

# **Electrolux Green Financing Second Opinion**

12 September 2022

### **Executive Summary**

Electrolux Group (Electrolux) is a global company, headquartered in Stockholm, specialized in the production of household appliances. Electrolux is listed on the Stockholm Stock Exchange, sells approximately 60 million products annually, and has 52,000 employees. Electrolux operates globally within core markets of Europe, North America, Australia, and Brazil.

According to Electrolux, most of the proceeds under the framework are expected to be allocated to the categories 'Be climate neutral and drive clean and resource-efficient operations' and 'Lead in energy-and resource-efficient solutions.' Possible investments under these categories are both assets and activities, in Europe, US, and other continents, and include green buildings with 30% energy efficiency improvement, and equipment which can result in at least 20% increase in energy efficiency. Other project categories relate to the i) development, production of, and R&D into, recycled materials, ii) elimination of harmful materials (refrigerants and foam blowing agents), and iii) increased generation and use of renewable energy. Electrolux's framework is an update from its 2019 green bond framework. Though the names of some project categories have changed, and Electrolux expects financing for the elimination of harmful materials to decrease, the eligibility criteria remain materially the same.

We rate the framework **CICERO Medium Green** and give it a governance score of **Excellent.** Electrolux has robust sustainability policies, targets, and reporting: for example, its scopes 1 and 2, and scope 3 targets are validated by the Science Based Targets initiative, and it reports in accordance with the TCFD recommendations including scenarios.

# GOVERNANCE ASSESSMENT GREEN BOND AND GREEN LOAN PRINCIPLES Based on this review, the framework is found to be aligned with the principles.

### Key Strengths

Electrolux has in place a robust sustainability governance across targets, policies, and reporting and it is a strength that manager remuneration is connected to emissions and other climate related targets. Further, a strength is also the relatively ambitious quantification of energy efficiency thresholds for appliances and buildings. It has a three-year track record of allocation and impact reporting in line with its previous framework's commitments.

### Key Pitfalls

Pitfalls under the framework include the financing of fossil fuel related infrastructure, a lack of thresholds for investments seeking to lower water consumption, and probable varying ambition levels of investments in commercial buildings.



Electrolux does not exclude financing or refinancing of fossil fuel related infrastructure, though its framework includes additional eligibility criteria (a screening methodology for assets potentially including a fossil fuel component), see Section 2 of this SPO. Electrolux anticipates such investments to be small. Electrolux has, for example, financed a gas-fired enamelling furnace at a US manufacturing site using green proceeds, as part of overall investments to improve energy efficiency of the site by at least 20%. According to Electrolux, despite the furnace being around 30% more efficient than its predecessor, it still accounts for around 30% of the site's emissions. With the furnace able to be electrified or run on biogas, Electrolux considers the lockin risk to be small. For all investments involving fossil fuels, Electrolux should be aware of lock-in effects and avoid green financing of such investment where the risk of locking in emissions is particularly high.

Electrolux plans to invest in manufacturing equipment and tooling related to specific products with improved energy or water efficiency. While eligible assets are required to have an energy efficiency that is at least 15% better compared to the average of current products produced for a specific market, there is no equivalent water efficiency thresholds.

The issuer plans to finance or refinance new or renovated commercial buildings with at least 30% energy efficiency improvements. Where building codes are applicable, the building codes provide the baseline and determine the 30% improvement which can lead to varying ambition levels of energy efficiency. Electrolux informed us that due to regionally varying conditions, there are no additional general requirements or screening for access to public transportation, physical risk resilience, or fossil fuel heating technology of buildings. An additional pitfall is that embodied emissions for new buildings are not considered.



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# 1 Electrolux's environmental management and green financing framework

### **Company description**

Electrolux Group (Electrolux) is a global company headquartered in Stockholm specialized in the production of household appliances. These include appliances such as refrigerators, cookers, hobs, ovens, professional kitchens as well as washing machines, dryers, vacuum cleaners, air-conditioners, water heaters and heat pumps. The group is listed on the Stockholm Stock Exchange, sells approximately 60 million products annually and has 52,000 employees. Electrolux operates globally in core markets of Europe, North America, Australia, and Brazil.

