

Second-Party Opinion

Gränges Green Finance Framework



Evaluation Summary

Sustainalytics is of the opinion that the Gränges Green Finance Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2021 and the Green Loan Principles 2023. This assessment is based on the following:



USE OF PROCEEDS The eligible categories for the use of proceeds - Sustainable and Circular Aluminium Solutions, Energy Intensity and Technology, and Renewable Energy - are aligned with those recognized by the Green Bond Principles and the Green Loan Principles. Sustainalytics considers that investments in the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDGs 7 and 12.



PROJECT EVALUATION AND SELECTION Gränges has established a Green Finance Committee, which will be responsible for project evaluation and selection. Gränges' investment policy includes a sustainability risk assessment for all investment decisions, as well as measures to prevent and minimize risks. Sustainalytics considers the project selection process and the risk management system to be in line with market practice.



MANAGEMENT OF PROCEEDS Gränges' regional finance departments will be responsible for the allocation of proceeds, which will be tracked using a green register through a portfolio approach. The Company intends to allocate proceeds within 36 months of each issuance. Pending full allocation, unallocated proceeds will be temporarily held in Gränges' liquidity reserves in cash and short-term deposits and managed in accordance with the Company's Financial Management Policy. This is in line with market practice.



REPORTING Gränges will report on the allocation of the proceeds and corresponding impact in a Green Investor Report, which will be published on its website on an annual basis until full allocation. For non-public issuances, Gränges may report directly to lenders or investors. Allocation reporting will include the nominal amount of instruments outstanding, balance of projects in the register, total aggregated proportion of proceeds by category, share of financing versus refinancing, and amount of unallocated proceeds. Sustainalytics views Gränges' allocation and impact reporting as aligned with market practice.

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Introduction

Gränges AB (“Gränges” or the “Company”) is a designer and manufacturer of value-added aluminium products for the automotive, specialty packaging and heating, ventilation and air conditioning sectors, among others. Founded in 1896 and headquartered in Stockholm, the Company has production facilities in Europe, Asia and the Americas with a total annual capacity of 610,000 tonnes as of July 2024.¹

Gränges has developed the Gränges Green Finance Framework dated September 2024 (the “Framework”) under which it intends to issue green bonds and obtain green loans, and use the proceeds to finance or refinance, in whole or in part, existing and future projects that are expected to contribute to the decarbonization of aluminium production. The Framework defines eligibility criteria in three areas:

1. Sustainable and Circular Aluminium Solutions
2. Energy Intensity and Technology
3. Renewable Energy

Gränges engaged Sustainalytics to review the Framework and provide a Second-Party Opinion on the Framework’s environmental credentials and its alignment with the Green Bond Principles 2021 (GBP)² and the Green Loan Principles 2023 (GLP)³. The Framework will be published in a separate document.⁴

Scope of work and limitations of Sustainalytics’ Second-Party Opinion

Sustainalytics’ Second-Party Opinion reflects Sustainalytics’ independent⁵ opinion on alignment of the Framework with current market standards and the extent to which the eligible project categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework’s alignment with the Green Bond Principles 2021, as administered by ICMA, and the Green Loan Principles 2023, as administered by LMA, APLMA and LSTA;
- The credibility and anticipated positive impacts of the use of proceeds; and
- The alignment of the issuer’s sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.17, which is informed by market practice and Sustainalytics’ expertise as an ESG research provider.

As part of this engagement, Sustainalytics held conversations with various representatives of Gränges’ to understand the sustainability impact of its business processes and planned use of proceeds, as well as the management of proceeds and reporting aspects of the Framework. Gränges representatives have confirmed that: (1) they understand it is the sole responsibility of Gränges to ensure that the information provided is complete, accurate and up to date; (2) they have provided Sustainalytics with all relevant information; and (3) any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics’ opinion of the Framework and should be read in conjunction with it.

Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and Gränges.

Sustainalytics’ Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics’ Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the Framework owner.

In addition, the Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee the realized allocation of the bond and loan proceeds towards eligible activities.

