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Second Party Opinion

Elopak Green Bond Framework

May 7, 2024

Location: Norway

Sector: Paper and plastic packaging products and materials

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Alignment With Principles

Aligned = ✔ Conceptually aligned = O Not aligned = ✘

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

See Alignment Assessment for more detail.

Dark green

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

Our Shades of Green Analytical Approach >

Strengths

Elopak demonstrates commitment to enhance recyclability and circularity within its operations. Moreover, it anticipates making this a more prominent part of its sustainability strategy, where efforts include expanding its bio-circular products and investments in research and development (R&D) projects that focus on circularity.

Elopak has historically reduced the greenhouse gas emissions of its products. Elopak uses life cycle assessment, considering cradle-to-gate, to review the carbon footprint of its different products. The assessments show that the carbon footprint of its cartons has continuously decreased over recent years, with a 26% decrease from 2014 to 2022.

Weaknesses

No weakness to report.

Areas to watch

While Elopak stays engaged with relevant stakeholders across markets, the overall recyclability and ability to limit cartons incinerated or sent to landfill will heavily depend on the local market. Elopak has limited control over the recycling infrastructure for each market, beyond adapting its products so they can be recycled. In addition, recycling is ranked in third place in the waste hierarchy, after waste prevention and reuse.

Paperboard used for production of packaging may be from wood controlled by the Forest Stewardship Council (FSC), which provides less assurance that important environmental risks are managed. Controlled does not provide the same assurance as FSC certified wood on avoiding unsustainable forestry practices. Nevertheless, controlled wood has minimum requirements to avoid sourcing of wood and fiber from illegal harvesting, high conservation value forests, forest conversion, and from genetically modified trees.

Eligible Green Projects Assessment Summary

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

Circular economy adapted products, production technologies and processes and/or certified eco-efficient products	**Dark green**
Investments in production line for the production, development, and introduction of sustainable and responsible circular paper-based packaging.	
R&D related to renewable and low-carbon packaging.	
Equipment and machines used to produce packaging.	
Sourcing of raw material.	

Renewable energy	**Dark green**
Solar energy, such as on-site solar panels.	

Clean transportation	**Dark green**
Electric cars, trucks, forklift, and machinery as well as associated infrastructure including electrical charging points.	

Energy efficiency	**Dark green**
Heat recovery projects, which lead to at least a 30% improvement in energy efficiency or emissions reduction.	
Electrification of processes, machinery, or equipment to replace the use of fossil fuels.	

See Analysis Of Eligible Projects for more detail.

Issuer Sustainability Context

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

Company Description

Elopak is a global supplier of carton packaging and filling equipment. Founded in Norway in 1957 and listed on the Oslo Stock Exchange (Oslo Børs) in 2021, Elopak operates in 40 countries, employs 2,700 people, runs 11 manufacturing units, and sells in excess of 14 billion cartons annually across more than 70 countries. Operating revenue in 2023 came from Europe (93%), Americas (4%), Africa (2%), and Asia (1%).

Material Sustainability Factors

Climate transition risks

The food system contributes to 22% of global greenhouse gas emissions. Many food brands are adopting decarbonization strategies in the face of increased investor and customer awareness. Packaging created from fossil fuel derivatives could face pressure from consumers or governments as the impact of climate transition accelerates beyond the energy sector, possibly leading to higher input costs if production is curbed. The paper-packaging sector is exposed to increasing regulation for its suppliers. Paper packaging is exposed to regulatory risks from constrained access or price fluctuations from wood-based raw materials. Forested areas could be increasingly protected in the future, as a major store of carbon, potentially restricting areas that can be used for forest products.

Physical climate risks

Physical climate risks, such as wildfires and droughts, are highly relevant to packaging suppliers. These will continue to affect stakeholders as climate change results in more extreme, and often unpredictable, weather patterns and may result in lower availability of raw materials and rising prices due to shortage of goods. Paper and forest product suppliers around the world contend with wildfires every year. In the Boreal region, tree loss resulting from drier weather and outbreaks of pests, diseases, and intense wildfires may be balanced by a longer growing season.

