

## SECOND PARTY OPINION (SPO)

Sustainability Quality of the Issuer and Sustainability-Linked Bond Framework

Knorr-Bremse AG  
8 September 2022

### VERIFICATION PARAMETERS

<b>Type(s) of instruments contemplated</b>	Sustainability-Linked Bonds
<b>Relevant standard(s)</b>	Sustainability-Linked Bond Principles, as administered by ICMA (06.2020) Sustainability-Linked Loan Principles, as administered by LMA (03.2022)
<b>Scope of verification</b>	Knorr-Bremse Sustainability-Linked Bond Framework (07.09.2022)
<b>Lifecycle</b>	Pre-issuance verification
<b>Validity</b>	As long as Knorr-Bremse's Sustainability-Linked Bond Framework and benchmarks for the Sustainability Performance target(s) remain unchanged

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## SCOPE OF WORK

Knorr-Bremse AG (“Knorr-Bremse”, “the issuer” or “the company”) commissioned ISS ESG to assist with its Sustainability-Linked Bonds by assessing three core elements to determine the sustainability quality of the instrument:

1. Knorr-Bremse’s Sustainability-Linked Bond Framework (07.09.2020 version) and structural components of the transaction – benchmarked against the Sustainability-Linked Bond Principles (SLBP), as administered by the International Capital Market Association (ICMA), and the Sustainability-Linked Loan Principles (SLLP) by the Loan Market Association (LMA).
2. The sustainability credibility of the KPI selected and Sustainability Performance Target (SPT) calibrated – whether the KPI selected is core, relevant and material to the issuer’s business model and industry, and whether the associated target is ambitious.
3. Sustainability-Linked Bonds link to Knorr-Bremse sustainability strategy – drawing on Knorr-Bremse’s overall sustainability profile and related objectives.

## KNORR-BREMSE BUSINESS OVERVIEW

Knorr-Bremse AG engages in the manufacture and sale of braking systems for rail and commercial vehicles. It is classified in the Heavy Trucks & Construction & Farm Machinery industry, as per ISS ESG’s sector classification. It operates through the Rail Vehicle Systems and Commercial Vehicle Systems segments. The Rail Vehicle Systems segment supplies products and services for local public transport vehicles, such as metros, light rail vehicles (LRV), freight cars, locomotives, regional and high-speed trains, and monorails. Its product portfolio includes HVAC and entry systems, auxiliary power supply systems, control components, windscreen wiper systems, platform screen doors, friction material, driver advisory systems, traction systems, and train control and monitoring systems. The Commercial Vehicle Systems segment offers brake systems and vehicle dynamics solutions including driver assistance and automated driving, brake control, brake system, steering, and electronic leveling control; energy supply and distribution systems such as air compressors and air treatment; and fuel efficiency products including engine components and transmission sub-systems. The company was founded by Georg Knorr in 1905 and is headquartered in Munich, Germany.