¹ Gränges, “Customer-driven, world leading research and innovation”, at: <https://www.granges.com/about-granges/our-operations/>

² The Green Bond Principles are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>.

³ The Green Loan Principles are administered by the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications and Trading Association and are available at <https://www.lsta.org/content/green-loan-principles/>

⁴ The Gränges Green Finance Framework is available on Gränges’ website at: <https://www.granges.com/investors/credit-market/>.

⁵ When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics’ hallmarks is integrity, another is transparency.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument, either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that Gränges has made available to Sustainalytics for the purpose of this Second-Party Opinion.

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Gränges Green Finance Framework

Sustainalytics is of the opinion that the Gränges Green Finance Framework is credible and impactful, and aligns with the four core components of the GBP and GLP. Sustainalytics highlights the following elements of the Framework:

- Use of Proceeds:
 - The eligible categories – Sustainable and Circular Aluminium Solutions, Energy Intensity and Technology, and Renewable Energy – are aligned with those recognized by the GBP and GLP.
 - Gränges has defined a look-back period of three years for refinancing operating expenditures, which Sustainalytics considers to be in line with the market practice.
 - Under the Sustainable and Circular Aluminium Solutions category, Gränges may finance or refinance projects according to the following criteria:
 - Facilities and supporting equipment for collecting, sorting and recycling aluminium. The Company has communicated to Sustainalytics that: i) the segregation of waste will be carried out at source before waste collection; and ii) financing of waste collection vehicles and the recycling of electronic waste will be excluded.
 - Battery manufacturing facilities and related equipment including cathode foil, battery casing material and battery cooling plates. Gränges has confirmed to Sustainalytics that the batteries produced will be primarily dedicated to electric vehicles and that some parts may also be used in stationary energy storage solutions.
 - This is in line with market practice.
 - Under the Energy Intensity and Technology category, Gränges may finance or refinance energy efficiency improvements in its manufacturing processes according to the following criteria:
 - Measures, installations and upgrades of equipment and related infrastructure in individual manufacturing processes that lead to a minimum 30% energy efficiency improvements compared to pre-investment conditions, including, smart control systems and energy efficiency improvements in the reuse of excess energy.
 - Gränges has confirmed that the investments will be restricted to facilities where the energy is derived from the national or state grid, renewables or green hydrogen produced through electrolysis powered by renewables or with low-carbon energy sources with an average carbon intensity at or below 100 gCO₂e/kWh.
 - These expenditures are in line with market practice.
 - Projects that support replacing fossil fuels with electricity or renewable energy, including converting casting fuel furnaces to oxyfuel furnaces, and annealing furnaces to electric furnaces. Sustainalytics notes that oxyfuel casting furnaces support the transition and decarbonization of aluminium production, but they would be powered by fossil fuels. Gränges has a transition plan for the asset based on its ambition to use 100% renewables in its plants by 2030, according to its SBTi-validated emissions reduction targets.
 - Related equipment connected to renewable energy, such as energy storage facilities including battery energy storage, intelligent energy management systems, including systems to protect installations against short circuits, telemetry devices to synchronize the protection, and control panels and metering devices. These expenditures are in line with market practice.
 - For all expenditures under this category, Gränges has confirmed the exclusion of:
 - i) technologies designed or intended for processes fossil fuel extraction or refining;

