

## SECOND PARTY OPINION (SPO)

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Sustainability Quality of the Issuer and Asset Pool

ZF Friedrichshafen AG

23 April 2021

### VERIFICATION PARAMETERS

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Type(s) of instruments contemplated	<ul style="list-style-type: none"><li>• Green Finance Instruments: Green Bonds, Green Bonded Loans (SSDs), Green Loans or any other debt instruments, aimed at financing and/or refinancing Eligible Green Projects</li></ul>
Relevant standards	<ul style="list-style-type: none"><li>• ICMA Green Bond Principles, LMA Green Loan Principles and the EU Taxonomy Delegated Act (April 2021)</li></ul>
Scope of verification	<ul style="list-style-type: none"><li>• ZF Green Finance Framework (as of April 2021)</li><li>• ZF Eligible Green Project Portfolio (as of April 2021)</li></ul>
Lifecycle	<ul style="list-style-type: none"><li>• Pre-issuance verification</li></ul>
Validity	<ul style="list-style-type: none"><li>• This SPO is valid as long as no new project categories are added to the Green Finance Framework and there are no material changes to the asset pool (e.g. addition of assets that does not follow the Eligibility Criteria as set out in the Green Finance Framework April 2021).</li></ul>

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## SCOPE OF WORK

ZF Friedrichshafen AG (“ZF” or “the issuer”) commissioned ISS ESG to assist with its Green Finance Instruments by assessing three core elements to determine the sustainability quality of the instruments:

1. The Green Finance Instruments’ link to ZF’s sustainability strategy – drawing on ZF’s overall sustainability profile and issuance-specific Use of Proceeds category.
2. ZF Green Finance Framework – benchmarked against the International Capital Market Association’s (ICMA) Green Bond Principles (GBPs) and Loan Market Association (LMA) Green Loan Principles (GLPs).
3. The current asset pool at date of publication of the Green Finance Framework – whether the project to be (re-)financed align with the Final Report on EU Taxonomy and associated Technical Annex<sup>1</sup> (EU Taxonomy - Delegated Act 2021) on a best effort basis.

<sup>1</sup> Taxonomy Report: Technical Annex

[https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-2800-annex-1\\_en.pdf](https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-2800-annex-1_en.pdf)

ISS ESG reviewed the alignment of the due diligence processes of ZF for the project categories to be (re-)financed under the Green Finance Instruments against the Delegated Act (April 2021) provisional version of the Taxonomy Report.

The EU Commission released a Delegated Act on the EU Taxonomy in April 2021. The Draft has been approved in principle by the European Commission on 21 April 2021. The first company report and investor disclosures using the EU Taxonomy are due at the start of 2022, covering the financial year 2021. Thus, as of the date of publication of this SPO report, it is not possible to conclude to any definite alignment with the EU Taxonomy, which is not yet finalized and implemented.

## ISS ESG ASSESSMENT SUMMARY

SPO SECTION	SUMMARY	EVALUATION <sup>2</sup>
<b>Part 1:</b>  <b>Green Finance Instrument's link to issuer's sustainability strategy</b>	According to the ISS ESG Corporate Rating published on 11.08.2020, the issuer shows a good sustainability performance against industry peer group on key ESG issues faced by the Auto Components sector. As of 20.04.2021, the company obtains a Decile Rank relative to industry group of 1, given that a decile rank of 1 indicates highest relative ESG performance out of 10. The issuer is rated 8 <sup>th</sup> out of 80 companies within its sector.	<b>Consistent with the issuer's sustainability strategy</b>
<b>Part 2:</b>  <b>Performance against the GBPs and GLPs</b>	The issuer has defined a formal concept for its Green Finance Instruments regarding use of proceeds, processes for project evaluation and selection, management of proceeds and reporting. This concept is in line with the ICMA GBPs and LMA GLPs.	<b>Positive</b>
<b>Part 3:</b>  <b>Alignment of the asset pool with the EU Taxonomy</b>	<p>The inaugural Green Bond will (re-)finance the manufacture of renewable energy technologies and low-carbon technologies for electric transport. The Eligible Categories Energy Efficiency and Pollution Prevention and Control are also included within the Framework but no projects were yet selected under such categories. The eligible project categories have a positive contribution to SDG 7 'Affordable and Clean Energy', SDG 11 'Sustainable cities and communities', SDG 12 'Responsible Consumption and Production' and SDG 13 'Climate Action'.</p> <p>ISS ESG assessed the alignment of ZF's due diligence processes against the requirements of the EU Taxonomy (Delegated Act version of April 2021). The issuer's Eligible Green Project Portfolio at date of publication of the Green Finance Framework, corresponds to the following EU Taxonomy categories: 3.1. "Manufacture of renewable energy technologies" and 3.3 "Manufacture of low carbon technologies for transport".</p> <p>Based on robust processes for selection, the Eligible Green Project Portfolio is considered to be aligned with the EU Taxonomy and the relevant activity-specific Technical Screening Criteria, Do No Significant Harm Criteria and Minimum Social Safeguards.</p>	<b>Positive</b>

<sup>2</sup> ISS ESG's evaluation is based on ZF's Green Finance Framework (April 2021 version), on the eligible green project pool as received on the 23.03.2021, and on the ISS ESG Corporate Rating applicable at the SPO delivery date (updated on the 11.08.2020).