Electrolux focuses on designing appliances to be more energy, water, and detergent efficient and prolong lifetime of household items and garments. Despite this, and inherent in the manufacturing industry, the company relies on raw materials and is a large emitter of greenhouse gas, both due to its manufacturing processes and its transportation network. Its sustainability framework focuses on three areas: (i) Better company, (ii) Better solutions, and (iii) Better living, is designed to help mitigate negative impacts from its operation.

The framework considered in this Second Opinion is an update from Electrolux's 2019 green bond framework, under which Electrolux has published three consecutive annual allocation and impact reports. According to its latest annual impact report, dated March 2022, it has issued SEK 1 billion under its 2019 framework.

### **Governance assessment**

Electrolux has in place robust policies, targets, and reporting on its sustainability matters. It has set specific targets for scopes 1 and 2, and scope 3, and these have been validated by the Science Based Targets initiative. It has specific climate reporting in place using the TCFD recommendations including scenarios. It addresses both mitigation and adaptation practices in its policies and reporting.

Electrolux has in place a green financing committee including senior representatives as well as representatives from the group sustainability team. The committee will decide on a consensus and decisions recorded. Sustainability experts will help prepare cases for the committee and ensuring alignment with criteria in the framework. When presented to the committee cases will include e.g., estimated GHG savings, life-cycle assessments, and more.

Electrolux has a three-year track record publishing both allocation and impact reporting under its 2019 framework. Those reports align with stated intention in that framework. The reports include allocation information, calculated impact on specific indicators, details on asset evaluation and selection, methodology, description of funded projects and/or project categories, and an external assurance. Intentions in the updated 2022 framework align with previous reports and are in line with best market practices.



The overall assessment of Electrolux's governance structure and processes gives it a rating of Excellent.



### **Sector risk exposure**

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. Currently, the industrial sector is the second-largest source of energy sector CO<sub>2</sub> emissions from existing infrastructure and technologies - totalling about 8.4 Gt in 2020 - and industrial production could further increase by nearly 500 percent by 2050 to meet growing demand for clean technologies.

**Physical climate risks**. Key physical risks include extreme weather events (storms, floods, droughts), rapidly changing cloud cover and wind speeds, increasing temperatures, and changes in precipitation patterns.

*Transition risks*. Key transition risks include increasing developments in carbon pricing, new legislation and regulations affecting, for example, prices of renewable energy, development of policies, regulation, and legislation related to the circular economy, recycling, end-of-life management.

*Environmental risks*. Key environmental risks are the negative impacts of raw material extraction, waste, and end-of-life scenarios of products.

### **Environmental strategies and policies**

Since 2018, Electrolux has been reporting its progress on its established Science-Based Targets. It is committed to reducing its GHG emissions from its operations by 80% (scope 1 and 2, according to its 2021 sustainability report at currently approximately 80 and 20 tonnes, respectively) and emission from its products by 25% (scope 3, approximately 68 m tonnes in 2021) by 2025 (2015 base year).

By the end of 2021, Electrolux had reduced its absolute scope 1 and 2 emissions by 78% and the scope 3 emissions by approx. 20% compared to 2015 – which includes emissions from inbound transport which has increased from 327 ktonnes to 375 ktonnes which can be partly explained by an enlarged scope of calculations. It is committed to decrease transportation emissions by securing commitments from 14 global logistics companies (representing 30% of transportation expenses) to commit to CDP supply chain program. According to its annual report it has decreased its GHG intensity (metric tonnes per SEKm sold) from approximately 2.7 in 2017 to 0.8 in 2021. Together with the phase out of HFCs this corresponds to an emission reduction of more than 10 million tons of CO<sub>2</sub>eq. or approx. one fifth of Sweden's annual territorial greenhouse gas emissions, according to Electrolux.

