

# Second-Party Opinion Gränges Sustainability-Linked Finance Framework



## Evaluation Summary

Sustainalytics is of the opinion that the Gränges Sustainability-Linked Finance Framework aligns with the Sustainability-Linked Bond Principles 2024 and Sustainability-Linked Loan Principles 2023. This assessment is based on the following:

- Selection of Key Performance Indicators** Gränges Sustainability-Linked Finance Framework defines the following KPIs: i) KPI 1: Absolute scope 1 and 2 GHG emissions (ktCO<sub>2</sub>e), and ii) KPI 2: Scope 3 GHG emissions intensity (tCO<sub>2</sub>e/t) (see Table 1). Sustainalytics considers KPIs 1 and 2 to be very strong based on materiality, relevance, scope of applicability and comparability to external benchmarks.
- Calibration of Sustainability Performance Targets** Sustainalytics considers the SPTs to be aligned with Gränges' sustainability strategy. Sustainalytics assessed the SPTs as follows, based on historical performance, peer targets and science-based trajectories, as applicable: SPTs 1a, 1b and 1c - highly ambitious and SPTs 2a, 2b and 2c - ambitious.
- Bond Characteristics** Gränges has linked the financial characteristics of the sustainability-linked instruments to the achievement of the SPTs which will trigger an annual margin adjustment mechanism for loans and a coupon step-up or a step-up mechanism on the redemption price for bonds.
- Reporting** Gränges commits to report on an annual basis on its performance on the KPIs in its report on its website. The reporting commitments are aligned with the SLBP and SLLP.
- Verification** Gränges commits to have external limited assurance conducted against each SPT for each KPI at least once a year, which is aligned with the SLBP and SLLP.

<b>Evaluation Date</b>	September 17, 2024
<b>Issuer Location</b>	Stockholm, Sweden

The SPTs contribute to the following SDGs:



## Overview of KPIs and SPTs

KPI	Baseline	Strength of KPI	SPT	Ambitiousness of SPT
KPI 1: Absolute scope 1 and 2 GHG emissions (ktCO <sub>2</sub> e)	2021	Very Strong	SPT 1: Reduce absolute scope 1 and 2 GHG emissions by: SPT 1a: 33% by 2028 SPT 1b: 38% by 2029 SPT 1c: 42% by 2030	Highly Ambitious
KPI 2: Scope 3 GHG emissions intensity (tCO <sub>2</sub> e/t)	2021	Very Strong	SPT 2: Reduce scope 3 GHG emissions intensity by: SPT 2a: 45% by 2028 SPT 2b: 51% by 2029 SPT 2c: 57% by 2030	Ambitious

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## Scope of Work and Limitations

Gränges has engaged Sustainalytics to review the Gränges Sustainability-Linked Finance Framework dated September 2024 (the “Framework”) and provide an opinion on its alignment with the Sustainability-Linked Bond Principles 2024 (SLBP)<sup>1</sup> and Sustainability-Linked Loan Principles (SLLP).<sup>2</sup>

Sustainalytics’ Second-Party Opinion reflects Sustainalytics’ independent<sup>3</sup> opinion on the alignment of the Framework with the SLBP, as administered by ICMA.

As part of this engagement, Sustainalytics exchanged information with various members of Gränges’ management team to understand the sustainability impact of their business processes and SPTs, as well as the reporting and verification processes of aspects of the Framework. Gränges’ representatives have confirmed that:

- (1) They understand it is the sole responsibility of issuer 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 the Framework. 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 SPTs of KPIs but does not measure KPI performance. The measurement and reporting of the KPIs and SPTS is the responsibility of the issuer. 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.

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<sup>1</sup> The Sustainability-Linked Bond Principles are administered by the International Capital Market Association and are available at: <https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/sustainability-linked-bond-principles-slbp/>

<sup>2</sup> The Sustainability-Linked Loan Principles are administered by the LSTA and are available at: <https://www.lsta.org/content/sustainability-linked-loan-principles-sllp/>

<sup>3</sup> 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.

## Introduction

Gränges (“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 amongst 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.<sup>4</sup>

Gränges intends to issue sustainability-linked bonds and obtain sustainability-linked loans whose coupon rate, margin or redemption price are tied to achievement of SPTs for KPIs related to its scope 1, 2 and 3 GHG emissions.

Gränges has engaged Sustainalytics to review the Framework and provide an opinion on the alignment of the Framework with the Sustainability-Linked Bond Principles 2024 and Sustainability-Linked Loan Principles 2023. The Framework has been published in a separate document.<sup>5</sup>

Gränges has defined the following KPIs and SPTs:

