°CICERO
Shades of
Green

BEST PRACTICES 2022

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CICERO Shades of Green Best Practices 2022

CICERO Shades of Green AS provides independent, research-based external opinions of green, sustainability and sustainability-linked financing frameworks and climate risk assessments of companies. Our Second Party Opinions (SPOs) and Company Assessments are grounded in climate science, drawing on competence from our parent organisation CICERO Center for International Climate Research, one of the world's foremost institutes for interdisciplinary climate research. At the heart of all of our external opinions is our award-winning Shades of Green methodology, whereby we assign shadings to investments and activities to reflect the extent to which they contribute to the transition to a low carbon and climate resilient future.

We have been championing SPOs in the global green bond market since 2008 and remain the largest external reviewer by volume globally. Our approach has been recognised with several international awards, including the Climate Bonds Initiative award for Largest External Reviewer in 2021, as well as Environmental Finance's Award for External Assessment Provider of the Year in 2022.

This Best Practices report highlights how we as a company and our methodology have evolved over the past year, and how climate science and green finance have developed in the context of recent events. This report also showcases examples of our work across our product range. For each sector, we highlight examples from our own SPOs and Company Assessments. These case studies should be considered within the context of the complete opinion or assessment, available at cicero.green/public-reviews.

1. Year in Review

Our Team and Market Position

CICERO Shades of Green is a market-leading provider of SPOs. According to data provided by the Climate Bonds Initiative, between 2008-2022, CICERO Shades of Green has a market share of **28 percent** by cumulative value issued of **more than USD 380 billion** worth of green bonds (see Figure 1) and **68 percent** by number of transactions. As of August 2022, **18 percent** of the global green bond market value this year that received an SPO was reviewed by CICERO Shades of Green.

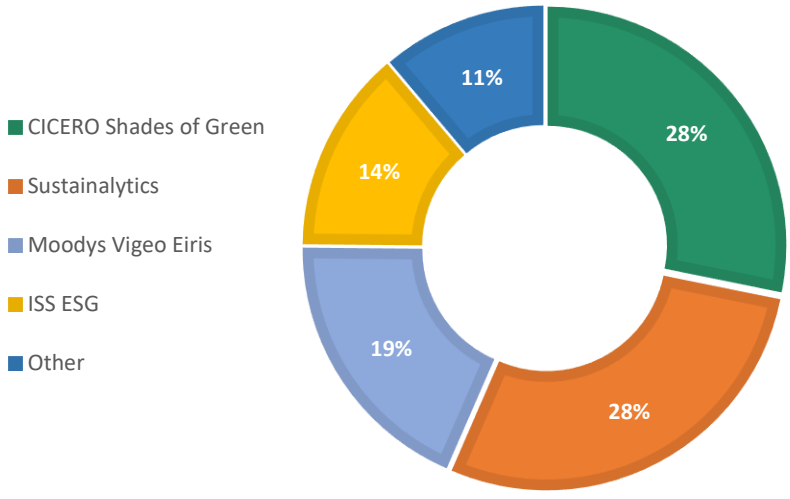

Figure 1: Green bond market share by cumulative value issued (2008-2022 year-to-date).

We have worked with over 330 unique clients around the globe, reviewing green finance, green equity, sustainable finance and sustainability-linked products, as well as providing sector briefs and reporting reviews for government entities, corporates, and financial institutions. Figure 2 shows issuers we have assessed by type and overall green shading. The large majority are corporates or financial institutions. Among the variety of public issuers are sovereign governments, including most recently the Government of Iceland, the Republic of Indonesia, and the Kingdom of Denmark, municipal banks in all the Nordic countries, and municipal and regional governments around the world such as in the US, Canada, Poland, Denmark, Sweden, and Norway. We have also assessed a large array of corporates in various sectors, including in the real estate sector (e.g., Atrium Ljungberg and Warehouses De Pauw) in the energy sector (e.g., Électricité de France (EFD), Ørsted, and Preem), in the manufacturing sector (e.g., Pensana, Yara, and SK Innovation), and in the transport sector (e.g., Maersk and Wallenius Wilhelmsen). We have also worked with multiple types of financial institutions, including pension funds (e.g., CPP Investments) global development institutions (e.g., the International Finance Corporation (IFC)), multilateral development institutions (e.g., the World Bank and the Islamic Development Bank (IsDB)), investment companies (e.g., Kinnevik and Latour), and savings banks (e.g., SpareBank 1 Østfold Akershus).

Since we introduced our Shades of Green methodology in 2015, we have assigned a green shading to more than 360 frameworks. Our Shades of Green reflect the extent to which investments and operations contribute to a low carbon and climate resilient future, with darker green shadings representing greater alignment with this transition (see page 10). Of all the frameworks shaded, 39 percent achieved a **Dark Green**, 50 percent were assigned a **Medium Green**, and 11 percent received a **Light Green** shading. Since 2018, we have noticed a strong increase in **Light Green** shaded frameworks, signalling a welcomed focus on harder to abate elements of the economy. The project categories that appear most in the frameworks we have assessed between 2015 and August 2022 are renewable energy, green buildings and energy efficiency, and clean transportation.

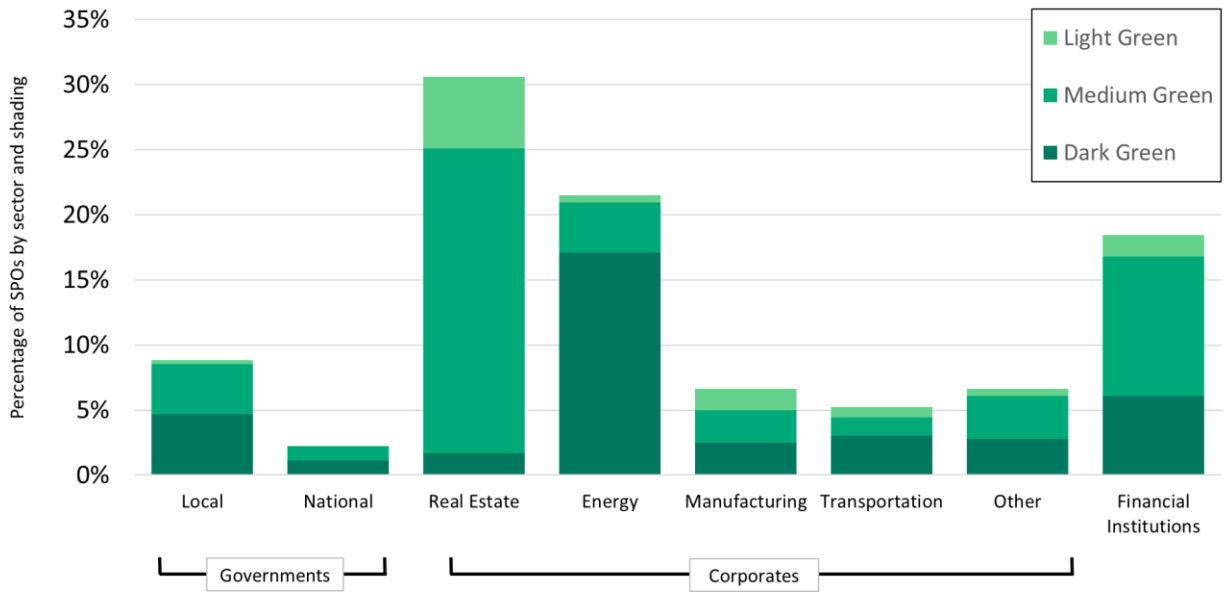

Figure 2: Percentage of SPOs by shading and issuer type (2015-2022). Local governments include municipal services, municipal governments, and municipal finance. Financial institutions include banking, development, export credit agencies, investment companies, and pension funds.

Our team is critical to our success. Drawing on diverse backgrounds across sectors and industries, countries, and areas of expertise, each of our colleagues brings a depth of knowledge and experience to our work and relationships. This year, we welcomed new employees with insights on key sectors such as real estate, clean transportation, renewable energy, and sustainable forestry and agriculture. Our company growth with employees from different regions has also allowed us to expand our language skills, which include English, French, Icelandic, Norwegian, and Spanish.

Figure 3: The CICERO Shades of Green team.

In addition to our core team, we draw on the global insights of the Expert Network on Second Opinions (ENSO) to broaden our network of technical, language, and regional expertise. The ENSO network consists of independent non-profit research institutions specialising in climate change, environment, and sustainability issues. Members include CICERO Center for International Climate Research (our parent organisation), the Basque Center for Climate Change (BC3), the Stockholm Environment Institute (SEI), the Institute of Energy, Environment and Economy at Tsinghua University (3E), the International Institute for Sustainable Development (IISD), and the University of Michigan School for Environment and Sustainability (SEAS).

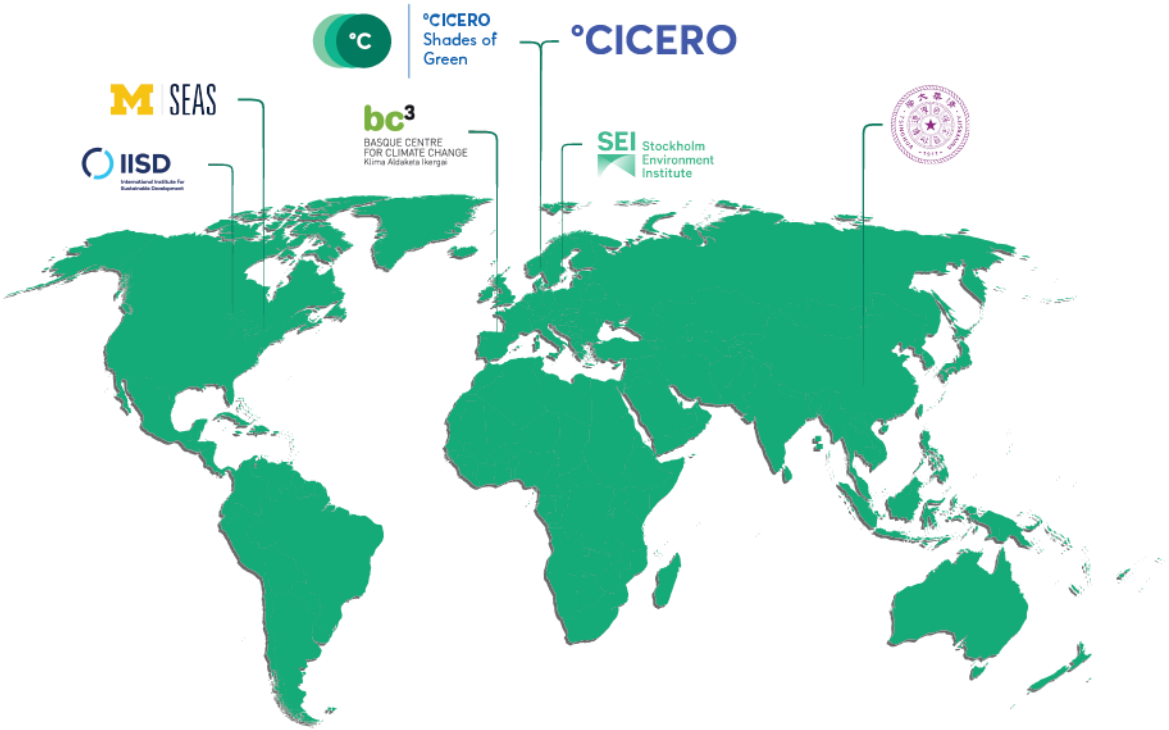

Figure 4: Expert Network on Second Opinions (ENSO).