Biodiversity and resource use

In addition to being the main source of virgin raw materials, forests also provide a wide range of benefits, including carbon sequestration, water filtration and storage, pollution capture, soil quality, and habitat for biodiversity. Various stakeholders are engaged in ensuring land, water, and wildlife conservation and a number of regulatory bodies have mandated the setting aside of land to protect biodiversity. Sustainable practices appear to be followed in most developed markets and by large industry players even in emerging markets.

Waste and recycling

Tighter restrictions on beverage waste and plastic waste from packaging, which contribute to systemic problems including climate change and plastic pollution and associated bioaccumulation of plastics within ecosystems and the food chain, pose regulatory risks to beverage products. In Europe, the Packaging and Packaging Waste Directive (PPWD) is currently being revised, to ensure that all packaging on the EU market is reusable or recyclable in an economically viable way by 2030. Other countries are likely to follow with similar regulations.

Workforce health and safety

Consumer beverage products rely heavily on labor-intensive production and manufacturing supply chains in which workers in processing facilities, on farms, or in other packing facilities and distribution channels remain vulnerable to abuses of fundamental worker rights. This includes child and forced labor, wage underpayment, and excessive working hours, among others. Looking forward, consumers may become more aware of and sensitive to supply chain practices as the regulatory environment evolves. Workers in processing of forest products face potential for significant bodily injury and exposure to hazardous materials. The agriculture, forestry, and fishing sector, for instance, had the fourth highest rate of fatal incidents at work in 2020, according to Eurostat. Companies in most developed markets have adopted low- to zero-tolerance for failing to abide by safety requirements, which can limit both litigation and operating disruption risks. In markets with less stringent legal requirements or enforcement capacities and with growing scrutiny of safety practices by stakeholders, legal and reputational risks may increase over time.

Issuer And Context Analysis

The framework's eligible projects--investments in circular products, energy efficiency, clean transportation, and renewable energy--aim to address climate transition risk, which we consider to be the most significant sustainability factor for the issuer. Eligible projects also seek to address waste and recycling, another important sustainability factor. Additionally, physical climate risk is relevant for the production line and procurement of raw materials because such investments are exposed to the impacts of climate change either for its direct operations or for its upstream value chain. Biodiversity and resource use is also relevant for eligible projects because of biodiversity and deforestation risks associated with the raw materials used in Elopak's production.

The company has set short- and long-term greenhouse gas emission-reduction targets validated by the Science Based Target initiative (SBTi), which include material emissions from its value chain, but do not cover all scope 3 emissions, such as end-of-life emissions from its products. Elopak reports third-party verified emissions following global frameworks such as the Greenhouse Gas Protocol. In 2022, Elopak was among the first three companies to have its net zero targets approved by the SBTi after the official launch of the Net-Zero Standard. Elopak's targets follow the SBTi guidance that at least two-thirds of total scope 3 emissions must be included. Consequently, Elopak has chosen to not include the end-of-life treatment of products in the scope of its target, as these accounted for an estimated 15% of total scope 3 emission in 2022. Elopak informs us that this is because it has minimal control of such emissions, as recycling infrastructure will depend on each country where the product is sold. While not included in its net zero target, Elopak has other targets and strategies that are aimed at increasing recyclability and therefore also decreasing such emissions. Its net zero target covers emissions associated with: raw materials, business travel, transport and distribution, and filling machines in operation. In 2022, scope 3 emissions accounted for 99% of total emissions when considering market-based scope 2 emissions. In 2022, scope 3 emission for these categories were reduced by 7% compared with 2020. The main contributor to scope 3 emissions is the raw materials used in its products. To complement its 2030 emission reduction target, Elopak has established a roadmap to 2030, which is part of its overall sustainability program and reaches across all business units, where key actions are identified to reduce emissions across all three scopes. Since 2016, Elopak has sourced 100% renewable energy through guarantees of origin.