- and ii) processes or technologies for hard-to-abate activities that are not aligned with the SBTi-validated targets.
- Under the Renewable Energy category, Gränges may finance or refinance solar photovoltaic technologies (PV) and onshore and offshore wind power generation facilities. Gränges has confirmed to Sustainalytics that offshore wind facilities will have a fossil fuel back up that will be limited to power monitoring, operating and maintenance equipment, as well as resilience or protection measures and restart capabilities. This is in line with market practice.
 - Project Evaluation and Selection:
 - Gränges has established a Green Finance Committee (the “GFC”), which will be responsible for project evaluation and selection. The GFC comprises the Chief Financial Officer, the Senior Vice President Sustainability, the Chief Executive Officer, the Chief Financial Officer, and the Vice President of Group Treasury. The GFC is supported by the Company’s sustainability experts and representatives in evaluating potential green projects.
 - Gränges communicated to Sustainalytics that the Company has an Investment Policy⁶ that includes a sustainability risk assessment for all investment decisions, along with a description of measures to mitigate identified risks. Sustainalytics considers these environmental and social risk management systems to be adequate and aligned with the requirements of GBP and GLP. For additional detail see Section 2.
 - Based on the established process for project evaluation and selection and the presence of a risk management system, Sustainalytics considers this process to be in line with market practice.
 - Management of Proceeds:
 - Gränges’ regional finance departments will be responsible for the allocation of proceeds, which will be tracked using a green register through a portfolio approach.
 - The Company intends to allocate proceeds within 36 months of each issuance. Pending full allocation, unallocated proceeds will be temporarily held in the Company’s liquidity reserves in cash and short-term deposits, and will be managed in accordance with the Company’s Financial Management Policy.
 - Gränges has communicated to Sustainalytics that instruments issued under the Framework may include multi-tranche loan facilities. The Company intends to label only those tranches of such facilities whose proceeds will be allocated according to the eligibility criteria in the Framework.
 - Based on the use of an internal tracking system and the disclosure of the temporary use of proceeds, Sustainalytics considers this process to be in line with market practice.
 - Reporting:
 - The Company will report on allocation of proceeds and the corresponding impact in a Green Investor Report, which will be published on its website on an annual basis until full allocation. For non-public issuances, Gränges may report directly to lenders or investors.
 - Allocation reporting will include the nominal amount of instruments outstanding, balance of the projects in the register, total aggregated proportion of the net proceeds from the bonds by category, share of financing versus refinancing, and amount of unallocated proceeds, if any. Additionally, Gränges may also report on the EU Taxonomy alignment of the projects financed.
 - Impact reporting will use relevant environmental impact metrics, where available, such as volume of sourced recycled aluminium (in tonnes), annual energy savings (in MWh), installed renewable energy capacity (in kW), and reduced or avoided GHG emissions (in tCO₂e). To the extent possible, the Company will aggregate the impact calculations by category.
 - The Company has communicated to Sustainalytics that if it obtains revolving credit facilities from banks under the Framework, it will report on allocation exclusively to the relevant banks until loan maturity.
 - Based on the commitments to allocation and impact reporting, Sustainalytics considers this process to be in line with market practice.

Alignment with Green Bond Principles 2021

Sustainalytics has determined that the Framework aligns with the four core components of the GBP.

⁶ Gränges has shared the Investment Policy with Sustainalytics confidentially.

Section 2: Sustainability Strategy of Gränges

Contribution to Gränges' sustainability strategy

In 2023, Gränges updated its sustainability strategy to focus on the following key environmental areas: i) reducing carbon footprint; ii) increasing circularity and recycling; and iii) sourcing from sustainable suppliers.⁷ In line with this strategy, the Company has set environmental targets for each focus area.

Gränges aims to achieve net zero emissions throughout its value chain by 2040 and has established both near-term and long-term GHG emissions reduction targets, which were validated by the SBTi in 2023.⁸ For its near-term targets, Gränges has committed to reducing its absolute scope 1 and 2 GHG emissions by 42% by 2030, using a 2021 baseline, and to reducing scope 3 emissions by 57% per tonnes of packed product within the same timeframe. For its long-term targets, the Company has pledged to reduce absolute scope 1 and 2 emissions by 90% and scope 3 emissions by 97% per tonnes of packed product by 2040, compared to a 2021 baseline.⁹ To achieve these targets, the Company plans to implement various initiatives, including increasing material and energy efficiency, phasing out natural gas and non-renewable fuels, and securing 100% of consumed electricity from renewable sources.¹⁰ As of 2023, Gränges had implemented projects to positively impact its decarbonization trajectory, these include collaborating with downstream aluminium manufacturers for access to low-carbon primary aluminium.¹¹