Climate Science Developments

Our grounding in science-based climate risk is reflected in contributions from our team and researchers at our parent institution, the CICERO Center for International Climate Research, to the Intergovernmental Panel on Climate Change (IPCC) reports. Across CICERO, six researchers served as lead authors to these international assessment reports on the physical science and climate mitigation, including our co-founder Christa Clapp, who co-authored the investment and finance chapter.[1]

The latest update on the physical science basis from the IPCC gives a clear message that the impacts of climate change are being felt across all regions of the world, such as through intensified heatwaves, aggravated air pollution, increased

[1] CICERO Researchers Contributing to the IPCC's Sixth Assessment Report | CICERO Center for International Climate Research (cicero.oslo.no)

extreme and slow-onset events, droughts impacting agriculture and ecosystems, and heavy precipitation.[2] While we remain hopeful that strong action on mitigation can reduce climate change impacts in the long term, we have already locked in greenhouse gas (GHG) emissions that will take us close to 1.5°C warming in the next decade or so.

Without immediate and significant emissions reductions across all sectors, limiting global warming to well-below 2°C in alignment with the Paris Agreement goals will not be possible.[3] The energy sector remains the largest contributor to climate change, accounting for over one-third of GHG emissions in 2019, followed by industry (24 percent), agriculture, forestry and other land use (22 percent), transportation (15 percent), and buildings (5.6 percent).[4]

Recent events have also impacted global emissions trends. The world saw a significant decrease in emissions due to the COVID-19 pandemic and related travel bans, lockdowns, and reduced industrial activities, resulting in a drop in daily global carbon dioxide (CO_2) emissions of 17 percent in April 2020.[5] However, global CO_2 emissions rebound by 4.8 percent in 2021, with varying increases across sectors and geographies.[6] In addition to humanitarian, human rights, and food and energy security concerns, the war in Ukraine starting in February 2022 has also caused severe air pollution and increased GHG emissions.[7] Changes in energy sources and supplies as a result of the conflict may also contribute to or mitigate climate change depending on policy and market choices.

Due to the increasing physical risks outlined by the IPCC, adaptation and resilience measures will play a key role in reducing exposure and vulnerability to climate change.[8] Although adaptation is a less frequently used category across the frameworks we have reviewed, our Shades of Green methodology considers whether resilience is integrated into infrastructure design and construction across all sectors. Recent examples of issuers that included climate adaptation as an eligible project category are Nederlandse Waterschapsbank (NWB), Skandinaviska Enskilda Banken (SEB), and Hafslund Eco.

The latest IPCC reports also highlight a persistent climate financing gap. To deploy mitigation solutions at the pace and scale required to achieve global climate goals, financing to reduce net GHG emissions must increase by a factor of at least three to six.[9] Financing to enhance adaptation to climate impacts, currently only around 10 percent of global climate finance, must also increase as a critical enabling factor for the low carbon, climate resilient transition.[10] As financial actors become more aware of climate risks and opportunities, we expect investor demand to continue to drive growth of and developments in innovative green financial products.

[2] Climate Change 2021: The Physical Science Basis | IPCC (ipcc.ch)
[3] Climate Change 2022: Mitigation of Climate Change | IPCC (ipcc.ch)
[4] Ibid. Note that more recent emissions data at this level of sector specificity is forthcoming but not yet available.
[5] COVID-19's Long-Term Effects on Climate Change—For Better or Worse | Columbia Climate School (columbia.edu)
[6] Monitoring Global Carbon Emissions in 2021 | Nature Reviews Earth & Environment (nature.com)
[7] Russian-Ukrainian War Impacts the Total Environment | Science of The Total Environment (sciencedirect.com)
[8] Climate Change 2022: Impacts, Adaptation and Vulnerability | IPCC (ipcc.ch)
[9] Climate Change 2022: Mitigation of Climate Change | IPCC (ipcc.ch)
[10] Ibid.

Sustainable Finance Market Developments

CICERO Shades of Green has noted several emerging trends in global green financing, including the proliferation of taxonomies, growth of sustainability-linked financing and corporate net zero targets, and focus on supply chains and impact reporting. Our response to these developments is reflected in our product offerings and methodology.

PROLIFERATION OF GREEN TAXONOMIES GLOBALLY

Efforts continue to standardise expectations for and maintain the integrity of green financial markets through taxonomies. Green financing classification systems have been introduced in the European Union, China, Japan, Malaysia, and Mongolia, while at least 19 additional countries are considering or in the process of developing green taxonomies.[11] Many of these efforts may enhance clarity and credibility in green financial markets. At the same time, they may also create significant discrepancies among different jurisdictions and be subject to political influence that may not always align with best available science or global goals, creating potential for controversy or confusion. Debates over the inclusion of natural gas and nuclear power in the EU Taxonomy, for instance, demonstrate this challenge, and point to a market with varying regional taxonomies rather than a global standard.

We offer an optional EU Taxonomy Assessment in our SPOs, but also provide additional context to investors via our core Shades of Green methodology. Those assessments identify gaps in the alignment of issuers' activities with substantial contribution to climate mitigation or adaptation, the "Do No Significant Harm" (DNSH) criteria, and minimum social safeguards (see page 12). Our Shades of Green approach provides important supplementary and contextual information to the EU Taxonomy. By specifying a range of Shades of Green, we provide greater nuance compared to binary taxonomy criteria. Using our **Light Green** shade, we allow for regional and development pathway differences, highlighting the first steps towards transition based on existing options but still avoiding fossil fuel lock-in. Our governance assessment (see page 10) considers issuer level management of environmental risks, providing important further context to issuers that can supplement taxonomies.

INCREASING EMPHASIS ON IMPACT REPORTING

As green finance markets mature and investors, central banks, and financial regulators are driving increased awareness of climate risk, investors are looking more closely at issuers' impact reporting to better assess the actual environmental outcomes from uses of proceeds. Issuers can expect greater scrutiny of disclosure quality and performance as investors become more discerning about what they consider green and seek to avoid greenwashing pitfalls that create reputational and potentially legal risks.

We offer annual reporting reviews that provide greater transparency on asset allocation and impact reports to investors. Over the past year, this has included reporting reviews across diverse sectors, including for pension funds, real estate corporates, energy companies, and banks (see page 18). In addition, we continue to assess issuers' reporting commitments in our SPOs both explicitly and as part of our governance scoring. When we review new frameworks from issuers with whom we have worked previously, we compare expected versus actual impact reporting under the previous framework as part of our re-evaluation process.

[11] Global Green Taxonomy Development, Alignment and Implementation | Climate Bonds Initiative (climatebonds.net)

GROWTH OF SUSTAINABILITY-LINKED FINANCING

Sustainability-linked bonds (SLBs) grew to nearly USD 119 billion in 2021, an over tenfold increase from 2020.[12] This instrument is also expanding to new sectors, with Chile issuing the first sovereign SLB in March 2022. Despite concerns about potential greenwashing and the true ambition of sustainability performance targets (SPTs), we expect issuers' and investors' interest in this instrument to continue to grow. New guidance from the International Capital Market Association (ICMA) on SLBs aims to improve market transparency,[13] and its illustrative KPIs registry can support issuers in developing more robust and comparable SLB frameworks.[14] We believe that information about issuers' business models and trajectories provide important context.

We provide deeper insight by applying our shading methodology to issuers' current revenues and planned investments as part of our SLB SPOs, in addition to evaluating SPTs and key performance indicators (KPIs) based on ICMA recommendations (see page 14). We also provide thoughtful reflections on the ambition levels, drawing on climate science and scenarios expertise.

MOMENTUM OF NET ZERO TARGET ANNOUNCEMENTS

As companies increasingly announce net zero targets, further reflection is required for investors to understand how meaningful these commitments are, how they related to climate science, and how they compare.

Corporate-level targets are considered in our governance assessments and, for SLBs, in evaluating the ability of the issuer to meet its targets. Elements we look for in corporate targets and KPIs include the scope of emissions covered, timeframe including whether near-term targets set out a pathway for longer-term achievements, and the planned use of offsets, which should be considered as a last resort for residual emission reductions and assessed for quality in terms of additionality, permanence, and environmental and social safeguards.

CALLS FOR IMPROVED SUPPLY CHAIN EMISSIONS DATA

With growing emphasis on climate risk and sustainability, some companies have taken a greater interest in how their suppliers are managing emissions. In many sectors, these Scope 3 emissions are the largest share of companies' total climate footprints. At the same time, supply chain emissions can often be challenging to accurately measure or estimate, and there are growing concerns about the consistency and quality of these data.

We take a value chain approach and encourage companies and issuers to use their influence to address this challenge by creating incentives for their suppliers to measure, disclose, and mitigate their emissions. Our Company Assessments in particular take into account how well a company manages climate risks in their supply chains (see shipping example X Shore on page 17). Our SPOs consider supply chain emission management and influence where these emissions are material (see energy sector examples Statkraft and Ørsted on page 22).

[12] Climate Bonds Initiative Sustainable Debt Global State of the Market 2021|Climate Bonds Initiative (climatebonds.net)
[13] Sustainability-Linked Bond Principles Related Questions | ICMA (icmagroup.org)
[14] Sustainability-Linked Bond Principles Illustrative KPIs Registry| ICMA (icmagroup.org)

2. Methodology and Product Highlights

CICERO Shades of Green provides a comprehensive set of services. These fall broadly into two categories. Firstly, we provide SPOs on green and sustainability finance frameworks, namely (1) Green Bonds and Loans, (2) Sustainability Bonds and Loans, (3) Sustainability-Linked Bonds and Loans, and (4) Investment Funds. Secondly, we offer Company Assessments, including for the Nasdaq Green Equity Designation and Green Initial Public Offerings (IPOs). To help issuers meet growing investor expectations and regulatory requirements on transparency, we offer external reviews of annual green bond impact and allocation reporting and annual updates of Company Assessments. As the EU Taxonomy continues to evolve, we also offer evaluations of alignment with relevant criteria in our SPOs and Company Assessments.