## ISS ESG SPO ASSESSMENT SUMMARY

SECTION	EVALUATION SUMMARY <sup>1</sup>
<p><b>Part 1:</b></p> <p><b>Alignment with the SLBP and SLLP</b></p>	<p><b>Aligned with ICMA Sustainability-Linked Bond Principles and the LMA Sustainability-Linked Loan Principles</b></p> <hr/> <p>The issuer has defined a formal framework for its Sustainability-Linked Bonds regarding the selection of KPI, calibration of Sustainability Performance Target (SPT), Sustainability-Linked Bonds characteristics, reporting and verification. The framework is in line with the Sustainability-Linked Bond Principles (SLBP) administered by the ICMA and the Sustainability-Linked Loan Principles (SLLP) by the LMA.</p> <p>The financial characteristics of any security issued under this Framework, including a description of the selected KPI, SPT, step-up margin amount or the premium payment amount, as applicable, will be specified in the relevant documentation of the specific transaction. Variations include but are not limited to coupon step-up(s), coupon step-down(s) and/ or a higher or a lower redemption price payable.</p>
<p><b>Part 2A:</b></p> <p><b>KPI: Setting a SBTi approved GHG Emissions target for Knorr-Bremse's value chain (Scope 3)</b></p> <p><b>SPT: Publication of a SBTi approved GHG Emissions target for Knorr-Bremse's value chain (Scope 3) until 31 August 2023</b></p>	<p><b>KPI selection: Relevant, Core, Material, to issuer's business model and sustainability profile</b></p> <hr/> <p><b>Sustainability Performance Target (SPT) calibration:</b></p> <ul style="list-style-type: none"> <li>• <b>Ambitious against issuer's past performance</b></li> <li>• <b>In line with issuer's industry peer group</b></li> <li>• <b>In line with Paris Climate Goals</b></li> </ul> <hr/> <p>ISS ESG finds that the KPI selected is core, relevant and material to the issuer's business model and consistent with its sustainability strategy. It is appropriately measurable, quantifiable, externally verifiable, and benchmarkable. Until now, underlying data on scope 3 have not been externally verified. It will cover at least 67% of the company's scope 3 GHG emissions (which represent over 99% of the issuer's total emissions).</p> <p>ISS ESG finds that the SPT is ambitious against the company past performance and industry peers; it will enable Knorr-Bremse to be committed to be in line with the Paris Climate Goals. It is to be noted that the SPT itself will not result directly in any emission reduction. The target is set in a clear timeline and is supported by a strategy and action plan disclosed in the company's framework.</p>

<sup>1</sup> ISS ESG's evaluation is based on the engagement conducted in August and September 2022, on Knorr-Bremse's Sustainability-Linked Bond Framework (07.09.2022 version) and on the ISS ESG Corporate Rating applicable at the SPO delivery date (updated on the 12.02.2022).

**Part 3:**

**Consistent with Issuer's sustainability strategy**

**Link to issuer's  
sustainability  
strategy**

The KPI selected by the issuer is related to climate change. Climate change has been defined as one of the key priorities of the issuer in terms of sustainability strategy and ISS ESG finds that this is a material sustainability topic for the issuer. ISS ESG finds that this issuance contributes to the issuer's sustainability strategy thanks to the KPI's clear link to one of the key sustainability priorities of the issuer.

## ISS ESG SPO ASSESSMENT

### PART 1: ALIGNMENT WITH ICMA SUSTAINABILITY-LINKED BOND PRINCIPLES AND AND LMA SUSTAINABILITY-LINKED LOAN PRINCIPLES

This section describes ISS ESG’s assessment of the alignment of the Knorr-Bremse’s Sustainability-Linked Bond Framework (dated 07.09.20220) with the Sustainability-Linked Bond Principles (SLBP), as administered by the International Capital Market Association (ICMA), and the Sustainability-Linked Loan Principles, as published by the Loan Market Association (LMA).

SLB/SLL PRINCIPLES	ASSESSMENT	ISS ESG’S OPINION
<b>1. Selection of KPI</b>		ISS ESG conducted a detailed analysis of the sustainability credibility of the KPI selection, which is available in Part 2 of this report.
<b>2. Calibration of SPT</b>		ISS ESG conducted a detailed analysis of the sustainability credibility of the SPT calibration, which is available in Part 2 of this report.
<b>3. Bond/Loan Characteristics</b>	✓	<p>ISS ESG considers the Sustainability-Linked Bond/Loan Characteristics description provided by the issuer as aligned with the SLBP and SLLP. The issuer gives a detailed description of the potential variation of the financial characteristics of the securities. Variations include but are not limited to coupon step-up(s), coupon step-down(s) and/ or a higher or a lower redemption price payable.</p> <p>The issuer also follows best market practices by providing language on potential extreme and or exceptional events (such as significant change in perimeters through material M&amp;A activities or drastic changes in regulatory environment or market practices) that could substantially impact the calculation of the KPI and the restatement of the SPT.</p>
<b>4. Reporting</b>	✓	ISS ESG considers the Reporting description provided by the issuer as aligned with the SLBP and SLLP. This will be made available annually to investors and include valuable information, as described above.
<b>5. External verification</b>	✓	ISS ESG considers the Verification description provided by the issuer as aligned with the SLBP and SLLP. ISS ESG provides an SPO through this report. The performance of the SPT against the KPI will be externally verified annually until the target is reached.

