S&P Global
Ratings

Powered by Shades of Green

An S&P Global Second Party Opinion (SPO) includes S&P Global Ratings' opinion on whether the documentation of a sustainable finance instrument, framework, or program, or a financing transaction aligns with certain third-party published sustainable finance principles. Certain SPOs may also provide our opinion on how the issuer's most material sustainability factors are addressed by the financing. An SPO provides a point-in-time opinion, reflecting the information provided to us at the time the SPO was created and published, and is not surveilled. We assume no obligation to update or supplement the SPO to reflect any facts or circumstances that may come to our attention in the future. An SPO is not a credit rating and does not consider credit quality or factor into our credit ratings. See Analytical Approach: Second Party Opinions.

Second Party Opinion

SFE Green Bond Framework

March 17, 2025

Location: Norway **Sector:** Energy

Primary contact

Alexander Volden
Oslo
+4721958337
alexander.volden
@spglobal.com

Alignment Summary

Aligned = ✓ Conceptually aligned = ○ Not aligned = ✗

✓ Green Bond Principles, International Capital Markets Association (ICMA), 2021 (with June 2022 Appendix 1)

See Alignment Assessment for more detail.

Dark green

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

Our Shades of Green Analytical Approach >

Strengths

Eligible projects will support Norway's climate targets. There is a need for additional renewable generation capacity and the expansion and strengthening of power grids to support electrification across sectors in Norway.

The framework will contribute to increasing the climate resilience of Norwegian renewable energy systems. Given the risks of river flooding and higher levels of precipitation in Norway, we see eligible projects--including the fortification of hydropower facilities and dams--as a strength.

Weaknesses

No weaknesses to report.

Areas to watch

Sogn og Fjordane Energi AS (SFE) will update its decarbonization targets and reduction strategy in spring 2025. The issuer's emissions reporting and decarbonization targets will be adjusted to reflect the current structure of the SFE group, after several companies exited it in recent years.

Issuance proceeds may finance equity investments, including minority stakes. This could limit the issuer's ability to track the associated environmental effects and fully control investees' activities. The issuer will only include companies where at least 90% of revenue comes from green projects and only keep those investments over which it has sufficient control in the portfolio.

Shades of Green Projects Assessment Summary

Over the three years following issuance of the financing, SFE expects to allocate most proceeds to the renewable energy category and a minority to the other categories.

The issuer expects 10% of proceeds to be allocated to refinancing projects, while 90% of proceeds will be directed to finance new projects.

Based on the project categories' Shades of Green detailed below, the expected allocation of proceeds, and the consideration of environmental ambitions reflected in SFE's Green Bond Framework, we assess the framework Dark Green.

Renewable energy	**Dark green**
Hydro power	
Wind	
Green hydrogen	
Bioenergy	

Energy efficiency	**Dark green**
Transmission and distribution	

Climate change adaptation	**Dark green**
Implementation of adaptation solutions	

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

SFE is a Norway-based energy production company in Vestland, Norway. The group's business areas are renewable energy generation with its main focus on hydropower, but it also focuses on wind, hydrogen, and bioenergy. Through its ownership in associated companies, SFE is engaged in other areas such as the transmission and distribution of electricity. The company's total operational income for 2023 was Norwegian krone (NOK) 2.488 billion (about €213 million). SFE has approximately 100 employees and is owned by Sogn og Fjordane Holding AS (49.51%), Eviny AS (36.8%), and six municipalities (Kinn, Gloppen, Bremanger, Stad, Askvoll, and Sunnfjord).

Material Sustainability Factors

Climate transition risk

Power generation is the largest direct source of greenhouse gas (GHG) emissions globally, making this sector highly susceptible to increasing public, political, legal, and regulatory pressure to accelerate climate goals. With no direct emissions, renewable energy technologies have a vital role to play in reducing emissions associated with power and heat. Electricity networks play a critical role in the energy delivery value chain, as more efficient, reliable, and flexible grids are critical enablers of renewable energy integration. Public awareness of the urgency for climate action has reached a turning point. As a result, policymakers and regulators are increasingly pushing for a faster transition to lower-carbon energy, especially as these technologies become more mature and cost competitive. Norway's climate goals place great emphasis on electrification and new green industries, thereby accelerating demand for renewable power.