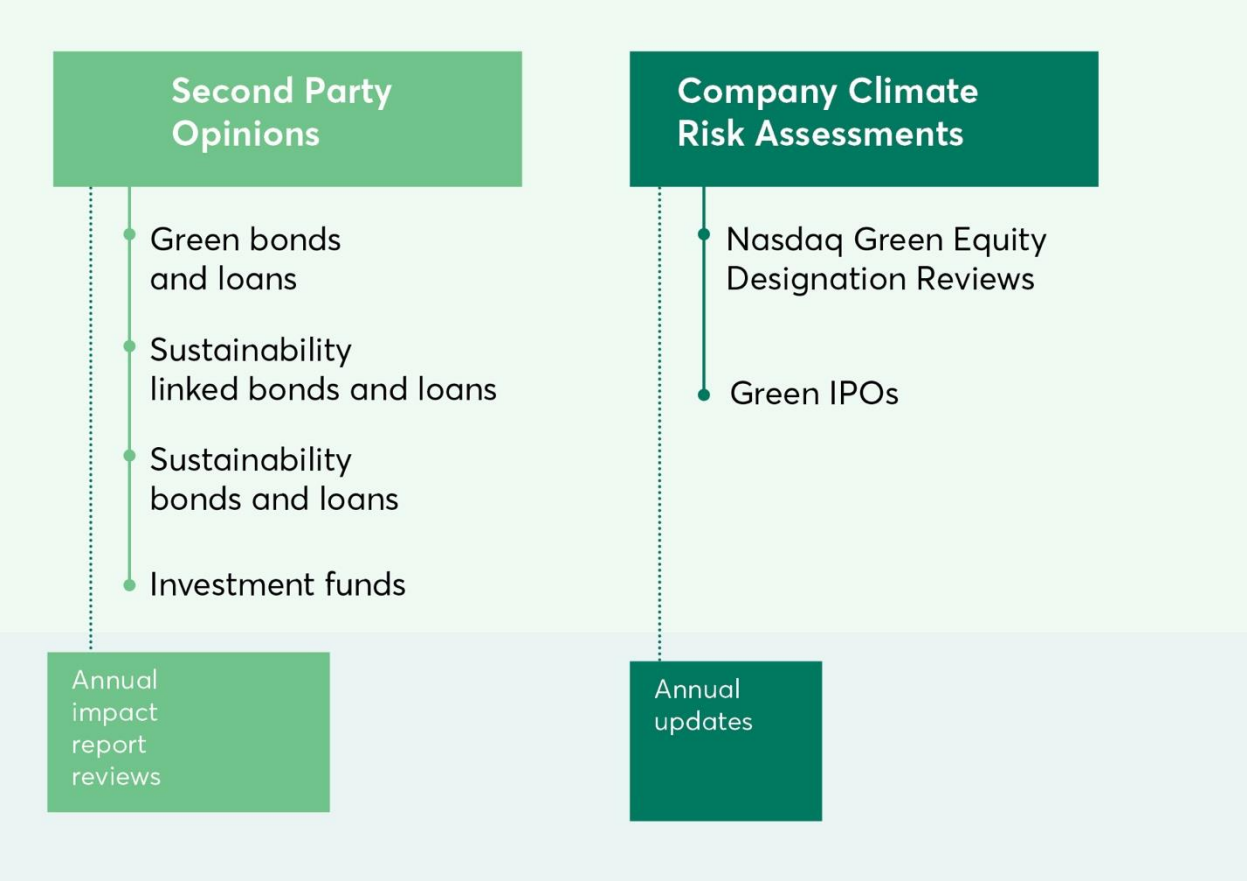

Figure 5: CICERO Shades of Green products and services.

Core Shading Methodology

Our award-winning methodology applies the latest climate science to the green finance market and organisations' operations and communicates this in a clear and comprehensible way. This core methodology is applied across our SPO and Company Assessment products.

At the heart of our methodology are our Shades of Green, which reflect the extent to which investments and operations contribute to the transition to a low carbon and climate resilient future and their exposure to climate risks. Our methodology provides a nuanced yet digestible assessment for investors by acknowledging that "greenness" is not binary. Investments in projects of all Shades of Green are necessary to successfully achieve the Paris Agreement target of keeping global warming well-below 2°C. The shades range from **Dark Green** to **Red**, encouraging early movers in the transition and motivating a race to the top.

Shading	Examples
Dark Green is allocated to projects and solutions that correspond to the long-term vision of a low-carbon and climate resilient future.	Solar power plants
Medium Green is allocated to projects and solutions that represent significant steps towards the long-term vision but are not quite there yet.	Energy efficient buildings
Light Green is allocated to transition activities that do not lock in emissions. These projects reduce emissions or have other environmental benefits in the near term rather than representing low carbon and climate resilient long-term solutions.	Hybrid road vehicles
Yellow is allocated to projects and solutions that do not explicitly contribute to the transition to a low carbon and climate resilient future. This category also includes activities with too little information to assess.	Healthcare services
Red is allocated to projects and solutions that have no role to play in a low-carbon and climate resilient future. These are the heaviest emitting assets, with the most potential for lock in of emissions and highest risk of stranded assets.	New oil exploration

Figure 6: The Shades of Green methodology.

The range of shades that can be applied in our assessments depends on the service. For SPOs on Green Bonds and Loans and Sustainability Bonds and Loans, we assign an overall shading to an issuer's framework. SPOs for use-of-proceeds are graded **Dark Green**, **Medium Green**, or **Light Green**, reflecting a qualitative review of the climate and environmental risks and ambitions. For Company Assessments and Sustainability-Linked Bonds, we assign a shading to the full range of company activities, from **Dark Green** to **Red**.

In assigning a shading, we take a long-term view and emphasise activities that support a low carbon and climate resilient society. Our shading is determined qualitatively, following a review of the climate and environmental risks and benefits of the investments in the framework or the companies' operations. Broadly, we consider:

- ✓ Avoiding locking in the use of fossil fuel in the future.
- ✓ Considering mitigation and climate resiliency or adaptation in built infrastructure.
- ✓ Evaluating what emission reductions are necessary by mid-century alongside the lifetime of the assets.
- ✓ Assessing management-level governance targets and procedures that can help mitigate future climate risk.

As part of our Shades of Green methodology, issuers and companies are reviewed based on their internal governance procedures. Given sound governance around climate and environmental concerns is paramount to ensuring successful progress towards a company's targets and implementing the ambitions of a green finance framework, we assign a governance score of Fair, Good, or Excellent. Across our services, the governance score can influence the shading awarded, as it gives an indication as to how environmental risk will be managed by the company going forward.

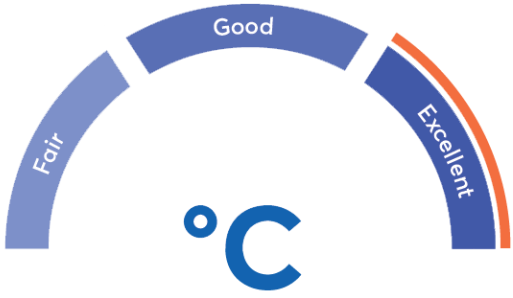

Figure 7: Governance scoring.

The extent and comprehensiveness of governance structures is related to the size, capacity, and type of an issuer or company. We place special emphasis on the governance structures where frameworks or company environmental strategies are less specific. Our governance assessments focus on:

- ✓ Strategy, goals, and policies, including policies towards sub-contractors and suppliers, and use of lifecycle assessments.
- ✓ Selection processes (for use of proceeds frameworks) and transparency of the governance structure.
- ✓ Integration of climate considerations into the business and handling of resilience issues.
- ✓ Reporting procedures and transparency.
- ✓ Awareness of social risks and the management of these (for sustainability bond SPOs and Company Assessments).

Examples from our SPOs and Company Assessments illustrating how our Shades of Green methodology is applied across different sectors and project categories can be found in section 3 of this report. Further external evaluations are available at cicero.green/public-reviews.

Assessment Process

The assessment process for both SPOs and Company Assessments is a desk-based review that considers relevant principles and other standards as well as cutting-edge climate science. Clients typically receive a draft report with written questions for discussion within one to two weeks for SPOs and within one to three weeks for Company Assessments. We then engage with the client in an iterative process as needed to finalise the report. The final report is sent within three to five weeks for SPOs on green and sustainability bonds and within four to six weeks for Company Assessments and SPOs for SLBs, assuming the full responsiveness of the client and the completeness of the documentation. The iterative process is illustrated in Figure 8.

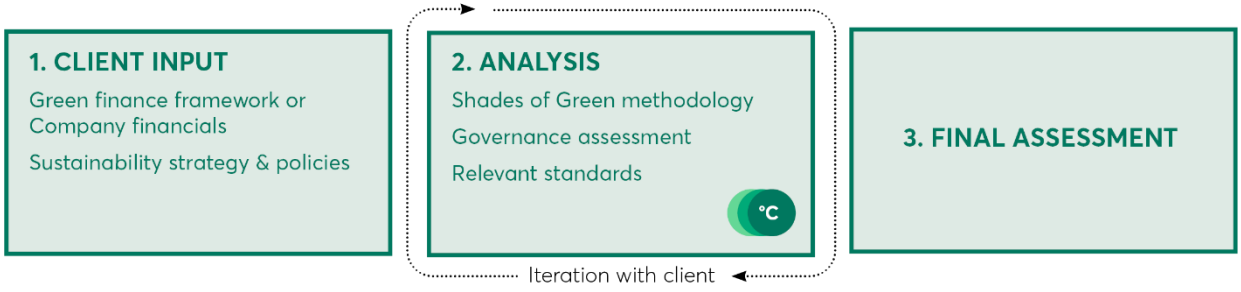

Figure 8: The CICERO Shades of Green assessment process.

EU TAXONOMY ASSESSMENT

In 2022, many companies prepared for reporting on their activities' taxonomy eligibility and alignment. Approximately 15 percent of our clients requested an assessment of their EU Taxonomy alignment to date this year. By establishing criteria for what constitutes environmentally sustainable activities, the EU Taxonomy provides signposting for investors and clients to aid their decision making and project selection processes.

The EU Taxonomy Disclosures Delegated Act in December 2021 clarified the timeline for phased in entity-level reporting on share of Taxonomy-eligible activities and Taxonomy alignment beginning with climate mitigation and adaptation, and a complementary Delegated Act in July 2022 set the criteria for natural gas and nuclear power. The EU Taxonomy seeks to set out a common classification system to determine the environmental sustainability of activities. It is based on six environmental objectives (Figure 9). To be considered environmentally sustainable, an activity must (1) substantially contribute to one or more of the six objectives; (2) not significantly harm any of the six objectives; (3) comply with minimum safeguards regarding e.g., human rights and labour issues; and (4) comply with the technical screening criteria (TSC) which detail the conditions for parts one and two. While the TSC for the first two environmental objectives (climate change mitigation and adaptation) have been established, those for the remaining four objectives are forthcoming.

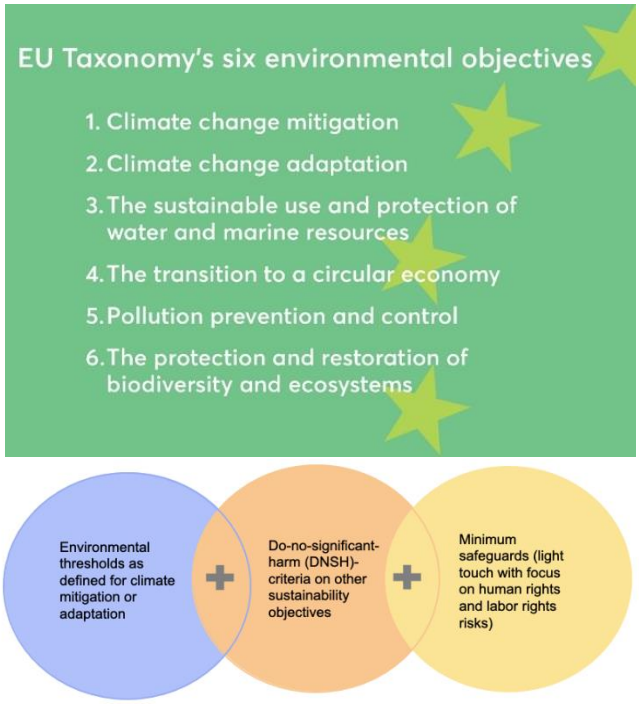

Figure 9: EU Taxonomy overview.

We offer an EU Taxonomy Assessment but also provide additional context to investors via our core Shades of Green methodology. This methodology includes a governance evaluation at the issuer or company level and considers climate mitigation alongside resiliency for the built environment in each sector, while also considering the issuer context.

For our SPOs, we offer an EU Taxonomy Assessment as an additional service, considering the likely alignment of eligible project categories in the issuer's framework with the mitigation or adaptation criteria and the Do No Significant Harm (DNSH) criteria contained in the TSC. For Company Assessments, we always conduct an EU Taxonomy Assessment, provided the activities are eligible. Here, we consider the likely alignment of the company's revenues, operating costs, and investments with the technical mitigation or adaption, and DNSH criteria. For both SPOs and Company Assessments, we also conduct an assessment against the minimum social safeguards, with a focus on human and labour rights.