## PART 2: KPI SELECTION & SPT CALIBRATION

### 1A.1 Selection of KPI

KPI: Setting a SBTi approved Greenhouse Gas (GHG) Emissions target for Knorr-Bremse's value chain (Scope 3)

#### FROM ISSUER'S FRAMEWORK

- **KPI:** Setting a SBTi<sup>2</sup> approved Greenhouse Gas (GHG) Emissions target for Knorr-Bremse's value chain (Scope 3)
- **SPT:** Publication of a SBTi approved Greenhouse Gas (GHG) Emissions target for Knorr-Bremse's value chain (Scope 3) until 31 August 2023

**Long-term goal:** the issuer has no longer term target in place at the moment and will submit a near-term target (target year 2030) for the SBTi validation.

**Rationale:** scope 3 represents the largest share of emissions for Knorr-Bremse. As such, the issuer has to address these emissions in order to align to the international climate change mitigation targets and efforts. In addition, the issuer is committed to drive sustainability considerations across its value chain.

**Baseline performance and year:** the issuer will submit 2021 as baseline year for the SBTi validation.

**Scope:** The target will cover at least 67% of the value chain emissions as per the SBTi requirements<sup>3</sup>.

### Materiality and relevance

Climate change mitigation is considered as a key ESG issue faced by the Heavy Trucks & Construction & Farm Machinery industry according to key ESG standards<sup>4</sup> for reporting and ISS ESG assessment. Companies of this industry are highly energy-intensive, namely in the process of producing technologies and end-to-end solutions, as well as services and consumables. Furthermore, the largest consumers of energy in the industrial sector are manufacturing, mining, construction, and agriculture.

ISS ESG finds that the Scope 3 emissions target setting KPI selected by the issuer is:

- **Relevant** to Knorr-Bremse's business as its industry is responsible for and exposed to the risks related to climate change. By setting a Science-Based Target for part its Scope 3 emissions (exact scope to be defined with SBTi), the company can lower the environmental impact of its value chain.
- **Core** to the issuer's business as setting a scope 3 GHG emissions reduction target require efforts with regard to liaising with the SBTi, calculating and mapping emissions across the value chain, assessing the technical feasibility of the reduction planned and drafting action plans to reach it.
- **Material** to Knorr-Bremse's most significant proportion of total GHG emissions as the target set as a result of this KPI will cover a significant share of the total GHG emissions of the issuer. While the scope of the target remains undefined at the moment, it will have to cover at least 67% of scope 3 emissions, as mandated by SBTi. According to the issuer Scope 3 emissions

<sup>2</sup> Science Based Targets Initiative (SBTi) - [Ambitious corporate climate action - Science Based Targets](#)

<sup>3</sup> Science Based Targets Initiative (SBTi) - [SBTi Criteria and Recommendations](#), version 5.0, October 2021, page 6

<sup>4</sup> Key ESG Standards include SASB and TCFD, among others.

represent more than 99% of the company's total emission (data not yet externally verified). Thus, the target will cover a share of emissions that can be considered material to Knorr-Bremse value chain according to the ISS ESG methodology.

### Consistency with overall company's sustainability strategy

ISS ESG finds that the KPI selected by the issuer is consistent with the overall company's sustainability strategy, which is further detailed in Part III.B of this report.

### Measurability

- **Scope and perimeter:** The KPI scope and perimeter is still to be defined but, as mandated by SBTi, it will cover at least 67% of Scope 3 emissions. Scope 3 emissions are estimated to represent more than 99% of Knorr-Bremse total emissions.
- **Quantifiable/Externally verifiable:** The KPI selected is quantifiable based on the fact that the SBTi adopts quantitative targets and explains the methodology behind them. The KPI selected is externally verifiable considering that SBTs are approved and verified by the SBTi. They are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement, limiting global warming to well-below 2°C pre-industrial levels and pursuing efforts to limit warming to 1.5°C.
- **Externally verified:** Scope 3 data are not yet verified but they will be as part of the SBTi verification process. In addition, the issuer commits to having the future data verified on an annual basis by an external reviewer as well.
- **Benchmarkable:** By referring to commonly acknowledged GHG accounting standards and protocol, the KPI is easily comparable with the data reported by other companies and with international targets such as the Paris Agreement. Benchmarking of the SPT in relation with this KPI has been analyzed in section 2.