## ISS ESG SPO ASSESSMENT

### PART I: THE INSTRUMENT'S LINK TO ZF'S SUSTAINABILITY STRATEGY

#### A. ASSESSMENT OF ZF'S ESG PERFORMANCE

The ISS ESG Corporate Rating provides material and forward-looking environmental, social and governance (ESG) data and performance assessments.

COMPANY	SECTOR	DECILE RANK	TRANSPARENCY LEVEL
ZF	AUTO COMPONENTS	1	VERY HIGH

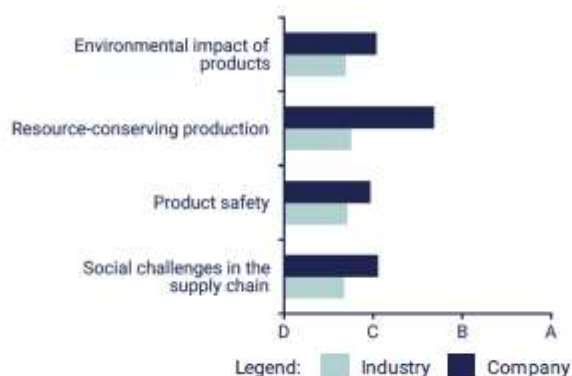
This means that the company currently shows a good sustainability performance against peers on key ESG issues faced by the 'Auto Components' sector and obtains a Decile Rank relative to industry group of 1, given that a decile rank of 1 indicates highest relative ESG performance out of 10.

#### ESG performance

As of 20.04.2021, this Rating places ZF 8<sup>th</sup> out of 80 companies rated by ISS ESG in the Auto Components sector.

Key Challenges faced by companies in terms of sustainability management in this sector are displayed in the chart on the right, as well as the issuer's performance against those key challenges in comparison to the average industry peers' performance.

#### Key Issue Performance



#### Sustainability Opportunities

ZF produces automotive components such as axles, driveline systems and chassis components, as well as various components for other segments like aviation, marine, wind power and agricultural applications. The company seizes its environmental opportunities by incorporating product safety considerations in its products and referring to internal guidelines regarding product responsibility. Energy-saving drive systems, alternative drive systems, as well as renewable energy products can contribute to solving some environmental challenges related to climate change. However, these products constitute only a small share of total net sales. The company's active and passive safety systems for passenger vehicles help prevent and mitigate negative impacts related to health. Its small-scale production of dedicated parts for military vehicles does not include any weapons systems. In 2020, ZF acquired WABCO Holdings, a specialized manufacturer of braking and suspension solutions for commercial vehicles.

### *Sustainability Risks*

ZF manages social sustainability risks comparatively well. Its comprehensive health and management system covers the majority of its employees, although less than half of all sites are certified to an international standard. Risks pertaining to working conditions in the supply chain are countered with a detailed supplier code of conduct and compliance measures such as risk assessments and audits. The company demonstrates good management of product safety, as is evidenced by its implementation of design guidelines and norms as well as efforts to reduce the noise emissions of certain products. Regardless, recently ZF-TRW, a subdivision of the company, allegedly manufactured defective air bag control units, which may have led to multiple severe injuries and deaths in the United States. While ZF states a commitment regarding the responsible sourcing of raw materials, for example by ensuring traceability and use of recycled raw materials, it provides little insight into its due diligence processes or findings.

Environmental risks are addressed through, e.g., life cycle assessments, which help identify negative environmental impacts, as well as through the incorporation of recyclability and considerations regarding product durability in the development process. Furthermore, the company operates a global reclaiming system and remanufacturing business for such products as flywheels and torque converters to improve product sustainability. Material efficiency in products and production is considered to some extent. The company has implemented measures regarding the handling and substitution of substances of concern used in products and production processes.

In 2020 ZF acquired WABCO Holdings, a specialized manufacturer of braking and suspension solutions for commercial vehicles. Although WABCO's management of sustainability risks was less comprehensive and advanced than ZF's, the overall impact on the company's sustainability performance is considered rather low.








### *Governance opinion*

ZF's business is overseen by a supervisory board. There are indications of an independent board committee in charge of remuneration and nomination. Compensation is disclosed for the executive team as a whole but is not subdivided at an individual level. Remuneration consists of fixed and variable components.

Regarding the governance of sustainability, according to the company, a sustainability committee reporting to the board is in place. There is no evidence of ESG targets being part of the executive management team's remuneration. A code of business ethics, addressing relevant topics such as corruption, antitrust, insider dealings, and conflicts of interest, has been formulated and is supported by comprehensive compliance measures.