Our EU Taxonomy Assessment highlights any gaps in alignment of company activities. To facilitate companies' preparation for reporting while allowing for improvement of environmental performance, our assessments indicate a likely full, partial, or non-alignment to the different criteria.[15]

[15] Since the EU Green Bond Standard is not yet formally approved and no verifiers are yet formally registered with the European Securities and Markets Authority (ESMA), our assessment does not firmly conclude on alignment, but indicates a

ISSUER SPOTLIGHTS

Diös is a real estate developer and manager active in the northern part of Sweden. Relevant EU Taxonomy activities included in its green financing framework are the construction of new buildings, acquisition, ownership, and renovation of buildings, as well as several related activities, such as the installation and repair of devices related to energy monitoring. The framework combines the TSC from the EU Taxonomy with additional eligibility criteria such as green building certifications and energy performance requirements. We assessed that all activities were likely aligned with the Taxonomy, with the exception that some buildings did not yet align with the DNSH to adaptation, measures for which are to be implemented within five years. Diös' framework was assigned a **Medium Green** shading with a governance score of **Excellent**.

Électricité de France (EDF) is a French multinational electric utility company largely owned by the French state. EDF's green bond framework will finance projects related to renewable and nuclear electricity production. The eligibility criteria seek to follow the climate mitigation and associated DNSH criteria of the EU Taxonomy. Any offshore wind power projects outside the EU will be subject to a gap analysis, and according to EDF, such projects will not be financed if they are not aligned with all EU Taxonomy criteria. CICERO Green considers the framework's activities to be likely aligned with the EU Taxonomy mitigation thresholds and all the DNSH criteria. EDF's framework was assigned a **Medium Green** shading with a governance score of **Excellent**.

likelihood. In all cases, it is each company's responsibility to finance projects aligned with the criteria and to follow up on actual alignment in their reporting.

SUSTAINABILITY-LINKED BONDS AND LOANS

In 2022, the number of SPOs we published for sustainability-linked frameworks increased as the market has continued to rapidly expand. SLBs and Sustainability-Linked Loans (SLLs) are increasingly attractive alternatives for issuers in sectors where there is insufficient capital expenditure to raise financing for specific green projects through a use of proceeds bond, or in sectors where flexibility in designing targets can help support transitioning companies. Linking the cost of capital to future environmental and/or social performance, coupled with the relative early stage of the market, increases the importance of comprehensive and clear SPOs for investors.

The link that SLBs and SLLs create between the cost of capital with environmental performance can provide investors with some assurance that their investments will create positive environmental and/or social impacts. However, the ambition of SLBs or SLLs can vary widely depending on what key performance indicators (KPIs) are selected, how they are measured, and the sustainability performance targets (SPTs). We provide transparency on: (1) the relevance, materiality, and reliability of selected KPIs; (2) the rationale and level of ambition of the proposed SPTs; and (3) the relevance of selected benchmarks and baselines, as well as transparency on how well the strategy outlined to achieve those fits with a low carbon and climate resilient future. By considering these factors, we provide context to consider the ambition level of the SLB or SLL.

To provide transparency on the greenness of an issuer's business model, our SLB and SLL SPOs include a shading of an issuer's revenues and investments as **Dark Green**, **Medium Green**, **Light Green**, **Yellow**, or **Red** (see page 9). We also classify the issuer's governance as **Fair, Good,** or **Excellent**, considering relevant corporate-level targets and policies related to an issuer's general sustainability profile and transparency, including reporting on past performance.

BEST PRACTICES

- ✓ Selecting KPIs that by themselves or together cover the issuer's most material environmental issues, while avoiding over-complication by the inclusion of too many.
- ✓ Ensuring that KPIs cover a meaningful share of environmental impact (e.g., including Scope 3 emissions if these account for a large share of total emissions).
- ✓ Expressing emissions reduction SPTs in terms of both absolute and emissions intensity where possible.
- ✓ Providing transparency on the issuer's strategy to achieve the SPTs, including quantitative pathways (both short-term and long-term) and planned capex where possible.
- ✓ Describing how the issuer's corporate strategy and business activities are expected to change to achieve SPTs and contribute to a low carbon future.
- ✓ Ensuring targets are methodologically sound and scientifically meaningful (e.g., through an independent external validation, or benchmarking against international best practices for non-emissions related targets).

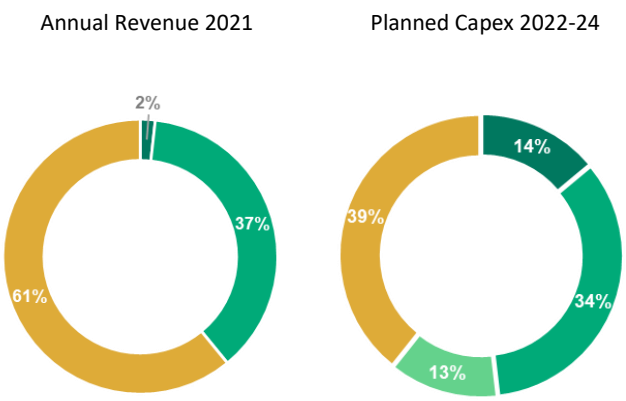

Figure 10: Hydro revenue and investment shading.

Norsk Hydro is an integrated producer of aluminium that is active throughout the value chain, from energy production to bauxite mining and alumina refining, primary aluminium, extrusions, and recycling. Hydro's KPI 1 is absolute Scope 1 and 2 emissions, and KPI 2 is post-consumer scrap aluminium recycling capacity. Its targets include to reduce KPI 1 by 10 percent and 30 percent by 2025 and 2030, respectively, from a 2018 baseline, and to increase KPI 2 to 660,000 tonnes by 2025 from 335,000 tonnes in 2021. These targets were assessed as ambitious against the Paris Agreement, immediate peers, and Hydro's own past performance, with caveats pertaining to natural gas lock-in and Hydro's share of pre-consumer scrap recycling capacity.

A Shade of Green was allocated to 39 percent of Hydro's 2021 revenues, including from sales of hydropower electricity and EU Taxonomy-aligned primary and secondary aluminium. Sixty-one percent of Hydro's 2022-24 planned capex received a Shade of Green, including investments in zero-carbon aluminium technology, carbon capture and storage, aluminium recycling, EU Taxonomy-aligned aluminium smelters, production of renewable energy and hydrogen, fuel switch and boiler electrification projects, and battery production. Hydro received a governance score of **Excellent**.

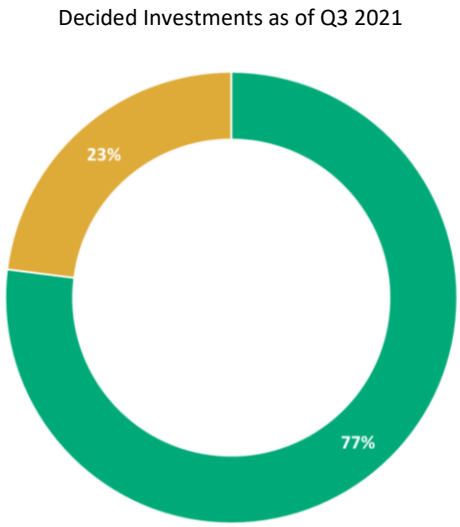

Figure 11: Atrium Ljungberg investment shading.

Atrium Ljungberg develops and manages office, retail, and residential properties in Sweden. Its four KPIs and SPTs related to climate neutral construction projects, reducing climate footprint for property management, social sustainability, and supplier reviews reflect Atrium Ljungberg's high level of ambition, especially in comparison to peers in the Swedish real estate sector, and the company has well-founded strategies to achieve them. The KPIs only indirectly address energy efficiency, which may be a source of transition risk for the company, and climate resiliency is only addressed to a small extent. SPTs 1 and 2 are ambitious when benchmarked against climate scenarios, albeit with caveats related to green building criteria and tenant transport emissions coverage. All four KPIs/SPTs have pitfalls due to the lack of historical data and comparability over time and because emissions accounting is market-based and thus may not reflect actual emissions linked with Atrium Ljungberg's properties. **Medium Green** was assigned to 77 percent of the company's planned green buildings investments, and Atrium Ljungberg received a governance score of **Excellent**.

COMPANY ASSESSMENTS

Since 2020, we have been applying our unique methodology to provide an in-depth look into the environmental impact of companies, evaluating the greenness of corporate activities and their transition efforts. Our Company Assessment methodology was developed through the CICERO Center for International Climate Research-led research project, Sustainable Edge, in iterative collaboration with financial sector partners and companies.

Our Company Assessments are a practical tool for investors, lenders, and public authorities for understanding climate risk, including in preparation for green equity listings, green initial public offerings (IPOs), EU Taxonomy reporting, and highlighting best-practice in corporate transparency.

A key part of our Company Assessments is the allocation of a shading of **Dark Green**, **Medium Green**, **Light Green**, **Yellow**, or **Red** (see page 9) to a company's revenues, operating expenses and investments depending on how well-aligned they are with a low carbon, climate resilient future. Our Company Assessments also incorporate an evaluation of likely alignment to the EU Taxonomy and the most relevant environmental KPIs for the company.

We furthermore undertake a governance assessment, classifying the company's sustainability governance as **Fair, Good,** or **Excellent.** Our Company Assessments take a broader view of a company's governance when compared with the evaluation of governance of a sustainability finance framework. As such, we consider: (1) strategies, policies, and structures; (2) lifecycle considerations including supply chain policies; (3) integration of climate considerations into the business and handling of resilience issues; (4) the awareness of social risks and the management of these; and (5) reporting.

NASDAQ GREEN DESIGNATIONS

In 2021, Nasdaq launched two Green Designations which provide transparency on the green credentials of equity issuers on Nasdaq European markets, namely the Nasdaq Green Equity Designation and the Nasdaq Green Equity Transition Designation.[16] To receive a Nasdaq Green Designation, a company must meet the criteria in the Nasdaq Green Equity Principles. For the Nasdaq Green Equity Designation, companies must generate over 50 percent of their turnover from green activities. For both designations, most of a company's investments must be in green activities, in addition to providing transparency on EU Taxonomy alignment and company-level sustainability targets.

As an approved reviewer for the Nasdaq Green Designations, we use our Company Assessment approach to assess if companies meet the criteria in the Nasdaq Green Equity Principles. As of August 2022, we approved all the issuers to achieve the Nasdaq Green Equity Designation: Godsinlösen Nordic (GIAB), Lamor Corporation, Rebelle, Nexam Chemical, Annehem Fastigheter, K2A, Platzer, and Wästbygg Gruppen.

Figure 12: Nasdaq Green Equity Labels.

GREEN INITIAL PUBLIC OFFERINGS

In 2022, we conducted our second Company Assessment for a green labelled IPO. The company, Rebelle, specialises in the second-hand market for luxury fashion items. As part of its IPO process, we provided a Company Assessment confirming that 100 percent of Rebelle's 2020 revenue and investments were green. In addition, we reviewed its application for the Nasdaq Green Equity Designation, which was awarded on its first day of trading as a public company on the First North Nasdaq stock exchange.

[16] Nasdaq Green Designation | Nasdaq (nasdaq.com)

BEST PRACTICES

- ✓ Aligning business models with a low carbon economy. This includes setting ambitious emissions targets, collecting data, and setting targets for other key material topics relevant to a company's sector. Ambitious emissions reduction targets are aligned with the Paris Agreement, accompanied by interim short- and medium-term targets, and enacted within a governance structure that ensures targets influence company decision making.
- ✓ Implementing a due diligence process that covers environmental and social risks, including the most salient risks in companies' value chains.
- ✓ Initiating the integration of financial and environmental accounting and reporting, for example, by referencing the share of green revenue in annual reporting.
- ✓ Committing to continued transparency and allowing investors to track progress, e.g., by updating Company Assessments annually.

