute to a low-carbon and climate-resilient future, supporting the dark green shading.
- Battery storage requires high volumes of environmentally sensitive materials and the supply chains for these materials need to be managed appropriately to avoid adverse social and environmental repercussions. Scatec manages this through its procurement policy and draft policy on conflict materials. We take a positive view of the fact that Scatec is formalizing its processes to manage conflict materials, including carrying out traceability audits, which we consider a strong practice.
- Examples of "other energy solutions" are high-voltage substations, dedicated transmission lines, and power management systems. Such solutions support the integration of renewable energy systems into the grid to supply customers, thus supporting end users' decarbonization objectives.

S&P Global Ratings' Shades of Green

Assessments	Dark green	Medium green	Light green	Yellow	Orange	Red
Description	Activities that correspond to the long-term vision of an LCCR future.	Activities that represent significant steps toward an LCCR future but will require further improvements to be long-term LCCR solutions.	Activities representing transition steps in the near-term that avoid emissions lock-in but do not represent long-term LCCR solutions.	Activities that do not have a material impact on the transition to an LCCR future, or, Activities that have some potential inconsistency with the transition to an LCCR future, albeit tempered by existing transition measures.	Activities that are not currently consistent with the transition to an LCCR future. These include activities with moderate potential for emissions lock-in and risk of stranded assets.	Activities that are inconsistent with, and likely to impede, the transition required to achieve the long-term LCCR future. These activities have the highest emissions intensity, with the most potential for emissions lock-in and risk of stranded assets.
Example projects	Solar power plants	Energy efficient buildings	Hybrid road vehicles	Health care services	Conventional steel production	New oil exploration

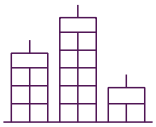
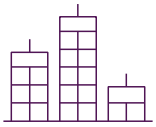
Note: For us to consider use of proceeds aligned with ICMA Principles for a green project, we require project categories directly funded by the financing to be assigned one of the three green Shades.

LCCR--Low-carbon climate resilient. An LCCR future is a future aligned with the Paris Agreement; where the global average temperature increase is held below 2 degrees Celsius (2 C), with efforts to limit it to 1.5 C, above pre-industrial levels, while building resilience to the adverse impact of climate change and achieving sustainable outcomes across both climate and non-climate environmental objectives. Long term and near term--For the purpose of this analysis, we consider the long term to be beyond the middle of the 21st century and the near term to be within the next decade. Emissions lock-in--Where an activity delays or prevents the transition to low-carbon alternatives by perpetuating assets or processes (often fossil fuel use and its corresponding greenhouse gas emissions) that are not aligned with, or cannot adapt to, an LCCR future. Stranded assets--Assets that have suffered from unanticipated or premature write-downs, devaluations, or conversion to liabilities (as defined by the University of Oxford).

Mapping To The U.N.'s Sustainable Development Goals

Where the Financing documentation references the Sustainable Development Goals (SDGs), we consider which SDGs it contributes to. We compare the activities funded by the Financing to the International Capital Markets Association (ICMA) SDG mapping and outline the intended linkages within our SPO analysis. Our assessment of SDG mapping does not impact our alignment opinion.

This framework intends to contribute to the following SDGs:

Use of proceeds	SDGs			
Renewable energy	 **7. Affordable and clean energy***	 **8. Decent work and economic growth***	 **9. Industry, innovation and infrastructure***	 **11. Sustainable cities and communities***
Energy storage, and other energy solutions	 **7. Affordable and clean energy**	 **8. Decent work and economic growth**	 **9. Industry, innovation, and infrastructure**	 **11. Sustainable cities and communities**

*The eligible project categories link to these SDGs in the ICMA mapping.

Related Research

- Analytical Approach: Second Party Opinions: Use of Proceeds, July 27, 2023
- FAQ: Applying Our Integrated Analytical Approach for Use-of-Proceeds Second Party Opinions, July 27, 2023
- Analytical Approach: Shades of Green Assessments, July 27, 2023
- S&P Global Ratings ESG Materiality Maps, July 20, 2022

Analytical Contacts

Primary contact

Catherine Baddeley
London
+44 20-7176-0459
catherine.baddeley
@spglobal.com

Secondary contacts

Irina Velieva
Stockholm
+749-5783-4071
irina.velieva
@spglobal.com

Maria Myrvoll Knudsen
Oslo
+47-9414-3562
maria.kundsen
@spglobal.com

Research contributor

Sreenidhi M K
Pune