Physical climate risk

Fixed physical assets like hydropower generation, wind power assets, and grid infrastructure are relatively more exposed to physical climate risks than other sectors. For stakeholders, climate hazards--including wildfires, hurricanes, and storms--are becoming more frequent and severe and can result in power outages. As water is a significant resource for hydropower generation, exposure to flooding, drought, or warmer temperatures can also negatively affect operations. In turn, these dynamics, coupled with regulatory pressure to preserve security of supply, are driving operators to enhance the resilience of assets. The physical climate risks may involve financial losses for operators due to repairs and, more importantly, from exposure to extreme power price spikes or claims due to business disruption. We expect these dynamics to continue but to vary regionally, depending on regulatory responses. Key risks in Norway relate to increased extreme heat events, rising sea levels, flash floods, and increases in annual mean temperature and precipitation.

Biodiversity and resource use

Renewable power, which is increasing to meet climate goals, requires large areas of land that can be located in sensitive habitats where they can alter ecosystems and impact species. In most jurisdictions, local regulations require renewable projects to be accompanied by environmental impact assessments to identify biodiversity risks, as well as mitigation measures to avoid or reduce potential harm. In addition to siting concerns, renewable energy infrastructure construction, operation, and maintenance can entail ecosystem disruption and biodiversity risks if sufficient safeguards are not put in place. 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.

Impact on communities

Community impacts are more acute for stakeholders, given how close electricity networks are to where people live and work, and that energy is essential for community health and wellbeing. Sites with high renewable energy potential are often in or near communities, which can prompt strong local opposition, including in cases of shared resources such as water.

Issuer And Context Analysis

The framework's project categories aim to address SFE's most material sustainability factors. Investment in renewable energy makes up most of the allocated proceeds under this framework and plays a crucial role in increasing Norway's clean energy supply and addressing climate transition risk. Biodiversity factors are also relevant for renewable energy generation and distribution networks, and these are mitigated by regulatory requirements and the issuer's efforts to minimize negative effects in both the planning and operation of projects. Physical climate risk is also highly relevant to renewable energy and distribution networks, which the issuer intends to address through climate adaptation projects.

The project categories focus on increasing power generation, upgrading and expanding distribution networks, and increasing the resilience of assets to physical climate risks in Norway. Investments eligible under the framework will contribute to SFE's 2040 goal to achieve 1.6 terawatt-hour in new power production for hydro and wind power. Furthermore, new grid projects will help expand grid capacity for the renewable energy market and play an important role in Norway's efforts to meet its climate targets.

SFE reports on scopes 1, 2, and 3 and has developed strategies to reduce these emissions. The company's scope 1 and 2 emissions make up roughly 5% of the emissions and stem mainly from the use of diesel and energy consumption in buildings and operations. Scope 3 is by far the largest source of emissions for the company, and these arise predominantly from material use further upstream in the value chain. The company has set a short-term target to reduce GHG emissions by 50% by 2030. Due to changes in the organization, SFE's climate targets will be updated during spring 2025. To achieve this target, SFE has identified the need optimize the use of electricity instead of fossil fuels, increase the number of electric vehicles in its fleet, and reduce energy consumption through energy efficiency measures in its own buildings and power plants. Furthermore, to address its scope 3 emissions the issuer has identified the need to use low emissions building materials such as low carbon steel and low carbon concrete where applicable. SFE is in the process of updating its decarbonization targets in spring of 2025 and will also update its procurement processes where it will emphasize more climate and environmental considerations. The issuer's emissions reporting and decarbonization targets will be adjusted to reflect the current structure of the SFE group, after several companies have exited it in recent years.

Physical climate risks, such as heavy precipitation, wind and thunderstorms, and rising sea levels, pose risks to the issuer's operations. To mitigate physical climate risks, the licensing process for projects takes into consideration projections of future flood patterns based on a changing climate. Furthermore, we view SFE use of scenarios (by the Intergovernmental Panel on Climate Change) SSP1 -2.6 and SSP3 – 7.0 to identify physical climate risks as positive. The issuer has identified the opportunity to upgrade existing hydropower plants and incorporate emergency plans when there are heavy rainfall warnings in addition to adapting production of energy to these changes to prevent damage. The company has further identified the need for backup systems in case of grid failures and ensures that climate adaptation is incorporated in the design of new facilities.