**Opinion on KPI selection:** ISS ESG finds that the KPI selected is core, relevant and material to the issuer's business model and consistent with its sustainability strategy. It is appropriately measurable, quantifiable, externally verifiable, and benchmarkable. Until now, it has not been externally verified. It will cover at least 67% of the company's scope 3 GHG emissions (which represent over 99% of the issuer's total emissions).



## 1B Calibration of SPT

SPT: Publication of a SBTi approved Greenhouse Gas (GHG) Emissions target for Knorr-Bremse's value chain (Scope 3) until 31 August 2023

### FROM ISSUER'S FRAMEWORK

**Sustainability Performance Target:** Publication of a SBTi approved Greenhouse Gas (GHG) Emissions target for Knorr-Bremse's value chain (Scope 3) until 31 August 2023

**Sustainability Performance Target Trigger:** when Knorr-Bremse will be referenced by the SBTi as having approved and published GHG emission reduction targets that are aligned with one of their scenarios before or by August 31, 2023.

**Sustainability Performance Target Observation Date:** August 31, 2023

**Historical performance:** Not available

**Factors that support the achievement of the target:** internal advancement of the processes needed for the target submission.

**Risks to the target:** progress of the internal processes needed for the target submission; identification of emission reduction potentials for relevant scope 3 categories.

## Ambition

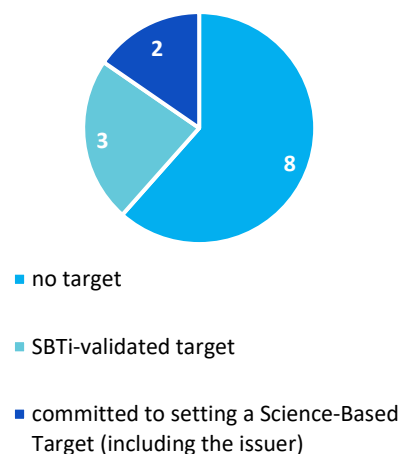
### Against company's past performance

Knorr-Bremse will set the SPT(s) to reduce its scope 3 GHG emissions relying on the SBTi methodology. Like all SBTi-validated targets, this SBT will be developed in line with the GHG Protocol Corporate Standard and it will cover all relevant GHG emissions (at least 67% of scope 3 GHG emissions should be covered). As the issuer has never set emissions reductions targets nor had targets verified by the SBT the target can be considered ambitious against the company's past performance.

### Against company's industry peers

ISS ESG conducted a benchmarking of the SPT set by Knorr-Bremse against the peer group of 12 listed companies provided by the issuer. Among the issuer's peers, three have scope 3 targets already validated by SBTi (for two companies the target is in line with the reductions required to keep the global mean temperature increase to 1.5°C, while for one company the reduction is in line with the well-below 2°C scenario). Two more companies, including the issuer, are committed to set SBTs. The SPT belongs to the top 38% of companies which have already an SBTi-approved target or are committed to setting one. Thus, ISS ESG considers the SPT to be in line with its peers.

Figure 3. Scope 3 target setting of peer group (including the issuer)



## Against international targets

### Paris Agreement

Knorr-Bremse has not yet benchmarked its SPT as it is not currently developed. However, like all SBTi-validated targets, it will be developed in line with the GHG Protocol Corporate Standard and it will cover all relevant GHG emissions. The SPT will be achieved when the SBTi approves the issuer's SBT. Therefore, the science-based target itself will permit Knorr-Bremse to be Paris-aligned. However, as the SPT sets the achievement of the science-based target, it cannot in and of itself permit the company to be Paris-aligned. Rather, once the issuer follows the emission trajectory set out in the SBT, that pathway will be Paris-aligned. It is important to stress that the target is not yet available, and therefore no details can be provided. The SBTi analysis is considered credible as it is provided by an independent third party based on a methodology established in the industry. Thus, ISS ESG considers the SPT to be committed to be in line with the Paris Climate Goals.