COMPANY SPOTLIGHTS

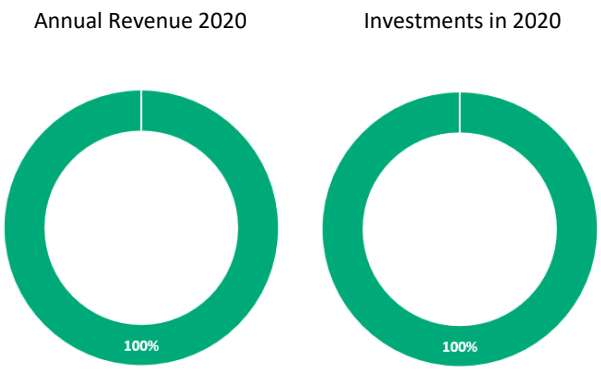

Figure 13: Rebelle revenue and investment shading.

Rebelle is a German-based re-commerce company specialising in the second-hand market for luxury fashion items. Rebelle facilitates a marketplace for sellers and buyers of high-end fashion through its digital platform, providing an alternative to purchasing such items in the first-hand market, which are emission and resource intensive to produce. Repairing and reusing textile and other fashion products is an important step towards a circular economy. Rebelle's revenues from selling second-hand products were shaded **Medium Green**. Investments into general fossil-free equipment were assessed as **Medium Green**. Rebelle received a governance score of **Fair**. The assessment was carried out as part of a review for the Nasdaq Green Equity Designation and its green-labelled IPO.

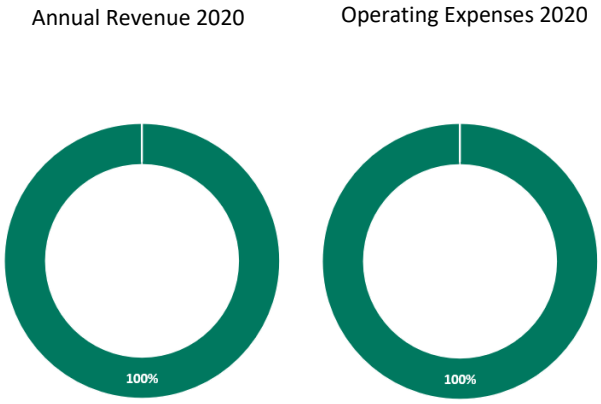

Figure 14: X Shore revenue and investment shading.

X Shore is a Swedish electric boat manufacturing company catering to the recreational boating market. All of X Shore's revenues and investments were shaded **Dark Green**. X Shore's focus on lowering its emissions from its production processes, sustainable sourcing of key components, and reusing materials such as plastics was highlighted in the assessment. Furthermore, we assessed X Shore's activities against the criteria set forth by the EU Taxonomy and assessed it to be likely aligned with both the technical climate change mitigation, DNSH, and social minimum safeguard criteria. X Shore received a governance score of **Good.**

IMPACT AND ALLOCATION REPORTING REVIEWS

As issuers seek to provide additional transparency to investors and assurances that they are avoiding greenwashing, we have seen growing interest in our external assessments of green financing reporting. Our reviews evaluate allocation reporting against the issuers' financing framework criteria and impact reporting metrics for relevance and transparency to help investors determine the actual outcomes of green financing.

We assess any discrepancies with the initial green financing framework and highlight reporting strengths and pitfalls. To review project allocation, we cross-reference reported use of proceeds with eligible project categories and our shading and review adherence to planned selection processes and other commitments under the framework. For impact metrics, we evaluate the clarity of methodologies and calculations. Finally, we assess the green finance reporting against the ICMA Handbook: Harmonized Framework for Impact Reporting's principles and recommendations.[17]

BEST PRACTICES

- ✓ Addressing framework commitments expressly and systematically in green financing reporting.
- ✓ Disclosing metric methodologies, assumptions, and data sources.
- ✓ Reporting use of proceeds on a project-by-project basis where possible and in line with framework commitments.
- ✓ Including reporting on investments where outcomes may be difficult to quantify, such as R&D expenditures. Qualitative descriptions and input or process indicators can be beneficial for transparency in those cases.

ISSUER SPOTLIGHTS

Continuum Green Energy is a Singaporean renewable energy holding company. CICERO Green finds no discrepancies in its review of the reporting against Continuum's Green Bond Framework. Continuum provides quantitative information about the climate and environmental impacts of projects to which green bond proceeds have been allocated using relevant indicators i.e., (1) installed capacity, (2) renewable energy generation, and (3) avoided/reduced CO_2 emissions. Continuum demonstrates commitment to transparency by detailing its methodology and by reporting on allocation at a project level.

Deutsche Pfandbriefbank (pbb) is a bank specialised in real estate and public investment finance. CICERO Green finds no discrepancies in our review of the reporting against pbb's Green Bond Framework. Pbb reports avoided emissions, which is a relevant impact indicator for green buildings, and has shown commitment to transparency by detailing its methodology and pro-rating impacts per EUR 1 million of green bond proceeds.

[17] Handbook: Harmonised Framework for Impact Reporting | ICMA (icmagroup.org)

3. Sectoral Best Practices – Highlights of 2021-2022

BEST PRACTICES
AGRICULTURE

According to the IPCC, in 2019 agriculture, forestry and other land uses (AFOLU) were responsible for 22 percent of total anthropogenic greenhouse gas emissions,[18] while the global food system (which includes pre- and post-production activities) is estimated to be responsible for 21-37 percent of annual emissions.[19] Methane (CH_4) emissions from livestock and nitrous oxides (N_2O) from fertiliser use are significant emission sources in addition to CO_2. Agriculture is the main cause of ongoing land use change emissions, primarily from clearing land for crop or livestock production. Reducing emissions will depend on dietary changes, minimising food waste, halting land conversion and degradation, optimising soils, maximising vegetation growth, and reducing unnecessary fertiliser use.[20]

Agriculture is in turn significantly impacted by climate change through increased heat stress and altered precipitation patterns. Water stress is exacerbating the challenge in many regions. Important ongoing technological innovations in the sector include research to reduce enteric fermentation in livestock, vertical farming, and new climate-resilient crop varieties. The EU Taxonomy does not currently cover agriculture.

Best Practices

- ✓ Reducing potential negative social and environmental impacts from land use change, pollution, and water usage.
- ✓ Maintaining carbon sinks and increasing CO_2 sequestration in soils through agroforestry and multi-crop (rather than monoculture) practices and reduced tillage techniques.
- ✓ Applying fertiliser correctly and replacing chemical fertilisers with bio/organic varieties. To improve biodiversity outcomes and reduce contamination, biological pest control should be prioritised.
- ✓ Integrating climate resilience and adaptation strategies by intercropping and considering new seed/crop varieties.
- ✓ Considering the potential impacts of expansion of agricultural roads on deforestation risk as well as reducing the use of fossil fuel-powered equipment in agriculture activities.

ISSUER SPOTLIGHTS

Kometa is a Hungarian pork-processing company. Pork has a much lower carbon footprint than red meat. Kometa also has a target of zero waste and a by-product plant that turns waste into pet food. Most investments will go towards implementing the goal of 30 percent energy efficiency improvements. Kometa's suppliers' feed tends to be locally sourced without the links to deforestation typically associated with the beef industry. Kometa has received a **Light Green** shading with a governance score of **Good**.

International Finance Corporation (IFC) is the largest global development finance institution focused on the private sector in developing countries. Its agriculture, forestry and land use eligible project category emphasises climate smart agricultural practices, including efficient tillage, water conservation, carbon sequestration through improved rangeland management and peatland restoration, and livestock projects that reduce methane. IFC received a **Medium Green** shading with a governance score of **Excellent**.

[18] Climate Change 2022: Mitigation of Climate Change | IPCC (ipcc.ch)
[19] Agriculture's Contribution to Climate Change and Role in Mitigation Is Distinct from Predominantly Fossil CO2-Emitting Sectors | Sustainable Food Systems (frontiersin.org)
[20] Carbon: Greenhouse Gas Emissions from Agriculture | AHDB (ahdb.org)

BEST PRACTICES

AQUACULTURE

Global aquaculture production of fish rose by 650 percent between 1990 and 2020,[21] and accounted for approximately 0.4 percent of anthropogenic GHG emissions in 2017.[22] The carbon footprint of farmed fish is dominated by the feed ingredients (agricultural and marine), as well as airfreight if that is used to reach markets. It has been estimated that land use change alone accounts for 28 percent of farmed salmon's carbon footprint at harvest, mostly due to soy from Brazil whose cultivation is linked to deforestation.[23] In recognition of this, Brazilian soy suppliers to the Norwegian aquaculture industry (Europe's largest aquaculture producer) have recently committed to not cultivating on recently deforested land. [24] Due to the growth in aquaculture, demand for protein for aquaculture feed may increase up to 96 percent by 2050, leading to a significant emissions increase.[25] Aquaculture can also greatly impact biodiversity if not carefully managed (e.g., through invasion of escapees, environmental degradation, and the greater risk of harm to wild populations).[26] Sea-based aquaculture is exposed to physical climate risks in terms of rising water temperatures, more frequent storms, and more frequent algae blooms. The EU Taxonomy does not currently cover aquaculture.

Best Practices

- ✓ Emphasising reducing emissions from feed sourcing, efficiency, and composition. Feed ingredients should be sourced from suppliers without links to deforestation.
- ✓ Integrating certification schemes to safeguard against many environmental problems, while recognising that GHG emissions are rarely considered. The Aquaculture Stewardship Council (ASC) is regarded as having the strictest environmental criteria, but feed criteria do not fully safeguard against deforestation risk.
- ✓ Introducing robust measures to reduce local environmental impacts and improve feed efficiency and fish welfare (including land-based, closed containment, or offshore systems as well as intelligent monitoring systems for sea-lice and disease management and circular waste and wastewater solutions).
- ✓ Avoiding air transport by using rail or sea freight or producing close to market. Airfreight can more than double the carbon footprint of the final product.
- ✓ Implementing electrification of sites and vessels, as well as renewable energy and energy efficiency measures.

ISSUER & COMPANY SPOTLIGHT

Proximar is a Norwegian aquaculture company that is initiating land-based salmon farming in Japan. The production avoids both airfreight to market and the negative impacts on local marine environment and wild salmon posed by traditional aquaculture. The company also aims at achieving efficient use of feed, electricity, and freshwater. On-site solar panel installations are planned to cover parts of the electricity consumption. Proximar's green financing framework has received the first **Dark Green** shading in the sector and a governance score of Good. In addition, our Company Assessment rated investments 100 percent **Dark Green.**

[21] The State of World Fisheries and Aquaculture 2022 | FAO (fao.org)
[22] Quantifying Greenhouse Gas Emissions from Global Aquaculture | Scientific Reports (nature.com)
[23] Greenhouse Gas Emissions of Norwegian Seafood Products 2017 | SINTEF (Sintef.no)
[24] Nå Nekter Norske Oppdrettere å Kjøpe Soya fra Selskaper som Hugger Regnskog | E24 (e24.no)
[25] Greenhouse Gas Emissions from Aquaculture Systems | World Aquaculture Society (was.org)
[26] Aquaculture: A Newly Emergent Food Production Sector—and Perspectives of its Impacts on Biodiversity and Conservation | Biodiversity and Conservation (springer.com)

BEST PRACTICES

AVIATION

Global aviation accounts for around 3.5 percent of climate impacts due to human activities.[27] If global aviation were a country, it would be among the top ten emitters globally.[28] It is one of the most difficult to abate sectors and is rebounding from the COVID-19 pandemic and likely to increase further in the decades ahead. Aviation is warming the climate at about three times the rate that would be expected from its CO_2 emissions alone due to non-CO_2 climate impacts (such as from NO_x and soot), and mitigation strategies for those emissions are less well-understood.[29] Emissions from airports themselves are much lower than from aviation in general, but activities such as ground transport and building operations require decarbonising. Extreme weather events that are expected to increase due to climate change can disrupt both aviation operations and fuel supply chains. The EU Taxonomy does not cover aviation directly. However, it includes low carbon airport infrastructure dedicated to aircraft with zero tailpipe CO_2 emissions; electrical ground power and preconditioned air to stationary aircraft; or zero direct emissions performance of the airport's own operations.