*Sustainability impact of products and services portfolio*

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

PRODUCT/SERVICES PORTFOLIO	ASSOCIATED PERCENTAGE OF REVENUE (2020)	DIRECTION OF IMPACT	UN SDGS
<b>Key components for vehicle safety solutions</b>	29%	CONTRIBUTION	
<b>Key components for renewable energy systems</b>	3%	CONTRIBUTION	 
<b>Key components for E-Mobility<sup>3</sup></b>	6%	CONTRIBUTION	 
<b>Key components for conventional combustion engine vehicles</b>	25%	OBSTRUCTION	 
<b>Others</b>	N/A	NO NET IMPACT	N/A

*Breaches of international norms and ESG controversies*

The company is not facing any severe controversy.

<sup>3</sup> Based on division E-Mobility, excluding activities in divisions Car Powertrain Technology, Commercial Vehicle Technology, Commercial Vehicle Control Systems and Industrial Technology.

**B. CONSISTENCY OF THE GREEN FINANCE INSTRUMENTS WITH ZF'S SUSTAINABILITY STRATEGY**

*Key sustainability objectives and priorities defined by the issuer*

ZF has taken steps in the last years to strengthen its commitment to sustainability. With its strategy "Next Generation Mobility" ZF strives to deliver a clean and safe mobility that is automated, comfortable and affordable for everyone, everywhere.

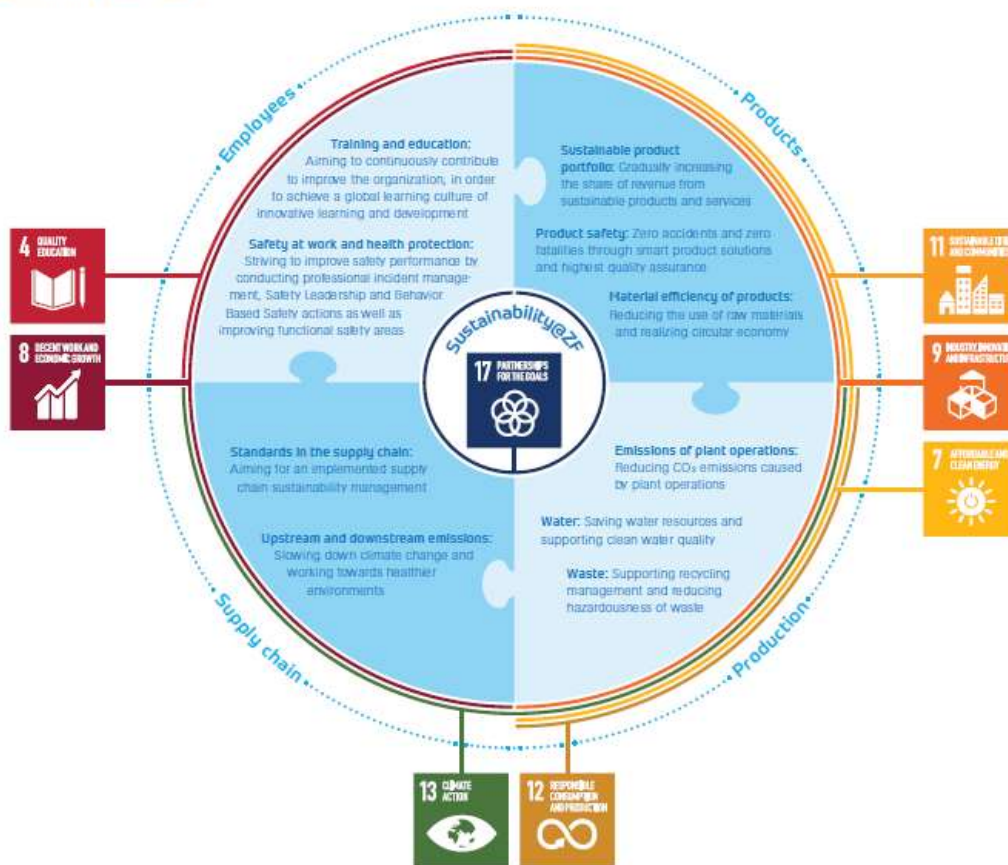
Its long-term goal is to become climate neutral across all emission scopes - covering products, its supply chain and production (Scope 1 to Scope 3) - no later than 2040. Already by 2030, production-related emissions (Scope 1 and 2) are to be reduced by 80 percent, as compared to 2018. The main levers for achieving these goals are the switch of ZF's electricity supply to green power, the reduction of emissions across its supply chain as well as minimizing the environmental impact from its products. With regard to its products ZF is working on its target of "Zero Emissions" focusing on its solutions for e-mobility in the three segments as well as its solutions in wind power business.



As for its sustainability strategy, ZF joined the UN Global Compact in 2012 and has subscribed to its ten principles, among them improving working conditions for employees worldwide, respecting human rights and fighting corruption and bribery. The strategy can be resumed as following:



Sustainability strategy



*Rationale for issuance*

ZF is convinced that Green Finance Instruments are an effective tool for channelling investments to projects that have environmental benefits and thereby contribute to the achievement of the SDGs and the Paris Agreement. By issuing Green Finance Instruments, ZF intends to align its funding strategy with its mission, sustainability strategy and objectives.