### Measurability & comparability

- **Historical data:** There are no historical data on the SPT.
- **Timeline:** The issuer defined a precise timeline related to the SPT achievement, including the target observation date, the trigger event and the frequency of SPTs measurement.

### Supporting strategy and action plan

Knorr-Bremse has been working on calculating its scope 3 emissions and assessing the technical feasibility of the future reduction to be carried out. This will enable the issuer to set the target to be submitted to SBTi.

**Opinion on SPT calibration:** *ISS ESG finds that the SPT is ambitious against the company past performance and industry peers; it will enable Knorr-Bremse to be committed to be in line with the Paris Climate Goals. It is to be noted that the SPT itself will not result directly in any emission reduction. The target is set in a clear timeline and is supported by a strategy and action plan disclosed in the company's framework.*

## PART 3: LINK TO KNORR-BREMSE'S SUSTAINABILITY STRATEGY

### A. KNORR-BREMSE'S BUSINESS EXPOSURE TO ESG RISKS

This section aims to provide an overall level of information on the ESG risks to which the issuer is exposed through its business activities, providing additional context to the issuance assessed in the present report.

#### *ESG risks associated with the Issuer's industry*

The issuer is classified in the Heavy Trucks & Construction & Farm Machinery, as per ISS ESG's sector classification. Key challenges faced by companies in terms of sustainability management in this industry are displayed in the table below. Please note, that this is not a company specific assessment but areas that are of particular relevance for companies within that industry.

ESG KEY ISSUES IN THE INDUSTRY
Environmental impact of products
Resource-conserving production
Product safety
Occupational health and safety

#### *ESG performance of the Issuer*

Leveraging ISS ESG's Corporate Rating research, further information about the issuer's ESG performance can be found on ISS ESG Gateway at: <https://www.issgovernance.com/esg/iss-esg-gateway/>.

Please note that the consistency between the issuance subject to this report and the issuer's sustainability strategy is further detailed in Part 3.B of this report.

#### *Sustainability impact of products and services portfolio*

Leveraging ISS ESG's Sustainability Solutions Assessment methodology, ISS ESG assessed the contribution of the issuer's current products and services portfolio to the Sustainable Development Goals defined by the United Nations (UN SDGs). This analysis is limited to the evaluation of final product characteristics and does not include practices along the issuer's production process.

Knorr-Bremse's product portfolio includes 5% of vehicle safety solutions products. The direction of impact for this share of the portfolio is associated with a contribution to SDG 3 (Good Health and Wellbeing). Furthermore, 1% of the portfolio includes key components for rolling stock (electric) and key components for electric vehicles, associated with contribution to SDG 7 (Affordable and Clean Energy) and 13 (Climate Action).

## *Breaches of international norms and ESG controversies*

### At issuer level

At the date of publication, ISS ESG has not identified any severe controversy in which the issuer would be involved.

### At industry level

Based on a review of controversies over a 2-year period, the top three issues that have been reported against companies within the Heavy Trucks & Construction & Farm Machinery industry are as follows: Failure to respect consumer health and safety, Failure to respect the right to life and Failure to respect the right to just and favorable conditions of work.

Please note, that this is not a company specific assessment but areas that can be of particular relevance for companies within that industry.

## B. CONSISTENCY OF SUSTAINABILITY-LINKED BONDS WITH KNORR-BREMSE'S SUSTAINABILITY STRATEGY

### *Key sustainability objectives and priorities defined by the issuer*

Knorr-Bremse has been publishing a Sustainability Report since 2011. The company's current sustainability strategy focuses on six areas:

1. Strategy and management: embed environmental and social aspects in strategic planning, management, and corporate processes.
2. Environment and climate: setting clear carbon and waste reduction targets and strategies to achieve them by 2030. Raising environmental awareness with employees.
3. Employees and governance: manage personnel development strategically, offer training to employees, and ensure occupational health and safety at all locations. Have a corporate culture characterized by diversity and equal opportunities, appreciation and transparency.
4. Commitment and society: carry out social initiatives through its non-profit organizations, the Knorr-Bremse Global Care and the Local Care initiative
5. Products and partner: provide safe and efficient products that can contribute to sustainable mobility. Work with suppliers as partners to address social and environmental responsibilities.
6. Communication and co-operation: keep a dialogue with external stakeholders and partner with organizations promoting sustainable development.