In addition, reduction of transportation emissions, as well as other environmental and climate progress, are included in the 2022 long-term incentive program for top managers (extending to about 800 employees), according to Electrolux. It has a target to include all of its plants in its internal "zero waste to landfill program (intended to recycle or reuse over 97% of waste) by 2025 (waste representing 0.01% of scope 3 emissions). It further has in place a target to replace 50% of virgin plastics with recycled plastics in its production by 2030. Raw materials, including plastics, metals, and other materials, have been mapped and are reported, both materials used by weight as well as raw material risks and scenarios.

<sup>&</sup>lt;sup>1</sup> Based on the calculation methodology used Electrolux and approved by the Science Based Target initiative in 2017.

Electrolux has a robust approach in using life-cycle assessments to assess environmental and climate impacts and gain a holistic view of its products and operation. It has estimated that 80-90% of its negative climate impacts occur during the use phase of its products. According to Electrolux, in principle, life-cycle assessments are conducted on every product manufactured. Electrolux has secured a commitment from 281 of the top direct material suppliers (corresponding to 78% of direct material expenses) to disclose emissions and set targets through the CDP supply chain program.

Electrolux has in place a climate risk disclosure report which is based on the TCFD recommendations (Task force on Climate-related Financial Disclosures) and has committed to its annual publication. In it, it describes two scenarios, 10-year and 30-year scenarios. In its last report Electrolux highlights potential higher cost to redesign products due to legislation, higher taxes on carbon emissions which could result in higher energy and material prices, acute and chronic physical risks affecting its supply chain, and opportunities, e.g., increasing need for electrification of appliances, a growing market, and a growing consumer demand. According to Electrolux, and mentioned in its TCFD report, it was found that its factories do not have significant risks related to greater acute and chronic physical risks due to more frequent and severe weather systems and changing climate conditions. Its main transition risk is if regulations would decide to pursue the 1.5C target and the risks include increased costs for redesigning products and increased carbon taxes.

### Green financing framework

Based on this review, the framework is found to be aligned with the Green Bond Principles and the Green Loan Principles. For details on the issuer's framework, please refer to the framework dated September 2022.

### Use of proceeds

For a description of the framework's use of proceeds criteria, and an assessment of the categories' environmental benefits, please refer to section 2.

### Selection

Electrolux has established a green financing committee consisting of representatives from its group treasury, investor relations, group controlling, and its group sustainability team. Committee decisions are made by consensus. Decisions by the committee should meet eligibility criteria in the framework, and Electrolux's sustainability framework which promotes the transition towards a low-carbon, environmentally sustainable, and socially sustainable society.

According to Electrolux, internal specialists in the sustainability team participate in developing analysis and cases for the green financing committee to ensure that technical criteria is complied with. The committee will be presented with life-cycle assessments on cases when relevant. The green finance committee will screen for fossil fuel components to decrease risk of lock-in effects. Any assets which involve the use of fossil fuels will be reported in the annual reporting. All financed assets, independent of geographical location, will undergo such assessments.

### Management of proceeds

Proceeds from issuances under the framework are segregated to a green account to ensure its monitoring and tracking. Until allocated proceeds will be managed as liquidity reserves (bank deposits, according to Electrolux). Assets no longer complying with the framework will be removed from the asset pool.

### Reporting



Under Electrolux's 2019 framework, it issued three separate reports for 2019, 2020, and 2021 in which it provided a detailed summary of its activities, process for asset evaluation and selection, green bond portfolio and proceeds, impacts, and methodology for impact reporting.

Its intentions for future reporting are in line with previous commitments for annual reporting, in addition to further align it with ICMA's handbook on core principles and recommendations for reporting and adding geographical distribution of green assets. The reporting will be on a project category level, however, adding examples of projects as is feasible and possible. A set of impact metrics have been defined in the framework which are in line with reporting under the previous framework. Limited assurance by an external party was provided to previous reporting and is intended for future reporting on both impact calculations (which are performed internally) and methodology.



# 2 Assessment of Electrolux's green financing framework

The eligible projects under Electrolux's framework are shaded based on their environmental benefits and risks, based on the "Shades of Green" methodology.