With respect to recycling, Gränges has committed to achieving a total recycling volume of 500 kilotonnes by 2030, which is a tenfold increase from 2017.¹² To support this goal, the Company intends to: i) enhance its recycling capabilities at its production sites; ii) invest in new technical solutions and remelting; iii) collaborate with recycling processing companies; and iv) form partnerships with its customers and suppliers to support recycling efforts. In line with these initiatives, in 2023, Gränges Americas partnered with a secondary aluminium recycling company in the US to secure a 10-year supply of 100% recycled aluminium for its Huntingdon facility.¹³

Regarding sustainable sourcing, Gränges aims to achieve 100% sourcing from sustainable suppliers by 2030, measured by the percentage of purchase value from active suppliers approved as sustainable in line with Gränges' responsible sourcing process, which was adopted in 2023.¹⁴ This process requires suppliers to undergo third-party audits or desktop assessments to identify environmental, social and corruption-related risks and to implement mitigating actions, when necessary.¹⁵

Gränges reports its progress on its sustainability key performance indicators following the GRI guidelines in its sustainability report, which is published annually on its website. The Company's GHG emission reporting follows the GHG Protocol. In terms of governance, the Group Sustainability function, headed by the Sustainability SVP, is responsible for leading the development and execution of the Company's global sustainability strategy and long-term targets, as well as preparing sustainability-related policies, ultimately approved by the Board of Directors.¹⁶

Sustainalytics is of the opinion that the Framework is aligned with Gränges' overall sustainability strategy and initiatives and will further the Company's actions on its key environmental priorities.

Approach to managing environmental and social risks associated with the projects

Sustainalytics recognizes that proceeds from the instruments issued under the Framework will be directed towards eligible projects expected to have positive environmental impacts. However, Sustainalytics is aware that such eligible projects could also lead to negative environmental and social outcomes. Some key environmental and social risks associated with the eligible projects may include issues involving: i) land use and biodiversity loss; ii) emissions, waste and effluents; iii) supply chain risks; iv) occupational health and safety; and v) community relations.

⁷ Gränges, "Gränges Annual and Sustainability Report 2023", at: <https://storage.mfn.se/867de47c-2dbc-4a7c-af28-7c60c1fa7810/granges-annual-and-sustainability-report-2023.pdf>

⁸ Ibid.

⁹ In this context, scope 3 emissions specifically encompass those from purchased goods and services, fuel and energy related activities, upstream transportation and distribution, business travel, and downstream transportation.

¹⁰ Gränges, "Gränges Annual and Sustainability Report 2023", at: <https://storage.mfn.se/867de47c-2dbc-4a7c-af28-7c60c1fa7810/granges-annual-and-sustainability-report-2023.pdf>

¹¹ Shandong Innovation Group, "About us", at: <http://sdcxjt.com/en/aboutus.asp>

¹² Gränges, "Gränges Annual and Sustainability Report 2023", at: <https://storage.mfn.se/867de47c-2dbc-4a7c-af28-7c60c1fa7810/granges-annual-and-sustainability-report-2023.pdf>

¹³ Scepter Inc., "The Scepter Group", at: <https://www.scepterinc.com/>

¹⁴ Gränges, "Gränges Annual and Sustainability Report 2023", at: <https://storage.mfn.se/867de47c-2dbc-4a7c-af28-7c60c1fa7810/granges-annual-and-sustainability-report-2023.pdf>

¹⁵ Gränges, "Responsible Sourcing Policy", (2023), at: <https://www.granges.com/globalassets/04.-hallbarhet/02.-strategy-and-governance/08.-policies/gp2.10-global-responsible-sourcing-policy-2023-07-05.pdf>

¹⁶ Gränges, "Gränges Annual and Sustainability Report 2023", at: <https://storage.mfn.se/867de47c-2dbc-4a7c-af28-7c60c1fa7810/granges-annual-and-sustainability-report-2023.pdf>

Sustainalytics is of the opinion that Gränges is able to manage or mitigate potential risks through implementation of the following:

- Regarding risks related to land use and biodiversity loss, Gränges reduces the negative impact caused by its operational processes on the natural environment and ecosystems by monitoring daily soil, air and water conditions and by establishing local water management plans, as outlined in its Environmental Policy.¹⁷ The Company also manages its environmental systems following ISO 14001:2015,¹⁸ which requires robust processes to enable the effective mitigation of negative impacts of its business activities on the environment.¹⁹ Furthermore, projects financed in the EU are expected to comply with Directive 2014/52/EU, which requires projects that are likely to have significant environmental effects to be assessed before approval.²⁰ It also requires such projects to have in place adequate measures to avoid, prevent, reduce and, if possible, offset significant adverse effects on the environment, in particular on species and habitats. Additionally, projects in the EU must follow the EU Habitats Directive and Birds Directive,²¹ which is part of the EU's Biodiversity Strategy for 2030²² and requires EU Member States to conserve the diversity of their wild flora and fauna, with a special focus on threatened and endemic species.
- With regard to emissions, effluents and waste, the EU Directive 2008/98 on waste requires companies in the EU to have in place a waste management system that minimizes the impact on human health and the environment, ensuring that waste is collected, treated or disposed of in an environmentally sound manner.²³ Moreover, Gränges' facilities must follow local waste handling procedures and actively work to reduce material consumption.²⁴ The Company also has a plan to phase out hazardous materials in line with its Environmental Policy.²⁵
- To mitigate supply chain risks, the Company requires its suppliers to adhere to its Supplier Code of Conduct which mandates that all suppliers: i) comply with applicable laws and regulations in relation to human rights, labour rights and business ethics; ii) avoid conflicts of interest; iii) uphold rigorous standards against corruption; iv) respect human rights; and v) ensure a safe working environment.²⁶ Additionally, in accordance with its Responsible Sourcing Policy, Gränges performs annual assessments of potential environmental, social and corruption risks for suppliers identified as medium to high risk and classifies them based on a score. The Company will develop a customized action plan for suppliers with a low score based on the supplier's business, strategic importance and associated supply risks.²⁷
- To address occupational health and safety risks, Gränges has in place an Occupational Health and Safety Policy, which is applicable to all employees and individuals who are directly or indirectly related to its operations and covers principles regarding safety performance. Under this policy, the Company: i) employs hazard analysis, risk assessment and risk control measures to monitor routine and non-routine tasks; ii) develops employee engagement programmes to discuss risks and behaviour improvements; iii) organizes local audit programmes to review the effectiveness of the OHS management system; and iv) defines location-specific OHS indicators, targets, goals and objectives and reports on results monthly.²⁸ Moreover, Gränges has in place safety routines which include daily safety monitoring on OHS issues and annual health and safety training for employees, temporary staff, managers, and onsite contractors.^{29,30}
- With respect to community relations, Gränges regularly engages in stakeholder dialogues to discuss its sustainability strategy and gather feedback on key focus areas and communication

¹⁷ Gränges, "Environmental Policy", (2024), at: <https://www.granges.com/globalassets/04.-hallbarhet/02.-strategy-and-governance/08.-policies/sustainability-policies-2024/gp2.09-global-environmental-policy-2024-07-02.pdf>

¹⁸ ISO, "ISO 14001 - Environment Management Systems", at: <https://www.iso.org/standards/popular/iso-14000-family>

¹⁹ Gränges, "Sustainability risks", at: <https://www.granges.com/sustainability/governance-and-policies/risks-management/>

²⁰ European Parliament, "Directive 2014/52/EU of the European Parliament and of the Council", (2014), at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0052>

²¹ European Commission, "Biodiversity strategy for 2030", at: https://environment.ec.europa.eu/strategy/biodiversity-strategy-2030_en

²² European Parliament, "Directive 2009/147/EC of the European Parliament and of the Council", (2009), at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02009L0147-20190626>

²³ European Commission, "Directive 2008/98/EC on waste", (2008), at: <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32008L0098&from=EN>

²⁴ Gränges, "Gränges Annual and Sustainability Report 2023", at: <https://storage.mfn.se/867de47c-2dbc-4a7c-af28-7c60c1fa7810/granges-annual-and-sustainability-report-2023.pdf>

²⁵ Gränges, "Environmental Policy", (2024), at: <https://www.granges.com/globalassets/04.-hallbarhet/02.-strategy-and-governance/08.-policies/sustainability-policies-2024/gp2.09-global-environmental-policy-2024-07-02.pdf>

²⁶ Ibid.