In January 2022, Knorr-Bremse concluded its first-ever syndicated loan which included an ESG component as changes in the company's Corporate Rating provided by ISS ESG would cause corresponding positive or negative impact on the loan spread.

### *Consistency with the KPI*

The KPI is consistent with the issuer's sustainability strategy as by setting a scope 3 GHG emissions reduction target, the company will take a step forward towards potentially reducing its carbon footprint, in line with point 2 of its strategy.

## DISCLAIMER

1. Validity of the SPO: For Knorr-Bremse's Sustainability-Linked Bonds issuances as long as Knorr-Bremse's Sustainability-Linked Bond Framework and benchmarks for the Sustainability Performance target(s) remain unchanged.
2. ISS ESG uses a scientifically based rating concept to analyze and evaluate the environmental and social performance of companies and countries. In doing so, we adhere to standardized procedures to ensure consistent quality of responsibility research worldwide. In addition, we provide Second Party Opinion (SPO) on bonds based on data provided by the issuer.
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## ANNEX 1: ISS ESG Corporate Rating

The following pages contain extracts from Knorr-Bremse 2022 ISS ESG Corporate Rating.

### Methodology - Overview

The ESG Corporate Rating methodology was originally developed by Institutional Shareholder Services Germany (formerly oekom research) and has been consistently updated for more than 25 years.

**ESG Corporate Rating** - The ESG Corporate Rating universe covers important national and international indices as well as additional companies from sectors with direct links to sustainability and the most important bond issuers that are not publicly listed companies.

The assessment of a company's social & governance and environmental performance is based on approximately 100 environmental, social and governance indicators per sector, selected from a pool of 800+ proprietary indicators. All indicators are evaluated independently based on clearly defined performance expectations and the results are aggregated, taking into account each indicator's and each topic's materiality-oriented weight, to yield an overall score (rating). If no relevant or up-to-date company information with regard to a certain indicator is available, and no assumptions can be made based on predefined standards and expertise, e.g. known and already classified country standards, the indicator is assessed with a D-.

In order to obtain a comprehensive and balanced picture of each company, our analysts assess relevant information reported or directly provided by the company as well as information from reputable independent sources. In addition, our analysts actively seek a dialogue with the assessed companies during the rating process and companies are regularly given the opportunity to comment on the results and provide additional information.

**Analyst Opinion** - Qualitative summary and explanation of the central rating results in three dimensions:

- (1) Opportunities - assessment of the quality and the current and future share of sales of a company's products and services, which positively or negatively contribute to the management of principal sustainability challenges.
- (2) Risks - summary assessment of how proactively and successfully the company addresses specific sustainability challenges found in its business activity and value chain, thus reducing its individual risks, in particular regarding its sector's key issues.
- (3) Governance - overview of the company's governance structures and measures as well as of the quality and efficacy of policies regarding its ethical business conduct.

**Norm-Based Research - Severity Indicator** - The assessment of companies' sustainability performance in the ESG Corporate Rating is informed by a systematic and comprehensive evaluation of companies' ability to prevent and mitigate ESG controversies. ISS ESG conducts research and analysis on corporate involvement in verified or alleged failures to respect recognized standards for responsible business conduct through Norm-Based Research.

Norm-Based Research is based on authoritative standards for responsible business conduct such as the UN Global Compact, the OECD Guidelines for Multinational Enterprises, the UN Guiding Principles for Business and Human Rights and the Sustainable Development Goals.

As a stress-test of corporate disclosure, Norm-Based Research assesses the following:

- Companies' ability to address grievances and remediate negative impacts
- Degree of verification of allegations and claims
- Severity of impact on people and the environment, and systematic or systemic nature of malpractices

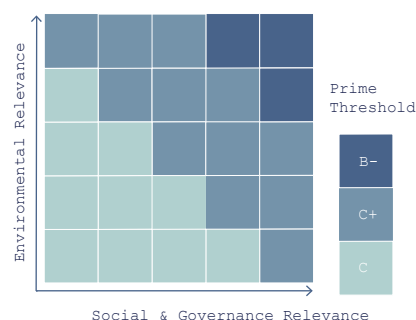
Severity of impact is categorized as Potential, Moderate, Severe, Very severe. This informs the ESG Corporate Rating.