SFE complies with the concession processes established by Norwegian authorities, recognizing the biodiversity and land-use risks associated power and grid infrastructure construction. The Norwegian Water Resources and Energy Directorate (NVE) requires energy and grid developers to conduct biological diversity surveys. SFE's environmental policies take

biodiversity into account and safeguards threatened or vulnerable species. The issuer aims for the proportion of untouched nature and land used for power plants to be at a minimum as well as to involve environmental expertise, to evaluate environmental aspects of projects.

As part of the planning process, SFE initiates early dialogue with landowners and local communities to discuss project details. Beyond the formal consultation requirements, SFE commonly holds information meetings to present plans and gather questions and feedback from the public. The Norwegian permit system, overseen by NVE, includes structured processes for stakeholder participation and consultation, ensuring that affected parties can voice concerns regarding potential external effects of power projects.

Alignment Assessment

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

Alignment Summary

Aligned = ✓ Conceptually aligned = o Not aligned = ×

✓ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)

✓ Use of proceeds

We assess all green project categories under the framework as having a green shade and we consider them aligned with the above principles. SFE commits to allocate the net proceeds issued under the framework exclusively to eligible green projects (capital expenditure, acquisitions, and refinancing), contributing to specific environmental goals. Proceeds can also be used to finance or refinance investments in the share capital of companies and partnerships where at least 90% of revenues can be attributed to green projects. Furthermore, the framework's exclusion criteria would prevent the inclusion of those companies if they had residual operations in activities such as fossil energy production. Please refer to the Analysis of Eligible Projects section for more information on our analysis of the environmental benefits of the expected use of proceeds. The company will disclose the proportion of financing compared with refinancing in their allocation reporting. The maximum look-back period is three years, which is in line with market practice.

✓ Process for project evaluation and selection

SFE has a green bond committee, comprising representatives from finance, treasury, communications, and sustainability teams, and all decisions will be made in consensus. The committee plans to meet every six months to screen and approve the potential projects. The company has processes to identify and manage environmental and social risks related to eligible projects. The framework's exclusion list covers topics such as fossil energy generation, weapons and defense, potentially environmentally harmful resource extraction, gambling, and tobacco.

✓ Management of proceeds

SFE will track the net proceeds after the issuance of a green bond. The company commits to replacing projects that cease to comply with the framework's eligibility criteria as soon as practicable. Pending allocation, net proceeds will be temporarily placed in the liquidity reserve and managed accordingly by SFE. The framework's exclusion criteria apply to the management of unallocated proceeds, adding consistency to the company's spending.

✓ Reporting

SFE has committed to reporting annually on the allocation of the net proceeds and on the financed projects' effect, until full allocation of the net proceeds. Reporting will be available on the company's website in the Green Bond Report. Allocation reporting will include the total amount of instruments outstanding, a brief description of the projects, and the breakdown of allocation of net proceeds by eligible category. SFE will also report on the actual or expected effect of the financed projects and, where applicable, will leverage key performance indicators based on the impact reporting principles of the Nordic Public Sector Issuers Position Paper on Green Bond Impact Reporting.

Analysis Of Eligible Projects

This section provides details of our analysis of eligible projects, based on their environmental benefits and risks, using the "Analytical Approach: Shades Of Green Assessments".

Overall Shades of Green assessment

Based on the project category shades of green detailed below, the expected allocation of proceeds, and consideration of environmental ambitions reflected in SFE's Green Bond Framework, we assess the framework as dark green.

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

Our Shades of Green Analytical Approach >

Green project categories

Renewable energy

Assessment	Description
Dark green	Expenditures related to construction, acquisition, development, installation, operation, maintenance, and upgrades of renewable energy production, related infrastructure, as well as related research and development (R&D) programs. Eligibility Criteria: Hydropower: Eligible EU Taxonomy activity: 4.5. Electricity generation from hydropower. Facilities that comply with either of the following criteria: • The electricity generation facility is a run-of-river plant and does not have an artificial reservoir; • The power density of the electricity generation facility is above 5 W/m2; or • The life cycle GHG emissions from the generation of electricity from hydropower, are lower than 100 grams of carbon dioxide-equivalents per kilowatt-hour (g carbon dioxide-equivalents/kWh). Wind power: Eligible EU Taxonomy activity: 4.3. Electricity generation from wind power. • Facilities (onshore and offshore) that produce electricity from wind power. Hydrogen: Eligible EU Taxonomy activities: 3.10. Manufacture of hydrogen; 4.12 Storage of hydrogen; 4.14 Transmission and distribution networks for renewable and low-carbon gases. • Facilities that produce hydrogen with renewable sources; • Hydrogen storage facilities; and • Hydrogen transmission and distribution pipelines.