**Table 1: KPI Definitions**

KPI	Definition
KPI 1: Absolute scope 1 and 2 GHG emissions (ktCO <sub>2</sub> e)	<p>This KPI measures absolute scope 1 and 2 GHG emissions in kilotonnes of carbon dioxide equivalent, expressed in ktCO<sub>2</sub>e.</p> <p>Scope 1 emissions cover direct emissions from Gränges’ own and controlled operations, including production facilities, office buildings, company-owned vehicles and refrigerants. Scope 2 emissions cover Gränges’ indirect emissions from the generation of purchased electricity, heat and steam consumed by the Company in production facilities and office buildings. Gränges uses the GHG Protocol Corporate Standard to calculate the emissions.<sup>6</sup></p>
KPI 2: Scope 3 GHG emissions intensity (tCO <sub>2</sub> e/t)	<p>This KPI represents Gränges’ scope 3 GHG emissions intensity measured in tonnes of carbon dioxide equivalent per tonnes of packed product, expressed in tonnes CO<sub>2</sub>e per tonne of packed product.</p> <p>Scope 3 emissions cover Gränges’ indirect emissions from the Company’s value chain, including emissions categories 1 (purchased goods and services), 3 (fuel- and energy related activities), 4 (upstream transportation and distribution), 6 (business travel) and 9 (downstream transportation and distribution) as specified under the GHG Protocol. Gränges uses the GHG Protocol Corporate Standard to calculate the emissions.<sup>7</sup></p>

**Table 2: SPTs and Past Performance**

KPI	2017	2018	2019	2020	2021	2022	2023	SPT 2028	SPT 2029	SPT 2030
KPI 1: Absolute scope 1 and 2 GHG emissions (ktCO <sub>2</sub> e)	N/A	N/A	N/A	N/A	434.6 (Baseline)	396.9	309.8	SPT 1a: Reduce absolute scope 1 and 2 GHG emissions by 33%	SPT 1b: Reduce absolute scope 1 and 2 GHG emissions by 38%	SPT 1c: Reduce absolute scope 1 and 2 GHG emissions by 42%

<sup>4</sup> Gränges, “Customer-driven, world leading research and innovation”, at: <https://www.granges.com/about-granges/our-operations/>

<sup>5</sup> Gränges, “Gränges Sustainability-Linked Finance Framework”, at: <https://www.granges.com/>

<sup>6</sup> GHG Protocol, “A Corporate Accounting and Reporting Standard Revised Edition”, at: <https://ghgprotocol.org/corporate-standard>

<sup>7</sup> Ibid.

KPI 2: Scope 3 GHG emissions intensity (tCO <sub>2</sub> e/t)	N/A	N/A	N/A	N/A	8.5 (Baseline)	8.1	7.8	SPT 2a: Reduce scope 3 GHG emissions intensity by 45%	SPT 2b: Reduce scope 3 GHG emissions intensity by 51%	SPT 2c: Reduce scope 3 GHG emissions intensity by 57%
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## Sustainalytics' Opinion

### Section 1: Alignment with the Sustainability-Linked Bond Principles and Sustainability-Linked Loan Principles

Sustainalytics is of the opinion that the Gränges Sustainability-Linked Finance Framework aligns with the five core components of the Sustainability-Linked Bond Principles 2024 and the Sustainability-Linked Loan Principles 2023.

Gränges published the Gränges Green and Sustainability-Linked Finance Framework in September 2021,<sup>8</sup> for which Sustainalytics provided a Second-Party Opinion.<sup>9</sup> The Gränges Sustainability-Linked Finance Framework of September 2024 (under review in the current Second-Party Opinion) updates the referred 2021 Framework as follows: i) changes the metric and consequently the target for KPI 1 from an emissions intensity metric to an absolute measurement of scope 1 and 2 GHG emissions; ii) expands the definition of KPI 2 to include additional scope 3 emission categories beyond category 1 (purchased goods and service); iii) updates the baselines for KPIs 1 and 2; and iv) extends the target years from 2025 to 2028, 2029 and 2030.



#### Selection of Key Performance Indicators

##### Relevance and Materiality of KPIs

In assessing the materiality and relevance of a KPI, Sustainalytics considers: i) whether the indicator speaks to a material impact of the issuer's activities on environmental or social issues; and ii) to what extent the KPI is applicable.

KPI 1: Absolute scope 1 and 2 GHG emissions; and KPI 2: Scope 3 GHG emissions intensity

Sustainalytics notes that KPI 1 and KPI 2 collectively address the issue of GHG emissions and, therefore, has assessed the relevance and materiality of these KPIs jointly. Sustainalytics considers the KPIs to be material and relevant based on the following:

The aluminium sector accounts for 3% of global direct industrial CO<sub>2</sub> emissions.<sup>10</sup> The core primary steps of alumina refining, anode production and aluminium smelting account for approximately 85% of the direct CO<sub>2</sub> emissions from aluminium production, with the remaining emissions arising from recycled production and semi-finishing processes.<sup>11</sup> For manufacturers of value-added aluminium products, emissions related to purchased goods and services, which are primarily driven by the energy intensive production of primary aluminium, are a significant source of scope 3 emissions. The processes of aluminium re-melting, casting and rolling are also energy intensive, further contributing more GHG emissions.