### Shading of eligible projects under Electrolux's green financing framework

- Electrolux expects that close to 100% of proceeds under its framework will be directed to new investments.
- In 2021, Electrolux directed 48% of proceeds to the category "be climate neutral" (investments that reduce environmental impact from operations such as factories, warehouses, and offices), 13% to "lead in energy and resource-efficient solutions" (including investments in new product platforms for refrigerators and freezers in North America), 34% to "eliminate harmful materials" (including investments to eliminate HFC as refrigerants and foam blowing agents in the manufacturing of refrigerators and freezers), and 5% to "climate targets". Under the new framework it anticipates that the ratio for "eliminate harmful materials" will decrease while that for "be climate neutral and drive clean and resource-efficient operations" will increase.
- Appendix 2 of the framework includes a screening methodology for assets potentially including a fossil fuel component. Per this methodology Electrolux can finance activities and assets, e.g., energy generation equipment, if the equipment is a bridging solution toward climate-neutral production processes or if the fossil fuel energy component to run the equipment is marginal (<5%) compared to the production unit's total energy consumption. The ratio of financing directed towards such investments is anticipated to be marginal. A bridging solution toward climate neutral production must fulfil the following criteria:
  - A technically and economically viable solutions for renewable energy does not exist.
  - The solution contributes to a considerable reduction (>30%) of a production unit's total CO2 emissions, for example, through lower energy consumption from the production unit.
- Electrolux has financed a cooker factory in the US using green proceeds, which has a natural gas fired new furnace for enamelling. The equipment has been assessed using the screening methodology in Appendix 2 of the framework.

Category	Eligible project types	Green Shading and considerations
"Be climate neutral and drive clean and resource-efficient operations"  GBP project categories:	• Investments in commercial buildings which result in: (i) in the case of new buildings, energy efficiency that is at least 30% better than applicable building codes and (ii) for renovated buildings, at least a 30% improvement in energy efficiency.	<ul> <li>Light to Medium Green</li> <li>A 30% reduction is in line with the IEA 'well below 2°C' target, though note that investments in factories or warehouses require only a 20% improvement in energy efficiency.</li> </ul>



- Renewable energy
- Energy efficiency
- Pollution prevention and control
- Sustainable water and wastewater management
- Green buildings



- Investments in new or renovated factory or warehouse buildings (including Manufacturing Engineering in relation thereto) which results in at least a 20% improvement in energy efficiency.
- Investments in equipment (including Manufacturing Engineering in relation thereto) which results in at least
   a 20% increase in energy efficiency.
- Investments in equipment (including Manufacturing Engineering in relation thereto) which aims to reduce water consumption.
- Investments in equipment (including Manufacturing Engineering in relation thereto) with an ambition to achieve best market standard in relation to wastewater treatment.
- Investments in equipment (including Manufacturing Engineering in relation thereto) with an ambition to achieve best market standard in relation to reduce emissions of harmful substances.
- Investments in equipment (including Manufacturing Engineering in relation thereto) with an ambition to achieve best market standard in relation to reduce manufacturing waste.

- Despite Electrolux having a market focus on Europe, Australia, North America and Brazil, investments can be global.
- LEED GOLD criteria have to be met by commercial buildings where no building codes exist.
  - Be aware of potential lock-in of emissions through investments in more efficient natural gas manufacturing or heating equipment.
- Best practice for investments in commercial office buildings and factories should also focus on broader climate impact requirements (e.g., resilience, transport, buildings materials etc.).
- Note that all construction projects can have negative local environmental impacts and that these should be minimized.
- There is a lack of thresholds in some categories and a vagueness in what constitutes 'best market standard' in this context.

### "Lead in energy-and resourceefficient solutions"

### GBP project categories:

- Energy efficiency
- Circular economy adapted products, production technologies and processes and/or certified ecoefficient products
- Investments in manufacturing equipment and tooling which relate to specific products with a view to improving energy and/or water efficiency. Eligible Green Assets should have an energy efficiency (weighted average) that is at least 15% better compared to the average of current products produced for a specific market. 