Moreover, ZF aims to contribute to the development of the Green Bond/Loan market and to the growth of SRI investing. Lastly, Green Finance Instruments will help to diversify ZF Group’s investor base and strengthen the ties with existing investors. Under the Green Finance Framework, ZF has the ambition to issue Green Finance Instruments to finance and/or refinance projects in accordance with ZF’s core businesses and sustainability strategy.

*Contribution of Use of Proceeds categories to sustainability objectives and priorities*

ISS ESG mapped the Use of Proceeds categories financed under the Green Finance Instruments with the sustainability objectives defined by the issuer, and with the key ESG industry challenges as defined in the ISS ESG Corporate Rating methodology for the Auto Components sector. From this mapping, ISS ESG derived a level of contribution to the strategy of each Use of Proceeds categories.

USE OF PROCEEDS CATEGORY	SUSTAINABILITY OBJECTIVES FOR THE ISSUER	KEY ESG INDUSTRY CHALLENGES	CONTRIBUTION
Clean Transportation	✓	✓	Contribution to a material objective
Renewable Energy	✓	✓	Contribution to a material objective
Pollution Prevention and Control	✓	✓	Contribution to a material objective
Energy Efficiency	✓	✓	Contribution to a material objective

**Opinion:** *ISS ESG finds that Use of Proceeds financed through the Green Finance Instruments are consistent with the issuer’s sustainability strategy and to material ESG topics for the issuer’s industry. The Use of Proceeds categories are appropriately linked to the issuer’s strategy and with material ESG topics for its sector. The rationale for issuing Green Finance Instruments is clearly described by the issuer.*

## PART II: ALIGNMENT WITH THE GBPs AND GLPs

### 1. Use of Proceeds

ZF will allocate an amount at least equivalent to the net proceeds of the Green Finance Instruments issued under this Framework towards financing and/or refinancing, in whole or in part, new and or existing Eligible Green Projects. Eligible Green Projects are defined as projects that meet the respective Green Eligibility Criteria defined below.

The Green Eligibility Criteria have been prepared in accordance with the ICMA and LMA Green Bond and Green Loan documentation and take into consideration the EU classification system for sustainable economic activities (the EU Taxonomy) as published in the Delegated Act for climate change mitigation and climate change adaptation activities of April 2021 and the EU Green Bond Standard.

ZF is expecting a considerable market shift to occur by 2030 thanks to electrification. Within a decade, the proportion of conventional engines will decrease from 90 to less than 50 percent. At a share of 40 percent, pure battery electric vehicles (BEVs) will have clearly overtaken plug-in hybrid electric vehicles (PHEVs). ZF's Use of Proceeds thus consequently focus on one hand on the development, manufacture and distribution of products for BEVs, and on the other hand on the development, manufacture and distribution of wind turbine gear units. In doing so, ZF accounts for the global energy transition required for the transformation towards electromobility to succeed. According to the International Renewable Energy Agency (IRENA), renewable energies would need to climb to 86 percent of electricity generation by 2050 to achieve the objectives of the Paris Agreement. In this scenario, wind energy is set to become one of the biggest drivers of the global energy transition, supplying more than one-third of total electricity demand, and this at strongly increasing energy generation needs.

In addition to the current portfolio, the Framework includes Eligible Categories related to Pollution Prevention and Control as well as Energy Efficiency.

GBP CATEGORIES	DESCRIPTION OF ELIGIBLE ASSETS: ELIGIBILITY CRITERIA	EU ECONOMIC ACTIVITY <sup>4</sup>	ENVIRONMENTAL/SUSTAINABLE BENEFIT DELIVERED
Clean Transportation	<ul style="list-style-type: none"> <li>Development, manufacture and distribution of products for fully electric, fuel cell and hydrogen zero emission vehicles<sup>5</sup> and energy storage systems, including investments and/or expenditures in public transportation/clean urban mobility (e.g., electric buses, rail, bike)</li> </ul>	<ul style="list-style-type: none"> <li>Manufacture of low carbon technologies for transport</li> <li>Public transport</li> </ul>	<ul style="list-style-type: none"> <li>Indirect contribution to GHG emission avoidance via manufacturing of components specific to fully electric vehicles and other zero emission vehicles (e.g., electric motors, E-axles)</li> </ul>

<sup>4</sup> In accordance with the EU Taxonomy Delegated Act as of April 2021.

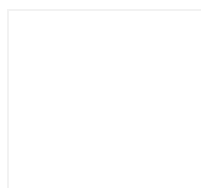
<sup>5</sup> Components for HEVs and PHEVs are excluded.