<sup>8</sup> Gränges, "Green and Sustainability-Linked Finance Framework", (2021), at: [https://www.granges.com/globalassets/05.-investerare/05.-kreditmarknad/01.-mtn-program/granges-green-and-sustainability-linked-finance-framework\\_2021.pdf](https://www.granges.com/globalassets/05.-investerare/05.-kreditmarknad/01.-mtn-program/granges-green-and-sustainability-linked-finance-framework_2021.pdf)

<sup>9</sup> Sustainalytics, "Gränges Green and Sustainability-Linked Finance Framework Second-Party Opinion", (2021), at: [https://www.sustainalytics.com/corporate-solutions/sustainable-finance-and-lending/published-projects/project/gr%C3%A4nges/gr%C3%A4nges-green-and-sustainability-linked-finance-framework-second-party-opinion-\(2021\)/gr%C3%A4nges-green-and-sustainability-linked-finance-framework-second-party-opinion](https://www.sustainalytics.com/corporate-solutions/sustainable-finance-and-lending/published-projects/project/gr%C3%A4nges/gr%C3%A4nges-green-and-sustainability-linked-finance-framework-second-party-opinion-(2021)/gr%C3%A4nges-green-and-sustainability-linked-finance-framework-second-party-opinion)

<sup>10</sup> IEA, "Aluminium", (2023), at: <https://www.iea.org/energy-system/industry/aluminium>

<sup>11</sup> Ibid.

Sustainalytics' ESG Risk Rating identifies Carbon - Own Operations<sup>12</sup> as a material ESG issue for the Diversified Metals sub-sector.<sup>13</sup> In addition, the Sustainable Accounting Standards Board (SASB) identifies GHG emissions as a relevant issue for the Metals and Mining industry.<sup>14</sup>

In terms of applicability, Sustainalytics has taken a combined approach to viewing the applicability of KPIs 1 and 2 as they together address the issue of GHG emissions. In this sense, these KPIs represented approximately 91.6% of the Company's total GHG emissions in 2023, with KPI 1 (scope 1 and 2) accounting for 7.1% and KPI 2 (scope 3) covering 84.5%.<sup>15</sup>

Based on the above, Sustainalytics considers KPI 1 and KPI 2 to be material and to have a high scope of applicability.

### KPI Characteristics

In assessing a KPI's characteristics, Sustainalytics considers whether: i) it uses a clear and consistent methodology; ii) it follows an externally recognized definition; iii) the KPI is a direct measure of the issuer's performance on a material environmental or social issue;<sup>16</sup> and iv) the methodology can be compared against an external contextual benchmark.<sup>17</sup>

#### KPI 1: Absolute scope 1 and 2 GHG emissions

Sustainalytics considers Gränges' definition and methodology to calculate the performance of KPI 1 to be clear, based on the ease of calculation, and consistent, as the Company has applied the methodology since 2015. Gränges follows an externally recognized methodology to calculate its absolute scope 1 and 2 emissions, namely the GHG Protocol Corporate Standard.<sup>18</sup> Sustainalytics considers KPI 1 to be directly linked to the Company's environmental performance on GHG emissions. Sustainalytics notes that the KPI supports benchmarking against external science-based decarbonization pathways, such as the Science Based Targets initiative's (SBTi) absolute contraction approach.<sup>19</sup>

#### KPI 2: Scope 3 GHG emissions intensity

Sustainalytics considers Gränges' definition and methodology to calculate KPI 2 to be clear, based on the ease of calculation, and consistent, as the Company has applied the methodology since 2017. Gränges calculates its scope 3 emissions intensity in accordance with the GHG Protocol Corporate Standard.<sup>20</sup> Sustainalytics considers KPI 2 to be directly linked to the Company's environmental performance given that the KPI measures the Company's environmental performance on the material issue of GHG emissions. Sustainalytics notes that the KPI supports benchmarking against external science-based decarbonization pathways, such as the Science Based Targets initiative's (SBTi) sectoral decarbonization approach for the aluminium sector.<sup>21</sup>

<sup>12</sup> Sustainalytics' Material ESG Issue Carbon – Own Operations refers to a company's management of risks related to its own operational energy use and GHG emissions (scope 1 and 2). It also includes part of scope 3 GHG emissions.

<sup>13</sup> Sustainalytics, "Diversified Metals Industry Report", (2023)

<sup>14</sup> SASB, "Granges AB", at: [https://sasb.ifrs.org/standards/materiality-finder/find/?company\[0\]=SE0006288015](https://sasb.ifrs.org/standards/materiality-finder/find/?company[0]=SE0006288015)

<sup>15</sup> In 2023, the scope 3 emission categories included in KPI 2 accounted for approximately 91% of total scope 3 emissions, while scope 3 emissions were approximately 92% of total scope 1, 2 and 3 emissions.

<sup>16</sup> A direct measure refers to a metric selected for the KPI that shows a specific indicator of performance or an outcome on the material ESG issue.

<sup>17</sup> External contextual benchmarks are standards or points of reference established by recognized third-party organizations to facilitate comparability.