Elopak has implemented pertinent strategies and procedures to enhance recyclability and circularity within its operations. All Elopak's packaging is recyclable, as long as the infrastructure is in place. Elopak is expanding its offering to include bio-circular products, such as cartons where the polymer barriers are based on bio-circular feedstocks rather than the traditional fossil sources. Elopak has established key performance indicators with bonus incentives at the top executive level that are implemented to increase the sales of low-impact cartons in Europe. Elopak anticipates that the revision of the PPWD will introduce regulatory changes relating to recycling, affecting its product suite. Consequently, it is intensifying its focus

on circularity to facilitate compliance with upcoming requirements. Elopak has set targets for increasing the collection and recycling of beverage cartons in Europe to reach a 90% collection rate and at least a 70% recycling rate by 2030, verified by third parties. Recycling of beverage cartons in Europe (EU-27 and the U.K.) has steadily increased over recent decades. In 2019, the carton recycling rate in the EU was 51% (using the applicable calculation method at the time) . Together with industry peers, Elopak annually reviews Design for Recycling (DfR) Guidelines, providing producers of beverage cartons with technical guidance to identify which materials are compatible with existing recycling processes, and how the recyclability of beverage cartons can be optimized. The effectiveness of recycling depends on product design, but also on the collection, sorting, and recycling systems where the product is sold. Elopak has limited control over the recycling infrastructure for each market, beyond adapting its product so it can be recycled according to local standards. While recycling practices are more developed in some regions, such as Europe, only 60% of households in the U.S. have access to beverage carton collection. While Elopak stays engaged with relevant associations and stakeholders across all markets, the overall circularity, and ability to limit incineration and cartons sent to landfills, will heavily depend on the local market.

Elopak relies on certifications to mitigate environmental risks from its purchased raw materials, such as deforestation risks from purchased paperboard. Elopak's main raw materials are paperboard, polymers, and aluminum. Elopak aims to use certified products in all its cartons, prioritizing paperboard, the main material in its cartons, where it relies on the FSC certification. In 2022, 49% of purchased materials were certified. On average, 85% of cartons are made of paperboard sourced from northern hemisphere forests. Key suppliers are assessed through a Ecovadis system. In addition, Elopak assesses suppliers with a questionnaire that includes environmental criteria; Elopak expects suppliers to follow its Code of Conduct and assesses them against social responsibility and environmental criteria.

In 2022, Elopak conducted a climate risk analysis by establishing a framework for identifying and assessing both physical risks and transition risks/opportunities such as regulations and technological developments. Climate scenarios based on Intergovernmental Panel on Climate Change's representative concentration pathway (RCP) of 2.6, 4.5, and 8.5 were used in the assessment. According to the assessment, key physical risks were identified to not be relevant already today, but relevant in the medium to long term. The risks are: 1) chronic droughts or water shortage of direct operations or upstream value chain, 2) wildfires affecting raw material volumes, and 3) extreme storm events disrupting direct operations. Elopak informs us that it performs local risk assessments to assess physical climate risks when planning for new facilities.

Alignment Assessment

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

Alignment With Principles

Aligned = ✔ Conceptually aligned = O Not aligned = ✘

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

✔ Use of proceeds

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

The issuer commits to allocate the proceeds to capital and operating expenditures that are in line with the eligibility criteria for green financing. Elopak will exclude investments related directly to activities associated with fossil fuels. Eligible green projects have a maximum three-year lookback period for refinancing. Purchasing costs for products defined under the sub-category "Sourcing of raw material" are considered as an annual cost and will have a maximum one-year lookback period for refinancing.

✔ Process for project evaluation and selection

The process for project evaluation and selection is described in the framework. The issuer identifies relevant environmental objectives for all eligible project categories. To conduct the selection and evaluation of green projects that are in alignment with the criteria set out in the issuer's framework, Elopak has established a green bond committee consisting of representatives from Finance, Procurement, and Sustainability functions. The green bond committee is responsible for identifying social and environmental risks associated with the green projects as well as mitigants to such risks. Company risk identification and mitigation is governed under Elopak's risk management procedures.

✔ Management of proceeds

Elopak will establish a green register to monitor green projects that are financed and to provide an overview of the allocation of net proceeds. The company provides clear commitment of the proceeds to be adjusted on an annual basis to match allocations to eligible projects during the time the instrument is outstanding. The pending full allocation will be temporarily managed by high credit rated Nordic/European institutions. The issuer specifies that unallocated proceeds will not be invested in any fossil fuel-based investments.