<p><b>Renewable Energy</b></p>	<ul style="list-style-type: none"> <li>• Development, manufacture and distribution of components for renewable energy generation and storage systems, e.g., wind turbine gearboxes</li> <li>• Installation and upgrade of renewable energy assets including e.g., solar PV and wind, at ZF locations. In line with the technical screening criteria of the EU Taxonomy, only renewable energy assets with a threshold of 100 g CO<sub>2</sub>/kWh<sup>6</sup> are eligible. Nuclear and fossil fuel sources are excluded</li> </ul>	<ul style="list-style-type: none"> <li>• Manufacture of renewable energy technologies</li> <li>• Production of electricity from renewable energy sources (e.g., solar PV power, wind power)</li> <li>• Storage of electricity</li> </ul>	<ul style="list-style-type: none"> <li>• Indirect contribution by increasing the capacity and generation of renewable energy with consequent GHG emissions avoidance via manufacturing of wind turbine gearboxes</li> <li>• Direct contribution by increasing the on-site capacity and generation of renewable energy, for instance via installation and upgrades of solar panels at ZF locations</li> </ul>
<p><b>Pollution Prevention and Control</b><sup>7</sup></p>	<ul style="list-style-type: none"> <li>• Development and implementation of approaches to prevent and reduce waste and enhance the re-use and recovery of materials</li> <li>• Increase of energy and resource efficiency, such as reduced CO<sub>2</sub> emissions, in product development</li> <li>• Reduction of greenhouse gas emissions during the ZF production phase</li> </ul>	<ul style="list-style-type: none"> <li>• Measures related to transition to a circular economy and pollution prevention and control</li> </ul>	<ul style="list-style-type: none"> <li>• Positive environmental contribution via specific measures and projects aimed at increasing recyclability and reduction of waste as well as at increasing efficiency and reducing GHG emissions, in product development and during the ZF production phase</li> </ul>
<p><b>Energy Efficiency</b><sup>8</sup></p>	<ul style="list-style-type: none"> <li>• Increase of energy and resource efficiency, such as reduced energy consumption or CO<sub>2</sub> emissions, in ZF locations. In the case of building renovations, the renovation must lead to a reduction of the Primary Energy Demand of at least</li> </ul>	<ul style="list-style-type: none"> <li>• Renovation of existing buildings</li> <li>• Measures related to transition to energy efficiency</li> </ul>	<ul style="list-style-type: none"> <li>• Relative improvement in energy performance at ZF Locations</li> </ul>

<sup>6</sup> Regarding emissions as part of life cycle assessments.

<sup>7</sup> Measures related to combustion engines, HEVs, PHEVs or any other activity which is not in the scope of EU environmentally sustainable economic activities Regulation (EU) 2020/852 Chapter II) are excluded.

<sup>8</sup> Measures related to combustion engines, HEVs, PHEVs or any other activity which is not in the scope of EU environmentally sustainable economic activities Regulation (EU) 2020/852 Chapter II) are excluded.



30% in comparison to  
the energy  
performance of the  
building before the  
renovation

**Opinion:** ISS ESG finds that the Use of Proceeds description provided by ZF aligns with the GBPs and GLPs. Environmental benefits are described and align with the issuer's sustainability strategy. A detailed analysis of the assets to be included in the current Eligible Green Project Portfolio and its alignment with the EU Taxonomy is available in Part III of this SPO.

## 2. Process for Project Evaluation and Selection

A dedicated Green Finance Committee has been established to create the Green Finance Framework. Projects financed and/or refinanced through the Green Finance proceeds are evaluated and selected on the basis of compliance with the Green Eligibility Criteria. The Committee consists of members of the Corporate Finance/Treasury, Controlling, Environmental Protection and Sustainability teams. The committee will manage any future updates to the framework, including expansions to the list of Eligible Categories and changes in the Green Bond and/or Loan Standards as well as the EU Taxonomy, on a best-effort basis, and oversee its implementation.

The Green Finance Committee monitors the Eligible Green Project Portfolio after each reporting period and is also responsible for:

- Reviewing the content of ZF's Green Finance Framework and updating it to reflect changes in corporate strategy, technology and market developments, on a best-effort basis;
- Excluding projects that no longer comply with the Eligibility Criteria or have been disposed of, and replacing them on a best-effort basis;

The Green Finance Committee will meet at least on an annual basis.

The Green Finance Committee is in close dialogue with the ZF Sustainability Committee. The 15-member steering group comprises representatives from all relevant departments and meets on a quarterly basis.

Project evaluation and selection complies with ZF's corporate and sustainability objectives as well as with applicable national, European and international environmental standards and regulations, to ensure a stringent management of any potential negative environmental and/or social impacts. Furthermore, the EU Environmental Objectives, the availability of relevant impact metrics and the steps to be taken in order to calculate the impact, as well as the EU Taxonomy "Do No Significant Harm" (DNSH) Criteria and the Minimum Social Safeguards are taken into consideration. ZF's governance guidelines, principles and management systems underpin the framework and serve as minimum standards for all business processes, including those financed with the proceeds of Green Finance Instruments issued under this Framework. ZF's Code of Conduct and guidelines are in compliance with valid principles and conventions, such as the principles of the UN Global Compact, the OECD Guidelines for Multinational Enterprises, the Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, and the relevant conventions of the International

Labour Organization (ILO). Examples of internal policies and guidelines which mitigate any environmental and social risks potentially associated with Eligible Green Projects, are:

- ZF Code of Conduct<sup>9</sup>
- Declaration of Principles Concerning the Respect of Human Rights<sup>10</sup>
- ZF Business Partner Principles<sup>11</sup>
- Due Diligence and risk analysis<sup>12</sup>
- ZF Trustline<sup>13</sup> and continuous methods for testing suppliers<sup>14</sup>
- Environmental protection<sup>15</sup>

Further information on ZF's sustainability activities can be found on ZF's webpage<sup>16</sup> and sustainability reports<sup>17</sup>.