<sup>18</sup> Greenhouse Gas Protocol, "A Corporate Accounting and Reporting Standard", at: <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>

<sup>19</sup> Science Based Targets initiative, "SBTi Corporate Manual", (2023) at: <https://sciencebasedtargets.org/resources/files/SBTi-Corporate-Manual.pdf>

<sup>20</sup> Greenhouse Gas Protocol, "A Corporate Accounting and Reporting Standard", at: <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>

<sup>21</sup> SBTi, "Aluminium", at: <https://sciencebasedtargets.org/sectors/aluminium>

**Overall Assessment**

Sustainalytics considers KPIs 1 and 2 to be very strong given that: i) they are a direct measure of the Company’s sustainability performance on a relevant and material environmental issue; ii) they together have a high scope of applicability; iii) they follow clear and consistent methodologies that are externally defined; and iv) they lend themselves to be benchmarked against recognised external GHG emission reduction trajectories.

KPI	Strength of KPI			
KPI 1: Absolute scope 1 and 2 GHG emissions (ktCO2e)	Not Aligned	Adequate	Strong	Very strong
KPI 2: Scope 3 GHG emissions intensity (tCO2e/t)	Not Aligned	Adequate	Strong	Very strong



**Calibration of Sustainability Performance Targets**

**Alignment with Gränges’ Sustainability Strategy**

Gränges has set the following SPTs for its KPIs:

- SPTs 1a, 1b and 1c: Reduce absolute scope 1 and 2 GHG emissions by 33% by 2028, by 38% by 2029 and by 42% by 2030, from a 2021 baseline

SPTs 2a, 2b and 2c: Reduce scope 3 GHG emissions intensity by 45% by 2028, by 51% by 2029 and by 57% by 2030, from a 2021 baseline. Gränges updated its 2017 materiality assessment in 2022 which identified 22 ESG topics, including recycling, sustainable materials and energy use.<sup>22</sup> Following the materiality assessment, Gränges’ sustainability strategy focuses on three key environmental areas, namely: i) achieving net zero by reducing carbon intensity, ii) improving circularity by increasing recycling capacity, and iii) sourcing from sustainable suppliers.<sup>23</sup> Noting that the SPTs represent interim milestones towards these sustainability goals, Sustainalytics considers the SPTs to be aligned with Gränges’ sustainability strategy. Please refer to Section 2 for an analysis of the credibility of Gränges’ sustainability strategy.

**Strategy to Achieve the SPTs**

Gränges intends to achieve the SPTs through the following strategy:

**SPT 1: Reduce absolute scope 1 and 2 GHG emissions by 42% by 2030 from a 2021 baseline**

- Gränges plans to increase material and energy efficiency by utilizing digital processes and tools to identify areas for energy savings, such as enhancing metal yield and optimizing thermal processes.
- The Company intends to reduce and eventually phase out natural gas and non-renewable fuels by switching to oxyfuel and biogas. The Company has investigated the replacement of cold air burners with oxyfuel burners in Finspång and Gränges Americas.
- Gränges intends to decarbonize its equipment fleet for moving materials and goods in its production facilities, including replacing diesel forklifts with electrical forklifts.
- The Company plans to purchase renewable electricity by establishing long-term partnerships through power purchase agreements. Gränges’ facility in Shanghai uses 100% hydro-powered electricity with a renewable energy contract. The facility in Konin sources 75% of its electricity from hydropower through guarantees of origin. In addition, Gränges Americas has signed a 20-year contract with a provider to source solar energy in the facility in Huntingdon starting from late 2024. The Company has also signed

<sup>22</sup> Gränges, “Materiality assessment”, at: <https://www.granges.com/sustainability/governance-and-policies/materiality-assessment/>

<sup>23</sup> Gränges, “Gränges Annual and Sustainability Report 2023”, at: <https://storage.mfn.se/867de47c-2dbc-4a7c-af28-7c60c1fa7810/granges-annual-and-sustainability-report-2023.pdf>

a 10-year contract with another company to source solar energy in its Newport facility. In addition, Gränges installed solar panels on the roof of its production facility in Shanghai in 2023.

SPT 2: Reduce scope 3 GHG emissions intensity by 57% by 2030 from a 2021 baseline

- Gränges plans to expand the sourcing of low-carbon primary aluminium and establish long-term partnerships with upstream and downstream suppliers. In 2023, Gränges Americas formed a partnership with a secondary aluminium recycling company for a 10-year contract to supply 100% recycled aluminium to Gränges' Huntingdon facility.<sup>24</sup> In the same year, the Company also formed a joint venture with an aluminium downstream processing manufacturer to secure access to low-carbon primary aluminium for its Shanghai facility.<sup>25</sup>
- The Company plans to invest in recycling capabilities and capacity at its production sites, including reprocessing aluminium from the Company's own operations and expanding scrap sourcing channels to promote circular aluminium through increased scraps consumption. Gränges also invested USD 52 million to expand its aluminium recycling and casting centre at its facility in Huntingdon, allowing the Company to cast 100% scrap aluminium to replace imported primary aluminium.
- The Company focuses on alloy design and innovation to increase the recycling ratio and enhance the recyclability of its alloys. The Company collaborates with customers in the heat exchanger, HVAC and battery markets to jointly develop sustainable and circular alloys.
- Gränges intends to expand partnerships to utilize closed-loop recycling systems, where the facility receives post-produced scraps, re-melt them and reuse them in the production of closure stock material. The Company is already working to create circular business models with closure manufacturers.
- Gränges has a responsible sourcing programme that imposes sustainability requirements on its suppliers. The Company intends to have 100% of its suppliers (measured by the share of purchase value from active suppliers) be approved as sustainable under Gränges' responsible sourcing process. The Company's ambition is to secure the availability of recycled aluminium and low-carbon primary aluminium.