Best Practices

- ✓ Accelerating energy efficiency improvements, including for aircraft design, fleet composition, and air traffic and route optimisation.
- ✓ Integrating sufficient and sustainable lower emissions biofuels and synthetic fuels into the fuel mix. Fuels should achieve lifecycle emissions benefits and avoid land use competition with food production and biodiversity.
- ✓ Developing lower emissions alternative technologies, such as green hydrogen or renewable electrification, which will require significant changes in aircraft design and associated investments in R&D to scale.
- ✓ Supporting research on aviation's non-CO_2 impacts to identify and implement effective mitigation measures.
- ✓ Assessing and avoiding potential lock-in to current aviation practices. In addition, airports should consider lifecycle emissions from other operations and logistics, renewable energy procurement, and energy efficiency measures.

ISSUER SPOTLIGHTS

Delhi International Airport is a joint venture that manages Indira Gandhi International (IGI) Airport. The use of proceeds is for terminal buildings and other airport infrastructure. While the airport achieved the "Level 4+, Transition" under the Airport Carbon Accreditation programme, there is substantial risk of lock-in as the reductions will not outweigh the increase in emissions from the airport's expansion. The necessity of aviation for economic development also factored into our shading. Delhi International Airport received a **Light Green** shading with a governance score of **Good.**

[27] The Contribution of Global Aviation to Anthropogenic Climate Forcing for 2000 to 2018 | Atmospheric Environment (sciencedirect.com)
[28] Reducing Emissions from Aviation | EU Commission Climate Action (ec.europa.eu/clima)
[29] The Contribution of Global Aviation to Anthropogenic Climate Forcing for 2000 to 2018 | Atmospheric Environment (sciencedirect.com)

BEST PRACTICES

ENERGY GENERATION

Emissions from energy systems must be rapidly reduced to achieve the Paris Agreement target. Among other widespread changes, this entails substantially lower fossil fuel use, net zero electricity systems by 2040, widespread electrification, and large increases in the use of alternative energy sources such as hydrogen, green ammonia, and bioenergy.[30] According to the International Energy Agency (IEA) World Energy Outlook, 2021 saw a rebound in fossil fuel production and consumption, and alignment with its Net Zero Emissions by 2050 scenario is not, at current rates, foreseeable. There is some good news, however: renewable energy sources continue to grow, and wind or solar electricity represents the cheapest source of electricity generation in most markets.[31] Energy generation assets and associated infrastructure are vulnerable to physical climate risks, for example heat related stress or storms impacting electricity supply. To align with the EU Taxonomy, most renewable projects must demonstrate a lifecycle impact of below 100gCO_2e/kWh. Relevant Do No Significant Harm criteria focus on climate change adaptation, materials sourcing, circular economy, and limiting environmental impacts on local ecosystems and biodiversity.

Best Practices

- ✓ Evaluating and minimising environmental impacts, including on biodiversity and ecosystems.
- ✓ Focusing on supply chain emissions and risks, such as embedded emissions in wind turbine production and potential social risks related to raw material inputs and the manufacturing of solar panel assets.
- ✓ Undertaking extra efforts to ensure local support for renewable projects, such as large hydropower plants or wind farms, which can be controversial and/or negatively affect local communities.
- ✓ Considering climate mitigation alongside resiliency for the built environment and planning for necessary water resources, including for cooling systems.
- ✓ For nuclear energy, although it will make it easier to achieve Paris Agreement goals, managing considerable risks related to final waste disposal, potential for weapons proliferation, and maximum credible accidental radiation.
- ✓ For bioenergy, ensuring feedstocks do not compete with food production, negatively impact soil carbon (e.g., peat), or have links with deforestation or other ecosystem conversion and associated biodiversity loss.

ISSUER SPOTLIGHTS

Statkraft is a Norwegian energy company and Europe's largest generator of renewable energy. Its framework focuses on renewable energy (hydropower, wind, and solar) and electric vehicle charging infrastructure. Statkraft is testing the development of a GHG emissions tool focusing on construction activity for hydropower, and recently included climate/environmental requirements in supplier construction contracts. Statkraft received a **Dark Green** shading with a governance score of **Excellent.**

Ørsted is a Danish power and heat producer. In 2021, 90 percent of its energy generation was from renewables, with the majority of this from offshore wind. Its framework allows for investments in wind and solar energy as well as integrated power storage. Of note was Ørsted's supply chain decarbonisation strategy and its increased use of lifecycle assessments to improve resource use. Ørsted received a **Dark Green** shading with a governance score of **Excellent**.

[30] IPCC Sixth Assessment Report: Working Group III |IPCC (ipcc.ch), Net Zero by 2050 - A Roadmap for the Global Energy Sector | IEA (iea.org)
[31] World Energy Outlook 2021 | IEA (iea.org)

BEST PRACTICES

FINANCIAL SERVICES

Financial institutions are vital for achieving the Paris Agreement target. At the same time, they need to further improve climate risk management and allocate additional capital to financing climate mitigation, adaptation and nature protection and restoration. Momentum in the sector has grown, culminating at COP26 in Glasgow with the launch of the Glasgow Financial Alliance for Net Zero (GFANZ). GFANZ brings together members of various net zero initiatives for banks, insurers, asset managers, and asset owners, encompassing over 450 firms with more than USD 130 trillion in assets under management and advice. Members work to implement their net zero commitments by developing transition plans, mobilising additional capital, and engaging policymakers to support the creation of an enabling policy environment.

Regulatory initiatives are also growing, with the European Central Bank, Bank of England, Australian Prudential Regulation Authority, and the People's Bank of China all concluding initial climate stress tests in 2021 and 2022. Others, including regulators in the US, Brazil, South Africa, Japan, Korea, Malaysia, and Singapore, have announced stress testing plans. In the asset management sector, the US Securities and Exchange Commission (SEC) has joined regulators in Europe and Asia with proposed requirements for fund managers to disclose how they incorporate ESG factors and fund impacts, including GHG emissions and investee engagement outcomes. More frequent and extreme weather events due to climate change can significantly impact the value of a financial institution's portfolio, making consideration of physical climate risks critical. This sector is not currently covered under the EU Taxonomy.

Best Practices

- ✓ Setting climate goals (including portfolio-level science-based targets and green finance targets), reporting on Scope 1, 2, and 3 emissions, implementing Taskforce on Climate-Related Financial Disclosures (TCFD) recommendations (including conducting portfolio-level climate physical and transition risk assessments), and disclosing robust sector and issue-specific policies.
- ✓ Engaging with investees to ensure that portfolio decarbonisation drives real economy change.
- ✓ Integrating considerations of climate resilience, supply chain and lifecycle impacts, and rebound and lock-in effects into policies and processes for assessing and managing climate and other environmental and social risks.

ISSUER SPOTLIGHTS

CPP Investments manages over CAD 500 billion of assets for beneficiaries of the Canada Pension Plan. Its updated green bond framework introduces green hydrogen and new performance thresholds for energy efficiency, on top of existing project categories such as wind and solar power, zero emissions transport, and green buildings. It excludes direct financing of fossil fuel infrastructure, including renewable energy that expands oil and gas production. CPP Investments received a **Dark Green** shading with a governance score of Excellent.

Skandinaviska Enskilda Banken (SEB) is a northern European financial services group and a pioneer in the green bond market. Its new green bond framework expanded to include a biodiversity focus, and contains ten categories, ranging from renewable energy, green buildings, and clean transportation to circular economy, sustainable water and wastewater management and terrestrial and aquatic biodiversity conservation. SEB relaxed some eligibility criteria from their previous framework to engage with and support more clients with transitioning their business models. SEB received a **Medium Green** shading with a governance score of Excellent.

BEST PRACTICES

FORESTRY AND BIOECONOMY

Emissions from deforestation and forest degradation currently account for around 11 percent of greenhouse gas emissions globally.[32] Sequestering carbon while growing but releasing carbon when felled, forests are both a source and a sink of GHG emissions. Sustainable forestry practices therefore represent an important opportunity for reducing GHG emissions and sequestering carbon.

Forests are important as a source of adaptation and resilience through their provision of ecosystem services (e.g., climate regulation and flood prevention), and for livelihoods - around 1.6 billion people depend on forests for food, water, shelter, and energy.[33] Forests additionally provide raw materials and goods needed for the low carbon economy, such as timber for buildings, bioenergy feedstocks, bioplastics, and biocomposites. Forests face physical risks from climate change, particularly increasingly frequent and severe fires, droughts, and other extreme events. The EU Taxonomy sets guidelines for afforestation, rehabilitation and restoration of forests, forest management, and conservation forestry.

Best Practices

- ✓ Managing forests to grow carbon sinks over time, with a robust and transparent methodology for carbon accounting. Certification schemes are common and can be a useful tool but are not a panacea.
- ✓ Incorporating biodiversity concerns, protected areas, and forest set-asides in a region-specific context.
- ✓ Seeking to minimise the construction of new roads and the use of fossil fuel equipment in forestry activities.
- ✓ Following circular economy principles. Full supply chain analysis evaluating the end-use of products and lifecycle emissions should be carried out.
- ✓ Optimising the use of side-streams and vertically integrated operations. Bioenergy should be waste-based and the growth of crops for biofuels should not compete with food crops.

ISSUER SPOTLIGHTS

Svenska Cellulosa Aktiebolaget (SCA) is a Swedish forest products company offering packaging paper, pulp, wood products, renewable energy, services for forest owners, and transport solutions. Eligible project categories include forestry operations, renewable energy, energy efficiency, and pollution prevention and control. SCA's products enable the replacement of carbon-intensive building and other materials with wood, and the company's operations are largely fossil-fuel free. SCA has received a **Dark Green** shading with a governance score of **Excellent**.

Preem Holdings AB is Sweden's largest fuel refining company. Eligible projects under its green financing framework support a stepwise transformation of its refineries with retrofits to produce biofuels. While risks of fossil fuel refining at the corporate level and unsustainable feedstock sourcing remain, Preem has an ambitious target to be carbon neutral by 2035. Ninety-three percent of its renewable feedstock in 2021 was certified and palm oil and soy were excluded. Preem received a **Light Green** shading with a governance score of **Good.**

[32] REDD+ Reducing Emissions from Deforestation and Forest Degradation | FAO (fao.org), Forests and Agriculture | European Commission (ec.europa.eu)
[33] Forests and Agriculture | European Commission (ec.europa.eu)

BEST PRACTICES

MANUFACTURING, MINING, AND HEAVY INDUSTRY

The industrial sector has a vital role to play in achieving the net zero goal: its emissions must fall by 90 percent by 2050 to align with the IEA's Net Zero by 2050 scenario.[34] The industrial sector is the second largest source of energy sector CO_2 emissions from existing infrastructure and technologies, and with industrial production expected to increase by approximately 500 percent by 2050 to meet growing demand for clean technologies, work is needed to reduce current and mitigate future emissions.[35] In addition, mining and heavy industry sectors are highly exposed to both transitional and physical climate risk, such as from flooding, water stress, heat events, and sea level rise.