**Opinion:** ISS ESG finds that the description of the Process for Evaluation and Project Selection provided by ZF aligns with the GBPs and GLPs. ZF's Green Finance Committee is responsible for the project evaluation and selection process. Roles and processes are well disclosed. The evaluation and selection criteria are compliant with the issuer's own investing policies that ZF discloses on its website. This shows increased transparency, above usual market practices.

### 3. Management of Proceeds

ZF will allocate the proceeds from the Green Finance Instruments to an Eligible Green Project Portfolio, consisting of Eligible Green Projects selected in accordance with the Green Eligibility Criteria and the Process for Project Evaluation and Selection presented above. This portfolio consists of new and and/or existing projects, as described in the following.

The Eligible Green Project Portfolio include Eligible Green Projects which are green assets (tangible and intangible) or green capital expenditures (tangible and intangible) and / or green R&D expenditures (double counting of capital expenditures on the same asset is not allowed). Eligible green assets qualify for refinancing without a specific look-back period, provided that at the time of issuance they follow the relevant Green Eligibility Criteria. Assets will be included in the portfolio at their current IFRS balance sheet value, which will be updated annually to reflect new investment and depreciation under IFRS. Green capital expenditures and R&D expenditures qualify with a three-year-look-back period, which means that capital expenditures and R&D expenditures initially included within the Eligible Green Project Portfolio will not be older than three years.

ZF will strive to maintain a level of allocation for the Eligible Green Project Portfolio which, after adjustments for intervening circumstances including, but not limited to, divestments, matches or exceeds the balance of net proceeds from its outstanding Green Finance Instruments. ZF aims to allocate the Green Finance Instrument net proceeds within a timeframe of 24 months after issuance, in accordance with market practice. Further Eligible Green Projects will be added to the Eligible Green

<sup>9</sup>[https://www.zf.com/master/media/corporate/m\\_zf\\_com/company/corporate\\_governance/compliance/coc\\_all\\_languages/1\\_ZF\\_Compliance\\_Code\\_of\\_Conduct\\_EN.pdf](https://www.zf.com/master/media/corporate/m_zf_com/company/corporate_governance/compliance/coc_all_languages/1_ZF_Compliance_Code_of_Conduct_EN.pdf)

<sup>10</sup> Microsoft Word - ZF Grundsatzklärung 2020\_EN.docx

<sup>11</sup> [https://www.zf.com/master/media/corporate/m\\_zf\\_com/company/corporate\\_governance/compliance/zf\\_bpc\\_en.pdf](https://www.zf.com/master/media/corporate/m_zf_com/company/corporate_governance/compliance/zf_bpc_en.pdf)

<sup>12</sup> Sustainability in the Supply Chain - ZF

<sup>13</sup> Compliance at ZF - ZF

<sup>14</sup> Sustainability in the Supply Chain - ZF

<sup>15</sup> Sustainability - ZF

<sup>16</sup> Sustainability - ZF

<sup>17</sup> Sustainability Reports - ZF

Project Portfolio to the extent required to ensure that an amount equal to the net proceeds from outstanding Green Finance Instruments will be allocated to the portfolio until the maturity of the Green Finance Instruments.

Pending the full allocation to the Eligible Green Project Portfolio, ZF will hold and / or invest the balance of net proceeds not yet allocated in its treasury liquidity portfolio (in cash or cash equivalents, money market funds, etc.).

**Opinion:** *ISS ESG finds that the Management of Proceeds description provided by ZF aligns with the GBPs and GLPs. Earmarking of proceeds is ensured through a portfolio approach, while allocation mechanism and timeframe are also described. The procedure for eventual unallocated proceeds is also disclosed.*

#### 4. Reporting

In accordance with the recommendations from the Green Bond Principles and Green Loan Principles, ZF intends to make and keep readily available reporting on the Eligible Green Project Portfolio and Green Finance Instruments outstanding. Reporting with respect to each Green Finance Instrument will take place annually and until full allocation, or until maturity. Allocation and impact reporting figures will be provided only in regard to the Eligible Categories under which ZF has actually selected eligible projects<sup>18</sup> and will be provided on an aggregated basis (at Eligible Category level). Case studies or examples of projects may be included within the reporting.

The ZF Green Finance Report will be available on ZF's webpage<sup>19</sup>.