**Ambitiousness, Baseline and Benchmarks**

To determine the ambitiousness of an SPT, Sustainalytics considers: i) whether the SPT goes beyond a business-as-usual trajectory; ii) how the SPT compares to targets set by peers; and iii) how the SPT compares with science-based references.<sup>26</sup>

Gränges has set the baselines for SPTs 1a, 1b, 1c and 2a, 2b, 2c at 2021 to be in line with SBTi-validated targets.

The Company has communicated to Sustainalytics that in the case of sustainability-linked loans, it will set annual targets and will disclose the same in the relevant loan documentation.

SPTs 1a, 1b and 1c: Reduce absolute scope 1 and 2 GHG emissions by 33% by 2028, by 38% by 2029 and by 42% by 2030, from a 2021 baseline

Sustainalytics was able to use the following benchmarks to assess ambitiousness: past performance, peer performance, science-based trajectories.

Regarding past performance, Gränges reduced its absolute scope 1 and 2 GHG emissions by 29% from 2021 to 2023, representing an average annual rate of 15.3%. To achieve SPT 1a, Gränges must reduce its absolute scope 1 and 2 GHG emissions by 1.2% annually from 2023 to 2028, 2.2% annually for SPT 1b from 2023 and 2029 and 2.7% annually for SPT 1c from 2023 to 2030, all compared to 2023, the latest reporting year. Therefore, Sustainalytics considers the SPTs to be below Gränges' historical performance, but representing a continuous improvement.

<sup>24</sup> Scepter Inc., "The Scepter Group", at: <https://www.scepterinc.com/>

<sup>25</sup> Shandong Innovation Group, "About us", at: <http://sdcxjt.com/en/aboutus.asp>

<sup>26</sup> We refer here to contextual benchmarks that indicate the alignment of targets with ecosystem boundaries.



In comparison with six peers globally, Gränges’ targets exceed similar emissions reduction targets for scope 1 and 2 GHG emissions set by its peers. Therefore, Sustainalytics considers SPTs 1a, 1b and 1c to be above peer performance.

Sustainalytics also notes that SPTs 1a, 1b and 1c are validated by the SBTi in line with the 1.5°C trajectory, following the absolute contraction pathway.<sup>27</sup>

SPT 2a, 2b and 2c: Reduce scope 3 GHG emissions intensity by 45% by 2028, by 51% by 2029 and by 57% by 2030, from a 2021 baseline

With regard to historical performance, Gränges reduced its scope 3 GHG emissions intensity by 8% from 2021 to 2023, representing an average annual rate of 4.2%. To achieve SPT 2a, Gränges must reduce its scope 3 GHG emissions intensity by 8% annually from 2023 to 2028, 7.8% annually for SPT 2b from 2023 and 2029 and 7.6% annually for SPT 2c from 2023 to 2030, all compared to the scope 3 emissions intensity in 2023, the latest reporting year. Sustainalytics considers the targeted performance required to achieve the SPTs to be above Gränges’ historical performance.

In comparison with six peers globally, Gränges’ targets exceed similar emissions reduction targets for scope 3 GHG emissions set by its peers. Therefore, Sustainalytics considers SPT 2a, 2b and 2c to be above peer performance.

Sustainalytics notes that SPTs 2a, 2b and 2c are validated by the SBTi with a minimum ambition under the well below 2°C trajectory.<sup>28</sup> Sustainalytics further notes that SBTi does not provide companies with the option to align scope 3 emissions with a 1.5° scenario.

**Overall Assessment**

Sustainalytics considers the SPTs to align with Gränges’ sustainability strategy.

Sustainalytics consider Gränges’ SPT 1a, 1b and 1c to be highly ambitious given that: i) they are below past performance but show a continuous material improvement; ii) they are above peer performance; and iii) they are aligned with the SBTi’s 1.5°C scenario.

Sustainalytics considers Gränges’ SPT 2a, 2b and 2c to be ambitious given that: i) they are above past performance; ii) they are above peer performance; and iii) at the minimum, they are aligned with the SBTi’s well below 2°C scenario.

SPT	Ambitiousness of SPT			
SPT 1: From a 2021 baseline, reduce absolute scope 1 and 2 GHG emissions by: SPT 1a: 33% by 2028 SPT 1b: 38% by 2029 SPT 1c: 42% by 2030	Not Aligned	Moderately Ambitious	Ambitious	Highly Ambitious
SPT 2: From a 2021 baseline, reduce scope 3 GHG emissions intensity by: SPT 2a: 45% by 2028 SPT 2b: 51% by 2029 SPT 2c: 57% by 2030	Not Aligned	Moderately Ambitious	Ambitious	Highly Ambitious



**Instrument Characteristics**

The financial characteristics of the sustainability-linked instruments issued under the Framework will be linked to the achievement or non-achievement of the selected SPTs and compliance with its reporting and verification

<sup>27</sup> Gränges shared its SBTi Near-Term Target Validation Report with Sustainalytics confidentially. . The Company’s targets are available at: <https://sciencebasedtargets.org/companies-taking-action#dashboard>.