✔ Reporting

Elopak commits to produce allocation and impact reporting through its annual Allocation and Impact Report (Green Bond Report) until full allocation. The allocation report will include a list of all eligible green projects financed, with project descriptions, allocated share of proceeds, distribution between new financing and refinancing, and the amount of unallocated proceeds. The impact report will disclose environmental impact of the eligible green projects on a best effort basis.

Analysis Of Eligible Projects

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

Elopak expects to allocate approximately 90% of proceeds to circular-economy-adapted products, production technologies and processes, and/or certified eco-efficient products. The remainder will be allocated to other project categories.

The issuer expects 50% of proceeds to be allocated to refinancing projects, while 50% of proceeds will be directed to finance new projects.

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

Our Shades of Green Analytical Approach >

Overall Shades of Green assessment

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

Green project categories

Circular-economy-adapted products, production technologies and processes, and/or certified eco-efficient products

Assessment

Dark green

Production line

Production technologies and processes related to the production, development and introduction of recyclable and sustainable paper-based packaging. The production lines will be certified in accordance with the standards of the FSC or the Sustainable Forestry Initiative (SFI).

R&D

R&D related to renewable and low-carbon packaging, processes, and technologies with the purpose of replacing non-renewable materials with renewable raw materials; improving the circularity of the product portfolio; reducing the environmental footprint; and increasing operational efficiencies related to waste, and energy consumption.

Equipment and machines

New production line equipment and machines used to produce paper-based packaging with the aim to reduce material consumption, lower the carbon footprint, and/or increase product recyclability. The new equipment and machines will be installed in factories certified in accordance with the standards of the FSC.

Sourcing of raw material

Purchasing of FSC certified paperboard

Analytical considerations

- The majority of proceeds is expected to be allocated to production lines of cartons (mainly to new facilities in the Americas and India), and remaining proceeds are expected to be allocated to equipment and machines, and R&D. Investments directed at

equipment or systems running on fossil fuels are excluded. Elopak's carton product suite are substitutes for fossil-based alternatives such as plastic bottles. While the total environmental and climate impact will depend on the region where the cartons are produced and sold, the project category receives a dark green shading because the company addresses key considerations such as circularity, biodiversity risks, carbon footprint, and physical risks.

- Elopak uses life cycle assessment, considering cradle-to-gate, to review the carbon footprint of its products. The assessment considers all emissions connected to the production of raw materials, as well as Elopak's own operations, including final conversion and transportation up to the delivery at Elopak's customers' gate. Elopak's key inputs in its cartons are paperboard, polymers, and aluminum. Paperboard, being by far the main purchased raw material, represents less than half of its materials' climate impact. Only new paperboard is used in the production of cartons because, according to Elopak, food safety and technical characteristics make recycled paperboard unsuitable for containing beverages. While aluminum only represents 2% of its raw material purchase, it represents 17% of the emissions from its raw materials. The assessments show that the carbon footprint of its cartons has continuously decreased over recent years. For example, in 2022 the average carbon footprint of its cartons with closure (sold in Europe) was 23.9 grams of carbon dioxide equivalent emissions (gCO_2e) per carton, representing a 26% decrease compared with 2014. According to Elopak, this is due to emission-reduction initiatives internally as well as at its suppliers, and because customers opt for more environmentally friendly cartons. Some examples on how Elopak has reduced the carbon footprint of its packaging are by increasing the use of brown board instead of white board, and making its bio-circular offering available to a wider range of customers.
- All paperboard used for production will be FSC certified or controlled wood. Controlled wood does not provide the same assurance as FSC certified on avoiding unsustainable forestry practices like deforestation. Nevertheless, controlled wood has minimum requirements to avoid sourcing of wood and fiber from illegal harvesting, high conservation value forests, forest conversion, and from genetically modified trees. We view it as positive that purchased paperboard under the framework will be FSC certified and that, for other investments relating to the production of the packaging, the share of certified input is likely to increase with time.
- Elopak's paperboard value chain is environmentally certified through FSC, while a minor share in addition obtains the SFI certification. FSC certification is generally seen as the most robust global standard for forest management, but SFI has important complementary properties. Concerns remain around the stringency and real benefits of forest certifications, both in relation to the requirements (most reasonably run companies are likely to qualify) and application (audits seldomly lead to suspension of certification).
- While reducing resource use through recycling is part of the low carbon future, it is only the third preferred option in the waste hierarchy, after re-use and waste prevention. Cartons' recyclability depends on both product design and the effectiveness of recycling systems where the product is sold. Recycling infrastructure is exposed to significant regional variations. Key investments for new production lines are expected to be in the U.S. and India, where recycling infrastructure is less advanced than in Europe. It is positive that Elopak works to improve the recyclability of its products and stays engaged with relevant stakeholders. Elopak's R&D focuses on sustainable product design with attention to resource efficiency and circularity. This means maximizing resource efficiency by using less polymers and more wood-based materials, as well as maximizing recyclability. While sold cartons may not achieve a high level of recycling in the short term in areas where recycling infrastructure is lacking, Elopak designs its product so that they can be recycled when such systems are in place.
- Elopak informs us that it performs local risk assessments to assess physical climate risks when planning for new facilities.