##### Allocation Reporting

The allocation report may provide, on a portfolio basis, the following:

- The total amount of proceeds allocated to the Eligible Green Project Portfolio;
- The balance of unallocated proceeds (if any);
- The total amount of ZF Green Finance Instruments outstanding;
- The amount or the percentage of new financing and refinancing;
- The amount or the percentage of the Eligible Green Project Portfolio allocated.

##### Impact Reporting

ZF intends to report on the environmental impacts of the projects funded with proceeds from Green Finance Instruments through annual impact reporting. Where relevant, information may be provided on data reporting and impact assessment methodologies to increase transparency. ZF intends to align its reporting with the Handbook for Harmonized Framework for Impact Reporting - December 2020<sup>20</sup>, on a best-effort basis. Impact reporting may include:

<sup>18</sup> A number of Eligible Categories were included in accordance with the ICMA Green Bond Principles and LMA Green Loan Principles. ZF may not select Eligible Green Projects belonging to all Eligible Categories and intends to report on the allocation and the impact of the Eligible Green Project Portfolio.

<sup>19</sup> See: [Investor Relations - ZF](#)

<sup>20</sup> <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Handbook-Harmonized-Framework-for-Impact-Reporting-December-2020-151220.pdf>

Green Eligible Category	Impact Reporting Indicators
<b>Clean Transportation</b>	<ul style="list-style-type: none"> <li>• Estimate of annual GHG emissions avoided/reduced during use</li> </ul>
<b>Renewable Energy</b>	<ul style="list-style-type: none"> <li>• Number of wind turbines covered</li> <li>• Annual renewable energy generated</li> <li>• Estimate of annual GHG emissions avoided/reduced during use</li> <li>• Number of renewable energy assets installed/upgraded and renewable energy generated at ZF locations, if relevant</li> </ul>
<b>Pollution Prevention and Control</b>	<p>Impact indicators will depend on the actual Eligible Projects that will be selected, in accordance with the Green Eligibility Criteria set out in the Use of Proceeds section. Examples of potential impact reporting indicators for this category are:</p> <ul style="list-style-type: none"> <li>• Indicators related to waste reduction and/or waste prevention and/or share of recovery of materials expressed in amounts and/or percentages</li> <li>• Indicators related to reduction and/or avoidance of GHG emissions</li> </ul>
<b>Energy Efficiency</b>	<p>Impact indicators will depend on the actual Eligible Projects that will be selected, in accordance with the Green Eligibility Criteria set out in the Use of Proceeds section. Examples of potential impact reporting indicators for this category are energy savings, prevention and/or reduction in power consumption and/or reduction in CO2 emissions, if relevant</p>

**Opinion:** ISS ESG finds that ZF's Reporting as described in the framework aligns with the GBPs and GLPs. Processes for reporting is provided for both allocation and impact, and the issuer gives details about level, frequency, scope and duration of reporting. Impact indicators are well defined, and intended disclosure of case studies further enhances the quality of the reporting.

## External review

### Second Party Opinion

ISS-ESG has reviewed the Eligible Green Projects, as well as the alignment of ZF's Green Framework with ICMA's 2018 Green Bond Principles and LMA's 2020 Green Loan Principles. ISS-ESG has provided a Second Party Opinion (SPO) that will be made available within the Investor Relations' section on ZF's website<sup>21</sup>. ZF has opted for a SPO which includes considerations around EU Taxonomy alignment of the Eligible Green Project Portfolio at date of publication of the Framework.

### Annual Audit / Limited Assurance on the Allocation Reporting

ZF intends to obtain a Limited Assurance by its auditor or any other qualified party on the allocation of Green Finance Instruments' proceeds. Such report will be incorporated within the ZF Green Finance Report.

<sup>21</sup> See: [Investor Relations - ZF](#)



## PART III: SUSTAINABILITY QUALITY OF THE ELIGIBLE PROJECT CATEGORIES









### 1. CONTRIBUTION OF THE ELIGIBLE PROJECT CATEGORIES TO THE UN SDGs

Based on the assessment of the sustainability quality of the Green Finance Framework and using a proprietary methodology, ISS ESG assessed the contribution of ZF's eligible project categories to the Sustainable Development Goals defined by the United Nations (UN SDGs).

This assessment is displayed on 5-point scale (see Annex 1 for methodology):

<b>Significant Obstruction</b>	<b>Limited Obstruction</b>	<b>No Net Impact</b>	<b>Limited Contribution</b>	<b>Significant Contribution</b>
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The eligible project categories have been assessed for its contribution to, or obstruction of, the SDGs:

USE OF PROCEEDS	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
Clean Transportation	Limited contribution	  
Renewable Energy	Significant contribution	 
Pollution Prevention and Control	Significant contribution	
Energy Efficiency	Limited contribution	 

## 2. ALIGNMENT OF THE ASSET POOL WITH THE EU TAXONOMY

ISS ESG assessed the alignment of the Eligible Green Project Portfolio at date of publication of the Green Finance Framework and the due diligence and selection processes in place, with the EU Taxonomy Delegated Act published in April 2021.