**Decile Rank** - The Decile Rank indicates in which decile (tenth part of total) the individual Corporate Rating ranks within its industry from 1 (best – company's rating is in the first decile within its industry) to 10 (lowest – company's rating is in the tenth decile within its industry). The Decile Rank is determined based on the underlying numerical score of the rating. If the total number of companies within an industry cannot be evenly divided by ten, the surplus company ratings are distributed from the top (1 decile) to the bottom. If there are Corporate Ratings with identical absolute scores that span a division in decile ranks, all ratings with an equal decile score are classified in the higher decile, resulting in a smaller number of Corporate Ratings in the decile below.

**Distribution of Ratings** - Overview of the distribution of the ratings of all companies from the respective industry that are included in the ESG Corporate Rating universe (company portrayed in this report: dark blue).

**Industry Classification** - The social and environmental impacts of industries differ. Therefore, based on its relevance, each industry analyzed is classified in a Sustainability Matrix.

Depending on this classification, the two dimensions of the ESG Corporate Rating, the Social Rating and the Environmental Rating, are weighted and the sector-specific minimum requirements for the ISS ESG Prime Status (Prime threshold) are defined (absolute best-in-class approach).



**Industry Leaders** - List (in alphabetical order) of the top three companies in an industry from the ESG Corporate Rating universe at the time of generation of this report.

**Key Issue Performance** - Overview of the company's performance with regard to the key social and environmental issues in the industry, compared to the industry average.

**Performance Score** - The ESG Performance Score allows for cross-industry comparisons using a standardized best-in-class threshold that is valid across all industries. It is the numerical representation of the alphabetic ratings (D- to A+) on a scale of 0 to 100 with 50 representing the prime threshold. All companies with values greater than 50 are Prime, while companies with values less than 50 are Not Prime. As a result, intervals are of varying size depending on the original industry-specific prime thresholds.

**Rating History** - Development of the company's rating over time and comparison to the average rating in the industry.

**Rating Scale** - Companies are rated on a twelve-point scale from A+ to D-:

A+: the company shows excellent performance.

D-: the company shows poor performance (or fails to demonstrate any commitment to appropriately address the topic).

Overview of the range of scores achieved in the industry (light blue) and indication of the grade of the company evaluated in this report (dark blue).

**Sources of Information** - A selection of sources used for this report is illustrated in the annex.

**Status & Prime Threshold** - Companies are categorized as Prime if they achieve/exceed the sustainability performance requirements (Prime threshold) defined by ISS ESG for a specific industry (absolute best-in-class approach) in the ESG Corporate Rating. Prime companies are sustainability leaders in their industry and are better positioned to cope with material ESG challenges and risks, as well as to seize opportunities, than their Not Prime peers. The financial materiality of the Prime Status has been confirmed by performance studies, showing a continuous outperformance of the Prime portfolio when compared to conventional indices over more than 14 years.

**Transparency Level** - The Transparency Level indicates the company's materiality-adjusted disclosure level regarding the environmental and social performance indicators defined in the ESG Corporate Rating. It takes into consideration whether the company has disclosed relevant information regarding a specific indicator, either in its public ESG disclosures or as part of the rating feedback process, as well as the indicator's materiality reflected in its absolute weight in the rating. The calculated percentage is classified in five transparency levels following the scale below.

0% - < 20%: very low

20% - < 40%: low

40% - < 60%: medium

60% - < 80%: high

80% - 100%: very high

For example, if a company discloses information for indicators with a cumulated absolute weight in the rating of 23 percent, then its Transparency Level is "low". A company's failure to disclose, or lack of transparency, will impact a company's ESG performance rating negatively.