²⁷ Gränges, "Responsible Sourcing Policy", (2023), at: <https://www.granges.com/globalassets/04.-hallbarhet/02.-strategy-and-governance/08.-policies/gp2.10-global-responsible-sourcing-policy-2023-07-05.pdf>

²⁸ Gränges shared the document with Sustainalytics confidentially.

²⁹ Gränges, "Sustainability risks", at: <https://www.granges.com/sustainability/governance-and-policies/risks-management/>

³⁰ Ibid.

efforts.³¹ The Company also actively participates in local communities and encourages employees to engage in activities that align with the Company's business strategy and vision.³²

Based on these policies, standards and assessments, Sustainalytics is of the opinion that Gränges has implemented adequate measures and is well positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

Section 3: Impact of Use of Proceeds

All three use of proceeds categories are aligned with those recognized by the GBP. Sustainalytics has focused below on where the impact is specifically relevant in the local context.

The importance of decarbonizing the aluminium sector

The aluminium sector accounts for 3% of global direct industrial CO₂ emissions, having emitted 270 million tonnes of direct CO₂ in 2022.³³ Despite an average annual reduction of 1.3% in the sector's direct emissions between 2020 and 2022, total emissions rose by 2.4% due to increased production volumes.³⁴ The International Aluminium Institute forecasts that demand for aluminium will increase by approximately 39% from 2020 to 2030.³⁵ In addition, in 2022, only 36% of the global aluminium production used recycled materials.³⁶ The Aluminium Association estimates that the production of recycled aluminium is 94% less emissions intensive than producing primary aluminium.³⁷

TPI has developed intensity-based decarbonization trajectories for the aluminium sector based on the 1.5°C scenario and the below 2°C scenario.³⁸ To achieve net zero by 2050, the carbon intensity of the sector must drop from 6.56 tCO₂/t aluminium to below 4.73 tCO₂/t by 2030 under the 1.5°C scenario.³⁹ Furthermore, according to the International Energy Agency's (IEA) 2050 Net Zero Emissions Scenario the reduction in the global average direct emissions intensity of aluminium production needs to accelerate to 4% per year from 2023 to 2030.⁴⁰

To achieve the intended reductions, the IEA estimates that the sector needs to focus on increasing the share of recycled aluminium from post-consumer scrap, enhancing the use of renewable energy in the industry's electrical supply, and incorporating near-zero emissions technologies into production processes.⁴¹ Additionally, the Net Zero Emissions Scenario requires recycled aluminium to account for more than 40% of the sector's total production by 2030.⁴² The sector has also introduced new smelting techniques, such as inert anodes, which emit only oxygen and replace the carbon-intensive Hall-Héroult electrochemical process.^{43,44} Other advancements include electric boilers, mechanical vapor recompression and hydrogen for heat generation in alumina refining.^{45,46,47} The World Economic Forum estimates that decarbonizing the aluminium sector would require a cumulative investment of USD 200 billion in low-emission smelting and refining technologies.⁴⁸

Based on the above, Sustainalytics is of the opinion that Gränges' proposed investments in aluminium recycling, energy efficiency and renewable energy have the potential to contribute to the decarbonization of the aluminium sector.