Bioenergy: Eligible EU Taxonomy activities: 4.8. Electricity generation from bioenergy; 4.13. Manufacture of biogas and biofuels for use in transport and of bioliquids; 4.20. Cogeneration of heat/cool and power from bioenergy; 4.24. Production of heat/cool from bioenergy.

- Facilities that produce heat/cool, power, or cogenerate heat/cool and power exclusively from biomass, biogas or bioliquids; and
- Facilities that manufacture biogas and biofuels for use in transport and of bioliquids.

Inputs are sustainably sourced biomaterials that comply with the EU Renewable Energy Directive (RED) and its requirement on GHG reductions.

Analytical considerations

- Renewable energy projects such as hydroelectric, wind, green hydrogen, and bioenergy are key to limiting global warming to well below 2 degrees Celsius, provided their negative effects on local environments, and physical risks, are sufficiently mitigated. According to the Internation Energy Agency (IEA), most of Norway's electricity supply comes from hydropower (88%), alongside an increasing contribution from wind power (10%). As of 2022, renewables accounted for 98.5% of power generation with the remainder from natural gas and waste.
- SFE expects most proceeds under this framework to go toward hydropower investments and some toward wind assets, which we assess as Dark green because these projects support increasing renewable energy generation and Norway meeting its national emissions targets. The issuer has informed us that it does not intend for any of the proceeds to be invested in hydrogen or bio-energy projects, which are included in this category. We still assess those projects independently as dark green due to their low emission energy potential, safeguards around feedstocks, and minimizing transportation emissions. SFE informs us that feedstocks would be from agricultural waste, aquaculture waste, and food waste sourced locally and in compliance with the RED criteria. Additionally, the issuer has taken measures to address physical climate risks, biodiversity impacts, and circularity within its value chain. As a result, we assign the entire category a Dark green shade.
- SFE's assets under the financing framework are exposed to physical climate risks, such as changing rainfall patterns, windstorms, frequent occurrences of lightning, and extreme weather events. These events, which are becoming more frequent and severe, can cause network service disruptions and other operational stoppages. The issuer conducts climate risk assessments to confirm its facilities can withstand climate change and severe weather conditions, as required by NVE. SFE has measures to address the physical climate risks identified for both hydro and wind assets which include upgrading existing power plants, adapting production to changing precipitation patterns, emergency plans for heavy rainfall warnings, backup systems, and ensuring climate adaptation as part of the design of new assets.
- Renewable energy sources like hydro and wind can have negative effects on local biodiversity. SFE follows strict requirements related to licenses/concessions before building new assets, as required by NVE. The Norwegian legislation relating to environmental impact assessments provides detailed procedures to be followed for projects that have an effect on the environment, either through their size, production volume, or the proposed location. Previously, the issuer has sought mitigation solutions to secure fish migration in rivers and has funded research to improve designs of hydropower assets for environmental consideration. SFE has also monitored bird migration in areas it has wind operations by conducting field studies with the use of radar.
- Hydropower projects can generate significant emissions during the construction phase and from water reservoirs. It is a positive aspect that the framework aligns with the EU Taxonomy's criteria for making a substantial contribution to climate change mitigation. The issuer has also indicated that life cycle emissions, including those from construction, are a key factor in larger projects, with an emphasis on minimizing the environmental impact. Reducing the carbon footprint in procurement processes, such as sourcing low-carbon steel and concrete where applicable and limiting land use where feasible, reduces the environmental impact. SFE also prioritizes material recyclability by sorting waste and transporting it to designated waste management facilities but has not set specific targets for projects under this framework.

Energy efficiency

Assessment	Description

Dark green	Expenditures related to the construction, acquisition, development, expansion, upgrade, operation, maintenance, and interconnection of energy and transmission systems as well as their associated infrastructure and related R&D programs.
	
	Eligibility Criteria:
	
	Transmission and distribution: Eligible EU Taxonomy activities: 4.9 Transmission and distribution of electricity.
	