The EU Taxonomy states that the manufacturing of low carbon technologies should demonstrate lifecycle GHG emission savings compared to the best performing alternative. For carbon intensive industries, the EU Taxonomy lays out specific thresholds for emissions levels, but does not cover all aspects and products. Circular economy principles are encouraged (e.g., the manufacturing of secondary aluminium is eligible with no additional mitigation criteria).

Best Practices

- ✓ Aligning targets and investments with the longer-term goal of zero-emission solutions and avoiding lock-in of emissions. Investing in R&D for these solutions, including carbon capture and storage (CCS).
- ✓ Accelerating the electrification of fossil fuel-based processes and machinery, renewable energy deployment, innovation in extractive practices and waste solutions, energy efficiency measures, and implementation of circular economy principles, such as reusing materials through refunding schemes.
- ✓ Focusing on extensive and transparent carbon accounting, such as by following the Greenhouse Gas Protocol standards, to mitigate against the current trend of increasing energy intensity.
- ✓ Considering the lifecycle emissions of raw material sourcing, as well as potential negative local impacts.
- ✓ Integrating climate risk scenarios to plan for physical climate impacts.

ISSUER SPOTLIGHTS

Boliden is a metal producer active in exploration, mining, smelting, and recycling. Most proceeds under its framework will finance the expansion of its low carbon zinc production facility in Odda, Norway, and other energy efficiency and pollution prevention and control projects. Direct emissions from Boliden's smelters amount to around 400,000 tonnes CO_2e per year. While these are expected to fall significantly towards the end of the decade, elements of the reduction process are currently dependent on coal or coke. Boliden has received a **Medium Green** shading with a governance score of **Excellent.**

Pensana intends to create a sustainable magnet-metal supply chain, with a rare-earth processing facility in the UK and mining operations in Angola. Proceeds will exclusively finance the UK processing facility, where the main product (NdPr) is a key element in permanent magnets used in electric motors, among other applications. Pensana's NdPr can enable the transition to cleaner technology, even though it was not possible to calculate its carbon footprint compared to other producers. Pensana has received a **Light Green** shading with a governance score of **Good**.

[34] Net Zero by 2050 - A Roadmap for the Global Energy Sector | IEA (iea.org)
[35] Climate-Smart Mining: Minerals for Climate Action | World Bank (worldbank.org)

BEST PRACTICES

REAL ESTATE

The real estate sector accounts for 39 percent of global energy-related carbon emissions.[36] Given the long lifetime of building assets, new construction decisions need to be made carefully and designed to be as energy-efficient as possible. Additionally, a recent study suggests that 11 percent of global greenhouse gas emissions are associated with the manufacturing of key materials used in construction, and approximately 70 percent of embodied emissions from a building are emitted before the building is put into use.[37] New construction is therefore a major emitting activity requiring urgent mitigation. Data on embodied carbon in the real estate sector is largely lacking, and differences in practices and standards impede benchmarking and creating effective emission reduction strategies. Buildings in all regions are likely exposed to increasing physical climate risks, such as flooding and heat stress.

The EU Taxonomy requires that new constructions demonstrate a net primary energy demand 10 percent lower than national regulations, renovations must deliver 30 percent greater energy efficiency, and ownership or acquisition of buildings should have an energy performance in the top 15 percent of similar stock.

Best Practices

- ✓ Defining a strategy to decrease the overall carbon footprint of an asset. For development projects, it is beneficial to prioritise the refurbishment of existing properties over building new. When building new, an emissions reduction strategy should consider material efficiency, low-carbon building materials and energy systems, and occupational density including transport connection.
- ✓ Considering that while voluntary environmental certifications such as LEED[38] and BREEAM[39] can help manage the environmental footprint of buildings, they fall short of guaranteeing a reduction in GHG emissions and do not necessarily include considerations of climate resiliency.
- ✓ Using energy efficiency targets that exceed national regulations and selecting low carbon energy sources.
- ✓ Evaluating and mitigating physical climate risks using scenario analyses.

ISSUER & COMPANY SPOTLIGHTS

HGR Property Partners is a Finnish real estate developer and investor. The issuer expects to allocate most of the net proceeds to certified new buildings. In Finland, the national government is planning to set limits for embodied emissions linked to the construction of new buildings. HGR is looking to overachieve this limit by 10 percent, demonstrating a potential company strategy to manage embodied emissions. HGR Property Partners has received a **Medium Green** shading with a governance score of **Good**.

Wästbygg Gruppen AB is a Swedish real estate company focusing on developing residential, commercial, and logical/industrial properties in the Swedish market. Our Company Assessment concludes that in 2021, 74 percent of rental revenue and 73 percent of operational costs were shaded green. In total, 30 percent of revenue and 29 percent of operational costs in 2021 went to buildings shaded **Dark Green**. Wästbygg has received a governance score of **Excellent.**

[36] Embodied Carbon Call to Action Report | World Green Building Council (worldgbc.org)
[37] Towards Embodied Carbon Benchmarks for Buildings in Europe | Ramboll (hubspotusercontent00.net)
[38] LEED Rating System | Leadership in Energy & Environmental Design (usgbc.org)
[39] BREEAM - Sustainability Assessment Method | BRE Group (bregroup.com)

BEST PRACTICES

ROAD AND RAIL TRANSPORTATION

Road transport currently accounts for around 37 percent of total CO_2 emissions from end-use sectors.[40] Rail transport represents 8 percent of global passenger travel and about 9 percent of freight activity and is one of the most energy-efficient transport modes, accounting for only 3 percent of transport energy use, requiring 12 times less energy, and emitting 7-11 times less GHGs per passenger-kilometre travelled than private vehicles and airplanes.[41]

Electrification is the major low carbon pathway for the transportation sector. In 2021, approximately 10 percent of global car sales were electric, four times the market share of 2019.[42] Three-quarters of global passenger rail transport activity takes place on electric trains, representing an increase of 60 percent since 2000.[43] Progress in decarbonising the power sector will accelerate the CO_2 emissions reduction benefits of electric vehicles and trains, while indirect GHG emissions, especially from producing batteries and infrastructure materials as well as during construction, remain problematic.[44] Adaptation measures are also needed given road and rail infrastructure vulnerabilities to increased flooding, heat stress, and other extreme weather events. The EU Taxonomy covers zero and low emissions passenger cars, light commercial vehicles, heavy duty vehicles, and passenger and freight related activities.

Best Practices

- ✓ Investing in rail, public transit, and walking or cycling infrastructure as alternatives to car ownership and air travel.
- ✓ Expanding renewable energy penetration in regional grids and electric vehicle charging infrastructure.
- ✓ Considering lifecycle emissions, biodiversity impacts, and resilience during infrastructure design and construction.
- ✓ Managing rail waste in accordance with the waste hierarchy and identifying circular economy opportunities considering the growing metals demand associated with electrification.
- ✓ Selecting biofuels with sufficient lifecycle climate benefits and environmental and social safeguards.

ISSUER SPOTLIGHTS

Posten Norge Group is a logistics company serving consumer and corporate markets in the Nordics. Proceeds from its green finance framework will be used for electric bikes, cars, and trucks and charging stations as well as sustainably sourced biofuels and biogas. We encourage the issuer to strengthen requirements and incentives for its suppliers as well as improving its own vehicle fleet. Posten received a **Medium Green** shading and a governance score of **Excellent.**

Altech Industries Germany is a producer of high purity alumina coated battery materials used for lithium-ion battery production. Altech's battery materials contribute to vehicle electrification, the battery materials have improved capacity compared to regular anodes, and Altech has taken steps to minimise emissions. On the other hand, fossil fuel linkages and mining impacts in Altech's supply chains remain, and materials are used in hybrid vehicles with associated fossil fuel emissions. Altech has received a **Medium Green** shading with a governance score of **Good.**

[40] Topic – Transport | IEA (iea.org)
[41] Tracking Report - Rail | IEA (iea.org)
[42] Global EV Outlook 2022| IEA (iea.org), How global electric car sales defied Covid-19 in 2020 | IEA (iea.org)
[43] Ibid.
[44] Ibid.

BEST PRACTICES

SHIPPING

Shipping is one of the most energy-efficient ways to transport cargo and accounts for approximately 90 percent of global trade. In 2018, shipping accounted for around 2.9 percent of total energy sector emissions.[45] According to the IEA, the shipping industry is expected to miss a net zero emissions target by 2050 due to a lack of available low carbon fuel options on the market and the long lifetime of vessels (typically 25 to 35 years). This highlights the necessity for more ambitious efficiency improvements, rapid fuel switching to low carbon fuels (e.g., biofuels), and technological innovation to facilitate this transition. Longer term, more severe storms may increase costs due to additional safety measures, longer routes, damage to ships and port infrastructure, and delays.

The EU Taxonomy currently does not cover deep sea shipping but covers a range of related water transport activities, including hybrid vessels through 2025 and zero direct tailpipe emission vessels.

Best Practices

- ✓ Considering the fossil fuel intensity of the cargo, which sectors the vessel serves, and whether the implementation of green technologies replaces or complements existing fleets to avoid rebound effects and lock-in of emissions.
- ✓ Using sustainable biofuel, which requires no additional technological innovation to implement in existing ships and is currently the only low carbon technology suitable for deep sea shipping.
- ✓ Deploying battery electric solutions that are already available for use cases such as ferries. For deep sea shipping, R&D into low carbon fuels and parallel improvements in energy efficiency are required to reach climate targets.
- ✓ Reducing port-related emissions, as the International Maritime Organisation (IMO) has calculated that ships burn around 15 percent of total fuel while in ports.[46] The Global Industry Alliance to Support Low Carbon Shipping (Low Carbon GIA) published the Ship-Port Interface Guide, which provides examples of practical measures ports can take to reduce ship emissions.[47]

ISSUER SPOTLIGHTS

A.P. Moller – Maersk is a Danish shipping company operating the world's largest fleet of container vessels. Maersk is the first in the sector to commission low-carbon ships at scale. Such vessels running on renewable fuels such as methanol and other alternative fuels would constitute a crucial step towards decarbonising long-haul shipping. Maersk received a **Medium Green** and a governance score of **Excellent.**

Wallenius Wilhelmsen is a provider of integrated vehicle shipping and logistics services headquartered in Norway. CICERO Green assessed the SLB framework's sole KPI, WalWil's fleet average carbon intensity, as material, strategically significant, and backed by a robust and transparent methodology. Its target is ambitious against the Paris Agreement when also considering the company's historical reductions, aligns with peers, and is ambitious against its past performance in requiring technological innovation. A Shade of Green was assigned to 13 percent of WalWil's revenues, reflecting the climate risk of WalWil's cargo and factoring in the firm's current reliance on fossil fuels. Wallenius Wilhelmsen received a governance score of **Good**.

[45] Fourth Greenhouse Gas Study| IMO (imo.org)
[46] Ports are Key to 2050 Emissions Targets, Says IMO Chief | Informa (https://lloydslist.maritimeintelligence.informa.com/)
[47] Ship-Port Interface Guide Released to Support GHG Emissions Reduction | IMO (https://greenvoyage2050.imo.org)

BEST PRACTICES

SOVEREIGNS AND GOVERNMENT ENTITIES

Sovereigns and other government entities play a significant role in enabling and driving their states' climate policies via public investment, financial incentives, and regulations. Against the backdrop of the Paris Agreement, in which countries negotiated and committed to their Nationally Determined Contributions with the aim of collectively limiting warming to well-below 2°C, sovereign states are setting the stage for climate action in their respective jurisdictions.