³¹ Gränges, "Gränges Annual and Sustainability Report 2023", at: <https://storage.mfn.se/867de47c-2dbc-4a7c-af28-7c60c1fa7810/granges-annual-and-sustainability-report-2023.pdf>

³² Gränges, "Code of Conduct", (2024), at: https://www.granges.com/globalassets/04.-hallbarhet/02.-strategy-and-governance/08.-policies/coc_24/coc_2024_english.pdf

³³ IEA, "Aluminium", (2023), at: <https://www.iea.org/energy-system/industry/aluminium>

³⁴ Ibid.

³⁵ CRU International, "Opportunities for aluminium in a post-Covid economy", (2022), at: <https://international-aluminium.org/wp-content/uploads/2022/03/CRU-Opportunities-for-aluminium-in-a-post-Covid-economy-Report.pdf>

³⁶ IEA, "Aluminium", (2023), at: <https://www.iea.org/energy-system/industry/aluminium>

³⁷ The Aluminium Association, "The Environmental Footprint of Semi-Fabricated Aluminium Products in North America", (2022), at: https://www.aluminium.org/sites/default/files/2022-01/2022_Semi-Fab_LCA_Report.pdf

³⁸ TPI, "Aluminium", at: <https://www.transitionpathwayinitiative.org/sectors/aluminium>

³⁹ Ibid.

⁴⁰ IEA, "Aluminium", (2023), at: <https://www.iea.org/energy-system/industry/aluminium>

⁴¹ Ibid.

⁴² Ibid.

⁴³ Trimet, "CO₂-free aluminum production", (2024), at: <https://www.trimet.eu/en/trimet/sustainability/environmental-and-climate-protection/production-of-inert-metallic-anodes>

⁴⁴ Alcoa, "Carbon free aluminium smelting a step closer: ELYSIS advances commercial demonstration and operates at industrial scale", (2021), at: <https://www.alcoa.com/global/en/stories/releases?id=2021/11/carbon-free-aluminium-smelting-a-step-closer-elysis-advances-commercial-demonstration-and-operates-at-industrial-scale>

⁴⁵ IEA, "Aluminium", (2023), at: <https://www.iea.org/energy-system/industry/aluminium>

⁴⁶ Australian Renewable Energy Agency, "Alcoa Renewable Powered Electric Calcination Pilot", (2022), at: <https://arena.gov.au/projects/alcoa-renewable-powered-electric-calcination-pilot/>

⁴⁷ Ibid.

⁴⁸ World Economic Forum, "Aluminium industry net-zero tracker", (2023), at: <https://www.weforum.org/publications/net-zero-industry-tracker-2023/in-full/aluminium-industry-net-zero-tracker/>

Contribution to SDGs

The Sustainable Development Goals were adopted in September 2015 by the United Nations General Assembly and form part of an agenda for achieving sustainable development by 2030. The instruments issued under the Gränges Green Finance Framework are expected to advance the following SDGs and targets:

Use of Proceeds Category	SDG	SDG target
Sustainable and Circular Aluminium Solutions	12. Responsible consumption and production	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
Energy Intensity and Technology	7. Affordable and clean energy	7.3 By 2030, double the global rate of improvement in energy efficiency
Renewable Energy	7. Affordable and clean energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

Conclusion

Gränges has developed the Gränges Green Finance Framework, under which it may issue green bonds and obtain green loans and use the proceeds to finance or refinance projects in the Sustainable and Circular Aluminium Solutions, Energy Intensity and Technology, and Renewable Energy categories. Sustainalytics considers that the eligible projects are expected to contribute to the decarbonization of aluminium production.

The Gränges Green Finance Framework outlines a process for tracking, allocation and management of proceeds and makes commitments for reporting on allocation and impact. Sustainalytics considers the Framework to be aligned with the overall sustainability strategy of Gränges and that the use of proceeds will contribute to the advancement of the UN Sustainable Development Goals 7 and 12. Additionally, Sustainalytics is of the opinion that Gränges has adequate measures in place to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects.

Based on the above, Sustainalytics is confident that Gränges is well positioned to issue green bonds and obtain green loans and that the Gränges Green Finance Framework is robust, transparent and in alignment with the four core components of the Green Bond Principles 2021 and Green Loan Principles 2023.

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