<sup>28</sup> Gränges shared its Near-Term Target Validation Report with Sustainalytics confidentially. The Company’s target is available at <https://sciencebasedtargets.org/companies-taking-action#dashboard>.

commitments. The relevant documentation of each instrument issued under the Framework will define the applicable financial characteristics, as well as a specification of the financial impact, the target observation date, the fallback mechanisms and the reporting end date. The Company communicated to Sustainalytics that it intends to have a coupon step-up or a step-up mechanism on the redemption price for all bonds and an annual margin adjustment mechanism for all loans, even if other characteristics may vary for each instrument and issuance. Additionally, Gränges has communicated to Sustainalytics that all three KPIs and their associated SPTs will be included in all sustainability-linked issuances under this Framework, except for cases where SPTs have already been met. Nevertheless, Sustainalytics encourages Gränges to include the most material and relevant KPIs and their associated SPTs in all instruments issued under the Framework. Sustainalytics considers the financial characteristics of the sustainability-linked financing instruments to be aligned with the SLBP and SLLP, but does not opine on the adequacy of the magnitude and structure of the financial penalty.



### Reporting

Gränges commits to report on its progress on the SPTs in relation to the respective KPIs on an annual basis in its Sustainability Report or in a separate Sustainability-Linked Progress Report published on its website. The Company communicated to Sustainalytics that it will provide lenders with a dedicated annual report on the progress of the SPTs, when relevant. This reporting will include: i) performance of the KPIs and related SPTs, as per the relevant reporting period, including the calculation methodology and baselines when relevant; ii) information about potential recalculations of baselines; ii) any relevant update to Gränges' sustainability strategy and governance with an impact on the KPIs and SPTs, and iii) a list of Sustainability-Linked Finance Instruments outstanding. In addition, Gränges may also include, when feasible: i) qualitative or quantitative explanations of the main factors contributing to the evolution of the annual performance of the KPIs, including for instance M&A activities; ii) positive sustainability impacts of performance improvement, and iii) updates on new or proposed regulations from regulatory bodies relevant to the KPIs and the SPTs. The reporting commitments are aligned with the SLBP and SLLP.



### Verification

Gränges commits to have an external verifier provide limited assurance against each SPT for each KPI on an annual basis. The verification will be publicly available on the Company's website, together with Gränges' Sustainability Report or Sustainability-Linked Progress Report. This is aligned with the SLBP and SLLP on verification.

## Section 2: Assessment of Gränges' Sustainability Strategy

### Credibility of Gränges Sustainability Strategy

In 2023, Gränges updated its sustainability strategy to focus on the following key environmental areas: i) carbon footprint; ii) increasing circularity and recycling; and iii) sourcing from sustainable suppliers.<sup>29</sup> Following 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.<sup>30</sup> 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.<sup>31</sup> 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

<sup>29</sup> Gränges, "Gränges Annual and Sustainability Report 2023", at: <https://storage.mfn.se/867de47c-2dbc-4a7c-af28-7c60c1fa7810/granges-annual-and-sustainability-report-2023.pdf>

<sup>30</sup> Ibid.

<sup>31</sup> 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.

sources.<sup>32</sup> 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.<sup>33</sup>

With respect to recycling, Gränges commits to achieve a total recycling volume of 500 kilotonnes by 2030, which is a tenfold increase from 2017.<sup>34</sup> 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.<sup>35</sup>

Regarding sustainable sourcing, Gränges aims to achieve 100% sourcing from active suppliers approved as sustainable under Gränges' responsible sourcing process by 2030.<sup>36</sup> 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.<sup>37</sup>

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.<sup>38</sup>

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.

### Gränges' Environmental and Social Risk Management

Sustainalytics recognizes that Gränges' defined targets are impactful but notes that achieving the SPTs bears environmental and social risks related to: i) community relations;<sup>39</sup> ii) emissions, effluents and waste;<sup>40</sup> iii) resource use;<sup>41</sup> and iv) occupational health and safety.<sup>42</sup>

Sustainalytics comments below on Gränges' ability to mitigate such potential risks:

- 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 efforts.<sup>43</sup> 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.<sup>44</sup>
- 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

<sup>32</sup> Gränges, "Gränges Annual and Sustainability Report 2023", at: <https://storage.mfn.se/867de47c-2dbc-4a7c-af28-7c60c1fa7810/granges-annual-and-sustainability-report-2023.pdf>

<sup>33</sup> Shandong Innovation Group, "About us", at: <http://sdcxjt.com/enaboutus.asp>

<sup>34</sup> Gränges, "Gränges Annual and Sustainability Report 2023", at: <https://storage.mfn.se/867de47c-2dbc-4a7c-af28-7c60c1fa7810/granges-annual-and-sustainability-report-2023.pdf>