Renewable energy

Assessment	Solar
Dark green	Solar energy, such as on-site solar panels.

Analytical considerations

- Renewable energy, provided the impacts on the local environment are sufficiently mitigated, is a key element in global efforts to limit global warming to well below 2°C. We consider investments in solar PV panels to be Dark green.
- Although solar projects are generally low carbon, there may be local environmental impacts (such as on biodiversity and the landscape) and lifecycle risks in the supply chain (such as from material sourcing, manufacturing, transportation, construction,

and end-of-life processing). All suppliers need to sign or demonstrate compliance to Elopak's supplier code of conduct, which includes requirements on environment.

Clean transportation

Assessment	Electric cars, forklift and heavy machinery
Dark green	Electric cars, trucks, forklifts, and machinery as well as associated infrastructure including electrical charging points.

Analytical considerations

- Electric modes of transportation, and the related charging infrastructure, are an important avenue for decarbonizing the transportation sector.
- While electric vehicles (EVs) and supporting infrastructure play a key role in decarbonizing the transport sector to align with a low carbon future, there are risks related to indirect greenhouse gas emissions from a lifecycle perspective (material sourcing, manufacturing), as well as fossil fuel-generated electricity for charging. As Elopak operates globally, the climate impact of the investments will depend on the location where EVs are operated. All suppliers need to sign or demonstrate compliance to Elopak's supplier code of conduct, which includes requirements on environment.

Energy efficiency

Assessment	Waste heat
Dark green	Heat recovery projects converting low temperature heat into hot water or steam, with installation technologies such as heat pumps and compressors, which lead to at least a 30% improvement in energy efficiency or emissions reduction.
	Electrification
	Electrification of processes, machinery, or equipment to replace the use of fossil fuels.

Analytical considerations

- Energy efficiency is key to reaching the goal of limiting warming to well below 2°C. According to the IPCC, the breakdown of average mitigation investment flows and investment needs until 2030 shows that energy efficiency is one area that requires the most significant investments.
- The activities described in the framework correspond with key actions needed to reach net zero, such as the use of heat pumps, and electrification. Electrification projects have an important part to play in the decarbonization path for multiple industries. Waste heat recovery projects reduce CO2 emissions by utilizing otherwise wasted heat energy. We believe Elopak's 30% minimum threshold for energy savings and emissions reductions for waste heat projects displays a solid ambition.
- Heat recovery projects are targeted to move from heating with gas to electricity through reuse of heat from production, where reusing heat from different sources like exhaust from sealers and exhaust from compressor rooms will be used, coupled with the use of heat pumps. No waste heat produced from fossil powered systems will be used.
- Investments directed at equipment or systems running on fossil fuels are excluded.

S&P Global Ratings' Shades of Green

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

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

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

Related Research

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

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