   Investments in manufacturing equipment and tooling which is a view to improving energy and/or water efficiency. Investments in manufacturing equipment and tooling which relate to specific products with a view to improving energy and/or water efficiency. Investments in manufacturing equipment and tooling which relate to specific products with a view to improving energy and/or water efficiency. Eligible Green Assets should have an energy efficiency (weighted average) that is at least 15% better compared to the average of current products produced for a specific market.
- R&D of products with improved energy or water efficiency. Eligible R&D projects will aim to improve the energy efficiency (weighted average) at least 15% compared to the average of current products produced for a specific market.

### Medium to Dark Green

- ✓ Focusing on 15% energy efficiency improvement compared to own product average can be seen as ambitious as Electrolux's products are efficient compared to benchmarks across regions.
- There is no water efficiency threshold according to Electrolux due to varying market requirements.
- ✓ Products will be fossil free, but be aware of potential lock-in through investments in fossil-fuel manufacturing equipment.







### "Offer circular products and business solutions"

GBP project categories:

- Pollution prevention and control
- Circular economy adapted products, production technologies and processes and/or certified ecoefficient
- Investments in manufacturing equipment related to the development and production of recycled materials.
- R&D of recycled materials. Eligible Green Assets should have the objective to develop material compositions based on recycled plastics, or redesign as well as qualification of products with recycled plastics.

### Medium to Dark Green

- ✓ Waste recycling is an essential activity in a low carbon society and part of the long-term solution.
- ✓ As any activity, recycling will entail some emissions (e.g., through energy use, transport, etc.) and discharges to the environment (e.g., plastic pollutants etc.) and should be managed.
- ✓ Consider that recycled plastics are still fossil fuel based and that continuous plastic use in end-user products can lead to lock-in of emissions through plastic dependency.
- Sourcing recycled materials can lead to increased emissions (e.g., transport). Electrolux aims at sourcing locally and conducts life-cycle assessments to mitigate this risk.





### "Eliminate harmful materials"

GBP project categories:

Pollution prevention and control

Investments in processing equipment using refrigerants Medium to Dark Green or foam blowing agents with GWP of less than 15  $CO_2eq.^2$ 

Substitution with foam blowing agents and refrigerants of less than 15 CO<sub>2</sub>eq is good.

<sup>&</sup>lt;sup>2</sup> Definition according to EU directive 2012/19/EU.







- Investments in research and development with a view to eliminating refrigerants and foam blowing agents with a GWP which is higher than 15 CO<sub>2</sub>eq.
- Investments in HFC substitutes substantially reduce climate impact but still involve other greenhouse gases. However, these represent a little share of the overall life cycle impact of products.
- ✓ Applying the EU standard globally can drive global market.

### "Supporting the UN Sustainable Development Goals and climate targets"

GBP project categories:

Renewable energy



- Investments in equipment (including Manufacturing Engineering relating thereto) which relates to the generation of renewable energy.
- Investments in equipment (including Manufacturing Engineering relating thereto) which relates to replacement or conversion of equipment that uses fossil fuels to equipment which uses renewable energy.

### Dark Green

- ✓ Renewable energy is key to a low-carbon transition.
- ✓ While, according to Electrolux, the generation of renewable energy is primarily photovoltaic, the criteria are not limited to this. Bio-based and geo-thermal production are possible, for example. Different types of renewable energy carry different climate risks which should be considered in selection.
- ✓ In all cases, associated emissions (including in the supply chain) and the climate resilience of renewable energy projects should be considered.
- ✓ All construction projects can have adverse local environmental impacts.

Table 1. Eligible project categories



## 3 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the client's framework dated September 2022. This second opinion remains relevant to all green bonds and/or loans issued under the framework for the duration of three years from publication of this second opinion, as long as the framework remains unchanged. Any amendments or updates to the framework require a revised second opinion. CICERO Green encourages the client to make this second opinion publicly available. If any part of the second opinion is quoted, the full report must be made available.

The second opinion is based on a review of the framework and documentation of the client's policies and processes, as well as information gathered during meetings, teleconferences and email correspondence.