<sup>35</sup> Scepter Inc., "The Scepter Group", at: <https://www.scepterinc.com/>

<sup>36</sup> Gränges, "Gränges Annual and Sustainability Report 2023", at: <https://storage.mfn.se/867de47c-2dbc-4a7c-af28-7c60c1fa7810/granges-annual-and-sustainability-report-2023.pdf>

<sup>37</sup> 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>

<sup>38</sup> Gränges, "Gränges Annual and Sustainability Report 2023", at: <https://storage.mfn.se/867de47c-2dbc-4a7c-af28-7c60c1fa7810/granges-annual-and-sustainability-report-2023.pdf>

<sup>39</sup> Sustainalytics' Material ESG Issue Community Relations focuses on how companies engage with communities by assessing how they involve local communities in business decisions, minimize adverse impacts on their wellbeing and foster sustainable community development over the long term.

<sup>40</sup> Sustainalytics' Material ESG Issue Emissions Effluents and Waste encompasses a company's practices to minimize non-greenhouse gas emissions, waste and wastewater discharges across its operations, as well as its preparedness and response measures for potential pollution emergencies.

<sup>41</sup> Sustainalytics' Material ESG Issue Resource Use focuses on how efficiently and effectively a company uses its raw material inputs (excluding energy and petroleum-based products) in production and how it manages related risks.

<sup>42</sup> Sustainalytics' Material ESG Issue Occupational Health and Safety refers to a company's ability to ensure its workforce is safe and healthy and to mitigate the risk of occupational hazards such as employee injuries or fatalities.

<sup>43</sup> Gränges, "Gränges Annual and Sustainability Report 2023", at: <https://storage.mfn.se/867de47c-2dbc-4a7c-af28-7c60c1fa7810/granges-annual-and-sustainability-report-2023.pdf>

<sup>44</sup> 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](https://www.granges.com/globalassets/04.-hallbarhet/02.-strategy-and-governance/08.-policies/coc_24/coc_2024_english.pdf)

waste is collected, treated or disposed of in an environmentally sound manner.<sup>45</sup> Moreover, Gränges' facilities follow local waste handling procedures and actively work to reduce material consumption.<sup>46</sup> The Company also has a plan to phase out hazardous materials in line with its Environmental Policy.<sup>47</sup>

- Regarding resource use, the Company's Environmental Policy outlines its initiatives related to reducing energy and water consumption, increasing the use of recycled materials and sourcing low-carbon primary aluminium.<sup>48</sup> In terms of water use, Gränges aims to implement local water management plans in all facilities by 2025 to address water related impacts, as the production sites are often located in areas affected by water stress.<sup>49</sup> In addition, Gränges Americas is working on reducing water consumption and water contamination by installing closed-loop cooling systems with high water recirculation.<sup>50</sup> Additionally, all the Company's sites are ISO 14001:2015<sup>51</sup> certified, requiring robust processes to enable the effective mitigation of negative impacts of its business activities on the environment.<sup>52</sup>
- 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 results monthly.<sup>53</sup> 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.<sup>54,55</sup>

Overall, Sustainalytics considers that Gränges has management programmes and policies to mitigate the above.

## Section 3: Impact of the SPTs

### The importance of decarbonizing the aluminium sector

The aluminium sector accounts for 3% of global direct industrial CO<sub>2</sub> emissions, having emitted 270 million tonnes of direct CO<sub>2</sub> in 2022.<sup>56</sup> Despite an average annual reduction of 1.3% in the sector's direct emissions between 2020 and 2022, total absolute emissions rose by 2.4% in the period due to increased production volumes.<sup>57</sup> The International Aluminium Institute forecasts that demand for aluminium will increase by approximately 39% from 2020 to 2030.<sup>58</sup> In addition, in 2022, only 36% of the global aluminium production used recycled materials.<sup>59</sup> The Aluminium Association estimates that the production of recycled aluminium is 94% less emission-intensive than producing primary aluminium.<sup>60</sup>

TPI has developed intensity-based decarbonization trajectories for the aluminium sector based on the 1.5°C scenario and the below 2°C scenario.<sup>61</sup> To achieve net zero by 2050, the carbon intensity of the sector must drop from 6.56 tCO<sub>2</sub>/t aluminium to below 4.73 tCO<sub>2</sub>/t by 2030 under the 1.5°C scenario.<sup>62</sup> Furthermore, according to the International Energy Agency's (IEA) 2050

<sup>45</sup> 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>

<sup>46</sup> Gränges, "Gränges Annual and Sustainability Report 2023", at: <https://storage.mfn.se/867de47c-2dbc-4a7c-af28-7c60c1fa7810/granges-annual-and-sustainability-report-2023.pdf>

<sup>47</sup> Gränges, "Environmental Policy", (2023), at: <https://www.granges.com/globalassets/04.-hallbarhet/02.-strategy-and-governance/08.-policies/gp2.09-global-environmental-policy-2023-07-05.pdf>

<sup>48</sup> 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>

<sup>49</sup> Gränges, "Gränges Annual and Sustainability Report 2023", at: <https://storage.mfn.se/867de47c-2dbc-4a7c-af28-7c60c1fa7810/granges-annual-and-sustainability-report-2023.pdf>

<sup>50</sup> Ibid.