	• Transmission and distribution infrastructure or equipment is in an electricity system that complies with at least one of the following criteria:
	  o The system is the interconnected European system, i.e. the interconnected control areas of member states, Norway, Switzerland, and the U.K., and its subordinated systems;
	  o More than 67 % of newly enabled generation capacity in the system is below the generation threshold value of 100 g carbon dioxide-equivalents/kWh measured on a life cycle basis in accordance with electricity generation criteria, over a rolling five-year period; or
	  o The average system grid emissions factor, calculated as the total annual emissions from power generation connected to the system, divided by the total annual net electricity production in that system, is below the threshold value of 100 g carbon dioxide-equivalents/kWh measured on a life cycle basis in accordance with electricity generation criteria, over a rolling five-year period.
	• Installation and maintenance of equipment to increase controllability and observability of the electricity system and enable the development and integration of renewable energy sources, including:
	  o Sensors and measurement tools (including meteorological sensors for forecasting renewable production);
	  o Communication and control (including advanced software and control rooms, automation of substations or feeders, and voltage control capabilities to adapt to more decentralized renewable infeed); and
	  o Demand side management (including smart grids).
	
	Energy storage: Eligible EU Taxonomy activity: 4.10 Storage of electricity
	
	• Facilities that store electricity and return it later in the form of electricity. The activity may include pumped hydropower storage.

Analytical considerations

- Reliable and efficient electricity transmission and distribution networks are important in supporting electrification and achieving a low-carbon economy. Investments in making grids more flexible and strengthening their resilience to physical risks, coupled with measures to reduce transmission losses, are needed. At the same time, careful network management is essential to avoid disrupting habitats and harming biodiversity, particularly in areas of high ecological value. According to the IEA, more electrification will be needed across sectors to meet Norway's climate targets, which will require the expansion and strengthening of power grids to accommodate the increasing demand for electricity.
- We assess investments in electricity transmission and distribution, smart grids, and energy storage solutions under this framework as Dark green, given their enabling role in the transition, supporting regional renewable energy growth, and the low carbon intensity of Norway's grid. The issuer has confirmed that proceeds will not be used to finance connections to fossil fuel power sources or oil and gas assets, such as refinery electrification.

- SFE informs us that due to the divestment, it is unlikely that this category would be used. Assets eligible under this category should have undergone climate risk assessments to ensure that they can withstand climate change and severe weather, as required by the NVE.
- Distribution assets may have local environmental effects because they often require the clearing of forests or construction of access roads, because they are located remotely. Environmental impact assessments are conducted in connection with such projects to mitigate risks. Thorough assessments are conducted in the planning phase regarding vulnerable natural environments, biodiversity, and the environmental impact.
- SFE prioritizes material recyclability by sorting waste and transporting it to designated waste management facilities but has not set specific targets for projects under this framework.