### 'Shades of Green' methodology

CICERO Green second opinions are graded dark green, medium green or light green, reflecting a broad, qualitative review of the climate and environmental risks and ambitions. The shading methodology aims to provide transparency to investors that seek to understand and act upon potential exposure to climate risks and impacts. Investments in all shades of green projects are necessary in order to successfully implement the ambition of the Paris agreement. The shades are intended to communicate the following:

	Shading	Examples
°C	<b>Dark Green</b> is allocated to projects and solutions that correspond to the long-term vision of a low-carbon and climate resilient future.	Solar power plants
°C	<b>Medium Green</b> is allocated to projects and solutions that represent significant steps towards the long-term vision but are not quite there yet.	Energy efficient buildings
°C	<b>Light Green</b> 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.	G: Hybrid road vehicles

The "Shades of Green" methodology considers the strengths, weaknesses and pitfalls of the project categories and their criteria. The strengths of an investment framework with respect to environmental impact are areas where it clearly supports low-carbon projects; weaknesses are typically areas that are unclear or too general. Pitfalls are also raised, including potential macro-level impacts of investment projects.

Sound governance and transparency processes facilitate delivery of the client's climate and environmental ambitions laid out in the framework. Hence, key governance aspects that can influence the implementation of the green bond are carefully considered and reflected in the overall shading. CICERO Green considers four factors in its review of the client's governance processes: 1) the policies and goals of relevance to the green bond framework; 2) the selection process used to identify and approve eligible projects under the framework, 3) the management of proceeds and 4) the reporting on the projects to investors. Based on these factors, we assign an overall governance grade: Fair, Good or Excellent. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.



### Assessment of alignment with Green Bond Principles

CICERO Green assesses alignment with the International Capital Markets' Association's (ICMA) Green Bond Principles. We review whether the framework is in line with the four core components of the GBP (use of proceeds, selection, management of proceeds and reporting). We assess whether project categories have clear environmental benefits with defined eligibility criteria. The Green Bonds Principles (GBP) state that the "overall environmental profile" of a project should be assessed. The selection process is a key governance factor to consider in CICERO Green's assessment. CICERO Green typically looks at how climate and environmental considerations are considered when evaluating whether projects can qualify for green finance funding. The broader the project categories, the more importance CICERO Green places on the selection process. CICERO Green assesses whether net proceeds or an equivalent amount are tracked by the issuer in an appropriate manner and provides transparency on the intended types of temporary placement for unallocated proceeds. Transparency, reporting, and verification of impacts are key to enable investors to follow the implementation of green finance programs.



# Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	Green Financing Framework	September 2022
2	Sustainability Report	2021
3	IT Sustainability Framework – Cloud and Hosting Services	Version 2.0 27 September 2021
4	IT Sustainability Framework – Hardware	Version 2.0 29 March 2022
5	Our Climate Goals	Website accessed in May 2022
6	Global Warming and Climate Change	Website accessed in May 2022
7	Conflicts Minerals Report	2021
8	Annual Report (including an EU Taxonomy report and a TCFD report)	: 2021



# **Appendix 2:**About CICERO Shades of Green

CICERO Green is a subsidiary of the climate research institute CICERO. CICERO is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international cooperation. CICERO has garnered attention for its work on the effects of manmade emissions on the climate and has played an active role in the UN's IPCC since 1995. CICERO staff provide quality control and methodological development for CICERO Green.

CICERO Green provides second opinions on institutions' frameworks and guidance for assessing and selecting eligible projects for green bond investments. CICERO Green is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO Green is independent of the entity issuing the bond, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising because of as a result of the fee structure. CICERO Green operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

We work with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions (ENSO). Led by CICERO Green, ENSO contributes expertise to the second opinions, and is comprised of a network of trusted, independent research institutions and reputable experts on climate change and other environmental issues, including the Basque Center for Climate Change (BC3), the Stockholm Environment Institute, the Institute of Energy, Environment and Economy at Tsinghua University, the International Institute for Sustainable Development (IISD) and the School for Environment and Sustainability (SEAS) at the University of Michigan.