## ANNEX 2: Methodology

### Alignment of the concept set for transactions against the Sustainability-Linked Bond Principles, as administered by ICMA

ISS ESG reviewed the Sustainability-Linked Bond Framework of Knorr-Bremse, as well as the concept and processes for issuance against the Sustainability-Linked Bond Principles administered by the ICMA / Sustainability-Linked Loan Principles by the LMA. Those principles are voluntary process guidelines that outline best practices for financial instruments to incorporate forward-looking ESG outcomes and promote integrity in the development of the Sustainability-Linked Bond / Loan market by clarifying the approach for issuance.

ISS ESG reviewed the alignment of the concept of the Knorr-Bremse's issuance with mandatory and necessary requirements as per the Appendix II - SLB Disclosure Data Checklist of those principles, and with encouraged practices as suggested by the core content of the Principles.

### Analysis of the KPI selection and associated SPT

In line with the voluntary guidance provided by the Sustainability-Linked Bond Principles / Sustainability-Linked Loan Principles, ISS ESG conducted an in-depth analysis of the sustainability credibility of the KPI selected and associated SPT. ISS ESG analyzed if the KPI selected is core, relevant and material to the issuer's business model and consistent with its sustainability strategy thanks to its long-standing expertise in evaluating corporate sustainability performance and strategy. ISS ESG also reviewed if the KPI is appropriately measurable by referring to key GHG reporting protocols and against acknowledged benchmarks.

ISS ESG analyzed the ambition of the SPT against Knorr-Bremse's own past performance (according to Knorr-Bremse's reported data), against Knorr-Bremse's industry peers (as per ISS ESG Peer Universe and data), and against international benchmarks such as the Paris agreement (based on data from the Transition Pathway Initiative). Finally, ISS ESG evaluated the measurability & comparability of the SPT, and the supporting strategy and action plan of Knorr-Bremse.



## ANNEX 3: Quality management processes

### SCOPE

Knorr-Bremse commissioned ISS ESG to compile a Sustainability-Linked Bonds SPO. The Second Party Opinion process includes verifying whether the Sustainability-Linked Bond Framework aligns with the ICMA Sustainability-Linked Bond Principles / LMA Sustainability-Linked Loan Principles and to assess the sustainability credentials of its Sustainability-Linked Bonds, as well as the issuer's sustainability strategy.

### CRITERIA

Relevant Standards for this Second Party Opinion

- ICMA Sustainability-Linked Bond Principles
- LMA Sustainability-Linked Loan Principles

### ISSUER'S RESPONSIBILITY

Knorr-Bremse's responsibility was to provide information and documentation on:

- Framework

### ISS ESG'S VERIFICATION PROCESS

ISS ESG is one of the world's leading independent environmental, social and governance (ESG) research, analysis and rating houses. The company has been actively involved in the sustainable capital markets for over 25 years. Since 2014, ISS ESG has built up a reputation as a highly-reputed thought leader in the green and social bond market and has become one of the first CBI approved verifiers.

ISS ESG has conducted this independent Second Party Opinion of the Sustainability-Linked Bonds to be issued by Knorr-Bremse based on ISS ESG methodology and in line with the ICMA Sustainability-Linked Bond Principles / Sustainability Loan Principles.

The engagement with Knorr-Bremse took place in August-September 2022.

### ISS ESG'S BUSINESS PRACTICES

ISS has conducted this verification in strict compliance with the ISS Code of Ethics, which lays out detailed requirements in integrity, transparency, professional competence and due care, professional behavior and objectivity for the ISS business and team members. It is designed to ensure that the verification is conducted independently and without any conflicts of interest with other parts of the ISS Group.

## About ISS ESG SPO

ISS ESG is one of the world's leading rating agencies in the field of sustainable investment. The agency analyses companies and countries regarding their environmental and social performance.

We assess alignment with external principles (e.g. the ICMA Green / Social Bond Principles), analyse the sustainability quality of the assets and review the sustainability performance of the issuer themselves. Following these three steps, we draw up an independent SPO so that investors are as well informed as possible about the quality of the bond / loan from a sustainability perspective.

Learn more: <https://www.isscorporatesolutions.com/solutions/esg-solutions/green-bond-services/>

For information about SPO services, please contact: [SPOsales@isscorporatesolutions.com](mailto:SPOsales@isscorporatesolutions.com)

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