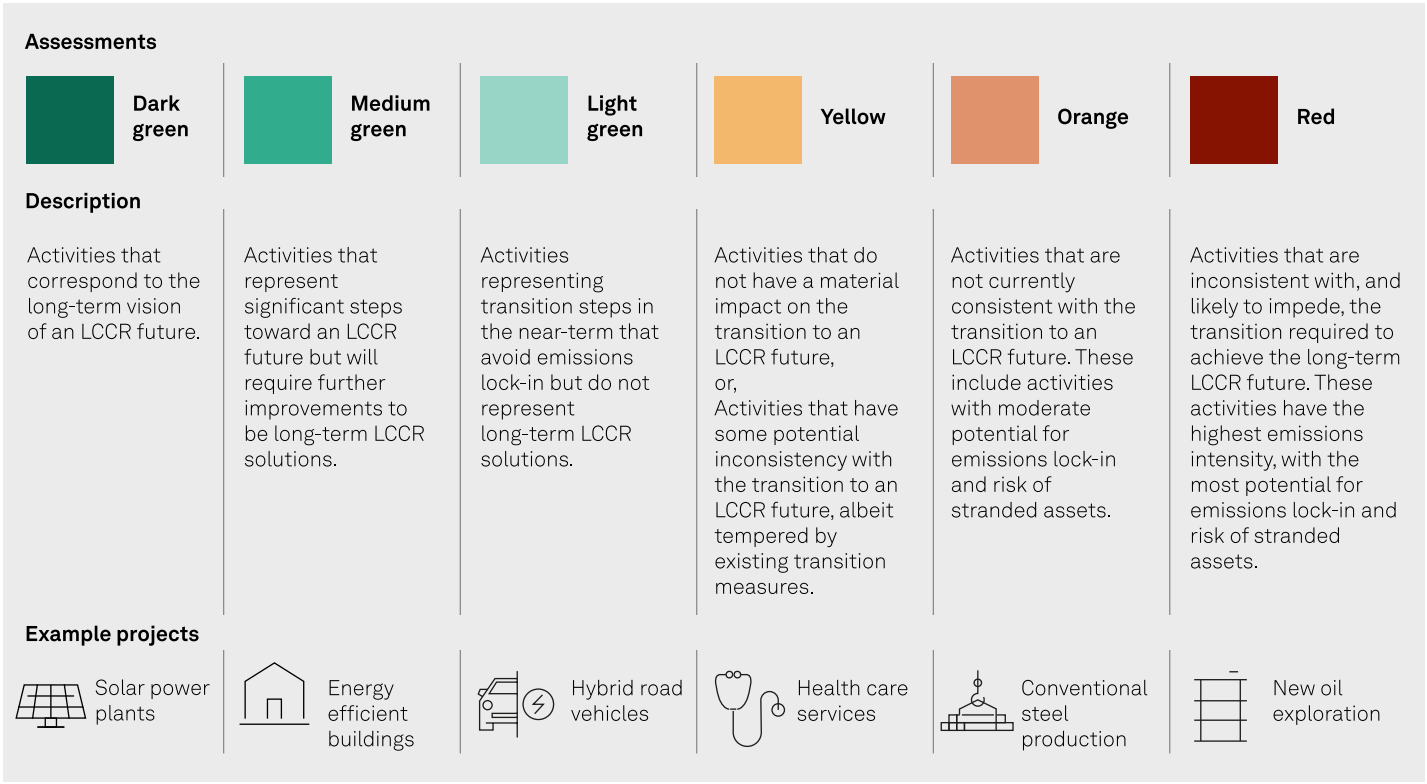
Climate change adaptation

Assessment	Description
Dark green	Expenditures related to measures that address climate change in the construction and operation of renewable energy systems, which will contribute to a substantial reduction of the negative effects of climate change. Eligibility Criteria: Adaptation measures: Eligible EU Taxonomy category: Climate change adaptation. • Implementation of adaptation solutions (i.e. physical or nature-based) that substantially reduce the most important physical climate risks that are material to renewable energy infrastructure such as hydropower, wind power, and energy transmissions. Climate change adaptation investments require a climate risk and vulnerability assessment.

Analytical considerations

- Climate scientists have been clear that some degree of climate change will take place, even in the most-optimistic scenarios. This makes it crucial to plan for and mitigate potential risks to reduce the financial and environmental effects. Implementing adaptation solutions can also reduce resources and emissions linked to rebuilding damaged assets.
- We assess this category as Dark green given the overall benefits the projects to increase renewable energy asset lifetime and resilience. We think that SFE's adaptation projects support a low carbon, climate resilient future. The project category aims to address the most material climate risks identified by SFE on its renewable energy infrastructure. Projects eligible for financing include drainage tunnels and strengthening of existing dams with the intention of extending the lifespan and the strengthening of dam structures because of increased climate effects. Other possible projects may include securing access roads due to the risk of landslides in the areas of operation.
- SFE screens for physical climate risks before building assets and has identified heavy precipitation, coastal floods, river flooding, and landslides as relevant risks for these projects.
- The financing includes adaptation and resilience measures that require construction, which can lead to substantial emissions during the construction phase. SFE plans to manage these embodied emissions through its environmental and climate procurement policies and will measure embodied emissions as part of the broader hydropower projects.

S&P Global Ratings' Shades of Green



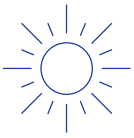
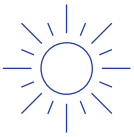
Note: For us to consider use of proceeds aligned with ICMA Principles for a green project, we require project categories directly funded by the financing to be assigned one of the three green Shades.

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 affect our alignment opinion.