<sup>51</sup> ISO, "ISO 14001 - Environment Management Systems", at: <https://www.iso.org/standards/popular/iso-14000-family>

<sup>52</sup> Gränges, "Sustainability risks", at: <https://www.granges.com/sustainability/governance-and-policies/risks-management/>

<sup>53</sup> Gränges shared the document with Sustainalytics confidentially.

<sup>54</sup> Gränges, "Sustainability risks", at: <https://www.granges.com/sustainability/governance-and-policies/risks-management/>

<sup>55</sup> Ibid.

<sup>56</sup> IEA, "Aluminium", (2023), at: <https://www.iea.org/energy-system/industry/aluminium>

<sup>57</sup> IEA, "Aluminium", (2023), at: <https://www.iea.org/energy-system/industry/aluminium>

<sup>58</sup> 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>

<sup>59</sup> IEA, "Aluminium", (2023), at: <https://www.iea.org/energy-system/industry/aluminium>

<sup>60</sup> The Aluminum Association, "The Environmental Footprint of Semi-Fabricated Aluminum Products in North America", (2022), at: [https://www.aluminum.org/sites/default/files/2022-01/2022\\_Semi-Fab\\_LCA\\_Report.pdf](https://www.aluminum.org/sites/default/files/2022-01/2022_Semi-Fab_LCA_Report.pdf)

<sup>61</sup> TPI, "Aluminium", at: <https://www.transitionpathwayinitiative.org/sectors/aluminium>

<sup>62</sup> Ibid.

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.<sup>63</sup>

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.<sup>64</sup> Additionally, the Net Zero Emissions Scenario requires recycled aluminium to account for more than 40% of the sector’s total production by 2030.<sup>65</sup> 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.<sup>66,67</sup> Other advancements include electric boilers, mechanical vapor recompression and hydrogen for heat generation in alumina refining.<sup>68,69,70</sup> 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 by 2050.<sup>71</sup>

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.

**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 Framework are expected to help advance the following SDGs and targets:

KPI	SDG	SDG Target
KPI 1: Absolute scope 1 and 2 GHG emissions (ktCO <sub>2</sub> e)	7. Affordable and clean energy	7.3. By 2030, double the global rate of improvement in energy efficiency
KPI 2: Scope 3 GHG emissions intensity (tCO <sub>2</sub> e/t)	9. Industry, Innovation and Infrastructure	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

**Conclusion**

Gränges intends to issue sustainability-linked instruments, tying the financial characteristics, such as a coupon step-up, a margin or a price adjustment, to achievement of the following SPTs:

- (1) SPTs 1a, 1b and 1c: Reduce absolute scope 1 and 2 GHG emissions by 33% by 2028, by 38% by 2029 and by 42% by 2030, from a 2021 baseline.
- (2) SPTs 2a, 2b and 2c: Reduce scope 3 GHG emissions intensity by 45% by 2028, by 51% by 2029 and by 57% by 2030, from a 2021 baseline.

<sup>63</sup> IEA, “Aluminium”, (2023), at: <https://www.iea.org/energy-system/industry/aluminium>

<sup>64</sup> Ibid.

<sup>65</sup> Ibid.

<sup>66</sup> Trimet, “CO2-free aluminum production”, (2024), at: <https://www.trimet.eu/en/trimet/sustainability/environmental-and-climate-protection/production-of-inert-metallic-anodes>

<sup>67</sup> 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>

<sup>68</sup> IEA, “Aluminium”, (2023), at: <https://www.iea.org/energy-system/industry/aluminium>

<sup>69</sup> Australian Renewable Energy Agency, “Alcoa Renewable Powered Electric Calcination Pilot”, (2022), at: <https://arena.gov.au/projects/alcoa-renewable-powered-electric-calcination-pilot/>

<sup>70</sup> Australian Renewable Energy Agency, “Rio Tinto Hydrogen Feasibility Study Report”, (2022), at: <https://arena.gov.au/knowledge-bank/rio-tinto-hydrogen-feasibility-study-report/>

<sup>71</sup> 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/>

Sustainalytics considers KPI 1 and KPI 2 to be very strong based on their materiality, relevance, scope of applicability and comparability to an external benchmark. In addition, Sustainalytics considers SPTs 1a, 1b and 1c to be highly ambitious, SPTs 2a, 2b and 2c to be ambitious, based on past performance, peer performance and alignment with science-based trajectories, as applicable.

Additionally, Sustainalytics considers the reporting and verification commitments to be aligned with the SLBP and SLLP.

Based on the above, Sustainalytics considers the Gränges Sustainability-Linked Finance Framework to be in alignment with the five core components of the Sustainability-Linked Bond Principles 2024 and the Sustainability-Linked Loan Principles 2023, and the prospective achievement of the SPTs to be impactful.

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