Subnational governments, including local and regional governments, municipalities, and mayoral offices, may move faster than national government on implementing change on the ground, including through projects within public transportation, new construction and refurbishment of buildings, and waste and water treatment, while being on the front lines of climate adaptation. Green and sustainability bond issuances by sovereigns and other government entities can help tap private sector investment to address part of the climate finance gap.

Best Practices

- ✓ Developing environmentally robust eligibility criteria combined with ambitious interim and long-term climate goals and specific plans on how targets are to be achieved. For sovereigns and national and local government entities, this implies setting environmental considerations at the heart of any public investment such as new healthcare buildings or large infrastructure projects, while working systematically to reduce emissions from own operations, for example by reducing energy consumption in public buildings.
- ✓ Integrating climate risks and vulnerabilities in standard planning procedures based on the latest available climate change scenarios and improving climate resiliency in all operations.
- ✓ Considering that transparency is paramount. This includes drawing up a clear project list with stringent eligibility criteria that align with climate targets. There should be clear oversight responsibilities across government ministries and agencies. Issuers should also disclose the share of administrative costs to be financed. The framework must facilitate regular, relevant, and comprehensive reporting.

ISSUER SPOTLIGHTS

Iceland is a sparsely populated Nordic island country with the main economic sectors being tourism, seafood, and aluminium production. Green projects eligible under Iceland's sustainable financing framework support the government's Climate Action Plan within transport, buildings, and nature conservation, while the social projects cover education, health, social inclusion, affordable housing, and employment. Iceland's framework has received a **Dark Green** shading with a governance score of **Good**.

The Republic of Indonesia is the world's fourth most populous country and the largest economy in ASEAN. Proceeds from Indonesia's Sustainable Development Goals framework finance or refinance projects within green and social categories, with a focus on healthcare, education, and information and communications technology. Green projects include renewable energy, sustainable transport, climate resilience and waste management. Indonesia has received a **Medium Green** shading with a governance score of **Good**.

City of Łódź is the third largest city in Poland and was previously an industrial centre. Under its green financing framework, the issuer expects to spend 90 percent of proceeds on upgrading and modernising the city's wastewater management. Remaining proceeds will be spent on low carbon clean transportation. The framework has received a **Medium Green** shading with a governance score of **Fair**.

BEST PRACTICES

WASTE AND CIRCULAR SERVICES

Advancing effective waste prevention and management and implementing circular solutions is critical for climate, natural resources, and the environment. The extraction and processing of new resources are responsible for some 50 percent of GHG emissions.[48] Municipal solid waste alone is expected to increase from 2.01 billion tonnes annually today to 3.40 billion tonnes by 2050, at double the population growth rate expected over that period.[49] At least one third of solid waste is not managed in an environmentally safe manner and is instead processed through open dumping or burning.[50] Emissions from waste largely depend on how the waste is treated: when waste is sent to a landfill, the organic content decomposes and produces methane and CO_2 emissions. When waste is incinerated – even if energy is captured– emissions of GHGs and other pollutants can be significant. If waste instead is converted into new materials through circular solutions, these emissions are avoided. With increasing flooding and other extreme weather events, adaptation and resilience for waste processing infrastructure should also be considered. The EU Taxonomy covers collection and transport of waste for reuse or recycling, material recovery, and landfill gas capture and utilisation.

Best Practices

- ✓ Following the waste hierarchy, which prioritises waste prevention followed by re-use, recycling, and recovery before disposal. Extending product lifetimes through repair can be a key tool for waste prevention.
- ✓ Considering that recycling and material recovery cause greenhouse gas emissions and pollution and may be energy intensive, and careful evaluation of these impacts is needed on a case-by-case basis.
- ✓ Designing circular solutions to turn waste streams from one process into inputs for another, such as using waste heat from data centres for district heating or greenhouses.
- ✓ Decarbonising and improving the efficiency of waste management machinery and waste transportation.
- ✓ Avoiding valorising the waste streams of unsustainable production, such as using palm oil wastes without ensuring there are environmental and social safeguards for the original palm oil production.
- ✓ Mitigating local pollution and community health risks during waste management.

ISSUER & COMPANY SPOTLIGHTS

Godsinlösen Nordic AB ("GIAB") provides repair and refurbishment services for products for insurance companies, e-commerce players, and office management. GIAB's repair and re-use services prolong products' lifetimes, preventing waste and potentially contributing to avoiding new production. For most products handled by GIAB, the major GHG emissions occur during production. Emissions from the transport for the repairs are relatively small but still need to be managed. In our Company Assessment, all GIAB's investments and 96 percent of its revenues received a **Dark Green** shading with a governance score of **Good**.

Stena Metall AB is a Swedish waste and materials company that recycles ferrous and non-ferrous metals, electronics, plastic, paper, and mixed waste, and then sells these in the form of new products to steel mills, paper mills and others. Its framework focuses on the circular economy category and includes recycling, aluminium alloy and fly ash recovery, and electric vehicle battery reuse, a particularly forward-looking technology. Stena Metall received a **Dark Green** shading with a governance score of **Good**.

[48] Circular Economy Action Plan | European Commission (environment.ec.europa.eu)
[49] What a Waste 2.0 | World Bank (worldbank.org)
[50] Ibid.

BEST PRACTICES

WATER, WASTEWATER, AND MARINE RESOURCES

Threats to global freshwater and marine resources include untreated sewage, agricultural runoff, and industrial discharge, as well as overexploitation of ecosystems. Due to a changing climate, chronic impacts such as sea level rise and ocean acidification and more frequent extreme events like flooding, droughts, and marine heatwaves will require adaptation measures. In a 2°C global warming scenario, between 0.9 and 3.9 billion people are projected to have higher exposure to water stress,[51] and over 99 percent of coral reefs will be lost, with ensuing impacts on fisheries and coastal livelihoods.[52] Around 80 percent of global wastewater is returned to ecosystems without adequate treatment or reuse.[53] Communities and ecosystems benefit from effective freshwater and marine resource management that generates energy, nutrients, and recoverable materials while safeguarding ecosystems and livelihoods. The EU Taxonomy covers water and wastewater treatment and anaerobic digestion of sewage sludge, with marine resources criteria forthcoming.

Best Practices

- ✓ Applying a circular economy approach to the water treatment process by using as much of waste streams as possible, such as by reusing extracted nitrogen in fertilizer and utilising sewage sludge for biogas production.
- ✓ Replacing fossil fuels in operations, for example in pumping stations, with biogas or renewable electricity.
- ✓ Selecting lower embodied emissions products and improving energy efficiency of equipment and operations.
- ✓ Integrating climate risk assessment and adaptation and resilience measures across water-related and coastal infrastructure design and operations in partnership with diverse stakeholders.
- ✓ Protecting biodiversity by improving water discharge quality and integrating nature-based solutions, such as green stormwater infrastructure or coastal restoration supporting water and ecosystem management, where feasible.

ISSUER SPOTLIGHTS

Veas AS is a limited liability company operating Norway's largest wastewater treatment plant in the Oslo area. Eligible projects include upgrading the current treatment plant to extract more organic components from wastewater to prevent pollution and investing in facilities generating biogas and fertilisers from wastewater sludge. Veas makes substantial efforts to reduce emissions associated with its investments, while striving to re-use materials extracted from the treated water. Through increased use of data modelling and adding back-up power lines, it aims to reduce the number of sewer overflows. The framework has received a **Dark Green** shading and a governance score of **Good**.

Asian Development Bank (ADB) is a regional development bank that provides loans, technical assistance, grants, and equity investments to promote social and economic development. Its green and blue bond framework covers projects which support marine and coastal ecosystem management, restoration, pollution control and sustainable coastal and marine development. ADB's inclusion of blue economy projects is commendable and shines a light on a sector which is often undervalued and overlooked. While the blue category selection criteria lack detail in places, previous thematic issuances and solid corporate safeguards suggest the selection of projects will be ambitious. The framework has received a **Medium Green** shading with a governance score of **Good**.

[51] IPCC WGII Sixth Assessment Report | IPCC (ipcc.ch)
[52] Special Report: Global Warming of 1.5°C | IPCC (ipcc.ch)
[53] Quality and Wastewater | UN-Water (unwater.org)

4. Useful Resources

Climate Risk and Scenarios:

- CICERO Shades of Green's Climate Risk Assessments of Sectors (2021)
- Climate Change 2022: Mitigation of Climate Change, IPCC (2022)
- Climate Change 2022: Impacts, Adaptation and Vulnerability, IPCC (2022)
- Climate Change 2021: The Physical Science Basis, IPCC (2021)
- Climate Change 2021: Fact Sheets, IPCC (2021)
- Description of a 1.5°C Scenario with Chosen Measures, CICERO (2022)
- Interactive Physical Risk Climate Indicators Platform, ClimINVEST (2020)
- Net Zero by 2050 - A Roadmap for the Global Energy Sector, IEA (2021)
- World Energy Investment, IEA (2022)
- World Energy Outlook, IEA (2021)
- Recommendations of the Taskforce on Climate-Related Financial Disclosures, TCFD (2017)
- TNFD Framework Beta v0.2, Taskforce on Nature-Related Financial Disclosures (2022)

Market Principles and Standards:

- ASEAN Green Bond Standards, ASEAN Capital Markets Forum (2018)
- Green, Social and Sustainability Bonds, ICMA (2019 - 2021)
- Handbook on Impact Reporting, ICMA (2022)
- Latest European Taxonomy for Sustainable Activities (2022)
- Nasdaq Green Designations, Nasdaq (2022)
- Position Paper on Green Bonds Impact Reporting, Crédit Agricole, CIB, the Nordic Investment Bank and SEB (2020)
- Sustainability-Linked Bond Principles, ICMA (2020)
- Sustainability-Linked Bond Principles and Related Questions, ICMA (2021)

Green Bond Market Overview and Examples:

- CICERO Shades of Green's List of Public Second Opinions & Company Assessments (2022)
- CICERO Shades of Green's Newsletter (Quarterly)
- Sustainable Debt: Global State of the Market 2021, Climate Bonds Initiative (2022)

CICERO Shades of Green AS

We provide independent, research-based evaluations of green, sustainability and sustainability-linked financing frameworks, as well as company assessments. Our Second Party Opinions and Company Assessments can receive Dark Green, Medium Green and Light Green Shading, as well as Yellow and Red Shading, to offer investors and other stakeholders better insights into the environmental integrity and climate risks.

Environmental Finance Bond Awards 2022 Winner
External assessment provider of the year

- **2021 Largest External Reviewer,** Climate Bonds Initiative Awards
- **2020 External Assessment Provider Of The Year,** Environmental Finance Green Bond Awards
- **2020 Largest External Review Provider In Number Of Deals,** Climate Bonds Initiative Awards
- **2019 External Assessment Provider Of The Year,** Environmental Finance Green Bond Awards
- **2019 Largest Green Bond SPO Provider,** Climate Bonds Initiative Awards
- **2018 External Assessment Provider Of The Year,** Environmental Finance Green Bond Awards
- **2018 Largest External Reviewer,** Climate Bonds Initiative Awards
- **2017 Best External Assessment Provider,** Environmental Finance Green Bond Awards
- **2016 Most Second Opinions,** Climate Bonds Initiative Awards

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