This framework intends to contribute to the following SDGs:

Use of proceeds	SDGs
Renewable energy	 **7. Affordable and clean energy***  **13. Climate action**
Energy efficiency	 **7. Affordable and clean energy***  **9. Industry, innovation and infrastructure***  **11. Sustainable cities and communities**  **13. Climate action**
Climate change adaptation	 **3. Good health and well-being**  **11. Sustainable cities and communities**  **13. Climate action***

*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

Alexander Volden
Oslo
+4721958337
alexander.volden
@spglobal.com

Secondary contacts

Pierre-Brice Hellsing
Stockholm
+46 84 40 5906
pierre-brice.hellsing
@spglobal.com

Luisina Berberian
Madrid
+34 91 788 7200
luisina.berberian
@spglobal.com

S&P Global Ratings Financial Services LLC or its affiliates (collectively, S&P) receives compensation for the provision of the Second Party Opinions product and the European Green Bond External Review product (separately and collectively, Product).

S&P may also receive compensation for rating the transactions covered by the Product or for rating the issuer of the transactions covered by the Product.

The purchaser of the Product may be the issuer.

The Product is not a credit rating, and does not consider credit quality or factor into our credit ratings. The Product does not consider, state or imply the likelihood of completion of any projects covered by a given financing, or the completion of a proposed financing. The Product is a statement of opinion and is neither a verification nor a certification. The Product is a point in time evaluation reflecting the information provided to us at the time that the Product was created and published, and is not surveilled. The Product is not a research report and is not intended as such. S&P's credit ratings, opinions, analyses, rating acknowledgment decisions, any views reflected in the Product and the output of the Product are not investment advice, recommendations regarding credit decisions, recommendations to purchase, hold, or sell any securities or to make any investment decisions, an offer to buy or sell or the solicitation of an offer to buy or sell any security, endorsements of the suitability of any security, endorsements of the accuracy of any data or conclusions provided in the Product, or independent verification of any information relied upon in the credit rating process. The Product and any associated presentations do not take into account any user's financial objectives, financial situation, needs or means, and should not be relied upon by users for making any investment decisions. The output of the Product is not a substitute for a user's independent judgment and expertise. The output of the Product is not professional financial, tax or legal advice, and users should obtain independent, professional advice as it is determined necessary by users.

While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

S&P and any third-party providers, as well as their directors, officers, shareholders, employees, or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness, or availability of the Product. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for reliance of use of information in the Product, or for the security or maintenance of any information transmitted via the Internet, or for the accuracy of the information in the Product. The Product is provided on an "AS IS" basis. S&P PARTIES MAKE NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDED BUT NOT LIMITED TO, THE ACCURACY, RESULTS, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE WITH RESPECT TO THE PRODUCT, OR FOR THE SECURITY OF THE WEBSITE FROM WHICH THE PRODUCT IS ACCESSED. S&P Parties have no responsibility to maintain or update the Product or to supply any corrections, updates, or releases in connection therewith. S&P Parties have no liability for the accuracy, timeliness, reliability, performance, continued availability, completeness or delays, omissions, or interruptions in the delivery of the Product.

To the extent permitted by law, in no event shall the S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence, loss of data, cost of substitute materials, cost of capital, or claims of any third party) in connection with any use of the Product even if advised of the possibility of such damages.

S&P maintains a separation between commercial and analytic activities. S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

For PRC only: Any "Second Party Opinions " or "assessment" assigned by S&P Global Ratings: (a) does not constitute a credit rating, rating, sustainable financing framework verification, assessment, certification or evaluation as required under any relevant PRC laws or regulations, and (b) cannot be included in any offering memorandum, circular, prospectus, registration documents or any other document submitted to PRC authorities or to otherwise satisfy any PRC regulatory purposes; and (c) is not intended for use within the PRC for any purpose which is not permitted under relevant PRC laws or regulations. For the purpose of this section, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.

For India only: Any "Second Party Opinions" or "assessments" assigned by S&P Global Ratings to issuers or securities listed in the Indian securities market are not intended to be and shall not be relied upon or used by any users located in India.

Australia: S&P Global Ratings Australia Pty Ltd. provides Second Party Opinions in Australia subject to the conditions of the ASIC SPO Class No Action Letter dated June 14, 2024. Accordingly, this Second Party Opinion and related research are not intended for and must not be distributed to any person in Australia other than a wholesale client (as defined in Chapter 7 of the Corporations Act).

Copyright © 2025 by S&P Global Ratings Financial Services LLC. All rights reserved.