ISS ESG assessed the categories 3.1. “Manufacture of renewable energy technologies” and 3.3 “Manufacture of low carbon technologies for transport”, which were the only project categories to be included in the initial Eligible Green Project Portfolio by ZF.

### 2.1. Manufacture of renewable energy technologies (3.1.)

Projects under this category include the development, manufacture, and distribution of components for renewable energy generation and storage systems, e.g. wind turbine gearboxes. The results of this assessment are displayed below:

EU TAXONOMY REQUIREMENT	GREEN PROJECTS OWN PERFORMANCE AND SELECTION PROCESSES	ISS ESG ANALYSIS AGAINST REQUIREMENTS
<b>1. CLIMATE CHANGE MITIGATION – TECHNICAL SCREENING CRITERIA</b>		
No threshold applicable to this activity	Manufacture of renewable energy technologies activities are automatically taxonomy eligible.	✓
<b>2. CLIMATE CHANGE ADAPATION – DO NO SIGNIFICANT HARM CRITERIA</b>		
Reducing material physical climate risks	The processes for selection of Green Projects are aligned with ZF’s own Environmental Management System, responsible financing policies (also applicable to suppliers), and national and international environmental legislations. Thus, environmental risk assessment is conducted at the planning stage and relevant measures are applied to reduce identified risks.	✓
Supporting system adaptation	The Green Projects do not increase the risks of adverse climate impact on other stakeholders and align with national and international adaptation efforts.	✓
Monitoring adaptation results	Adaptation results can be monitored and measured against defined indicators and are reviewed by the issuer.	✓
<b>3. WATER – DO NO SIGNIFICANT HARM CRITERIA</b>		
Water preservation	ZF confirms that environmental degradation risks related to preserving water quality and avoiding water stress are identified and	✓

	addressed, and appropriate management plans including water are carried out.	
<b>4. CIRCULAR ECONOMY – DO NO SIGNIFICANT HARM CRITERIA</b>		
Recycling and waste management	ZF has implemented adequate measures ensuring recycling and waste management at its manufacturing facilities	✓
<b>5. POLLUTION – DO NO SIGNIFICANT HARM CRITERIA</b>		
Not applicable		-
<b>6. ECOSYSTEMS – DO NO SIGNIFICANT HARM CRITERIA</b>		
Environmental Impact Assessment or Strategic Environmental Assessment has been conducted and required mitigation measures implemented.	The construction of facilities is subject to ZF's responsible financing policies, national and international legislation.  These include environmental risk assessments at the planning stage.	✓
<b>CONTROVERSY ASSESSMENT AND MITIGATION ACTION PLAN</b>		
ZF has mitigation action plans in place in case of potential controversies that can ultimately lead to the removal of the assets from the Green project pool.		

## 2.2. Manufacture of low-carbon technologies for transport (3.3.)

Projects under this category include the development, manufacture and distribution of products for fully electric, fuel cell and hydrogen zero emission vehicles. The results of this assessment are displayed below:

EU TAXONOMY REQUIREMENT	GREEN PROJECTS OWN PERFORMANCE AND SELECTION PROCESSES	ISS ESG ANALYSIS AGAINST REQUIREMENTS
<b>1. CLIMATE CHANGE MITIGATION – TECHNICAL SCREENING CRITERIA</b>		
Eligible activities include but not limited to: <ul style="list-style-type: none"> <li>• Vehicles of category M1 and N1 with: <ul style="list-style-type: none"> <li>○ until 31 December 2025: specific emissions of CO<sub>2</sub>, as defined in Article 3(1), point (h), of Regulation (EU) 2019/631 of the</li> </ul> </li> </ul>	Green Projects include vehicles of any category with tailpipe CO <sub>2</sub> emissions equal to 0g CO <sub>2</sub> e/km	✓

<p>European Parliament and of the Council, lower than 50gCO<sub>2</sub>/km (low- and zero-emission light-duty vehicles);</p> <ul style="list-style-type: none"> <li>○ (ii) from 1 January 2026: specific emissions of CO<sub>2</sub>, as defined in Article 3(1), point (h), of Regulation (EU) 2019/631, are zero;</li> <li>● Vehicles of category L with tailpipe CO<sub>2</sub> emissions equal to 0g CO<sub>2</sub>e/km calculated in accordance with the emission test laid down in Regulation (EU) 168/2013 of the European Parliament and of the Council;</li> </ul>		
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**2. CLIMATE CHANGE ADAPATION – DO NO SIGNIFICANT HARM CRITERIA**

<p>Reducing material physical climate risks</p>	<p>The processes for selection of Green Projects are aligned with ZF’s own Environmental Management System, responsible financing policies (also applicable to suppliers), and national and international environmental legislations. Thus, environmental risk assessment is conducted at the planning stage and relevant measures are applied to reduce identified risks.</p>	<p>✓</p>
<p>Supporting system adaptation</p>	<p>The Green Projects do not increase the risks of adverse climate impact on other stakeholders and align with national and international adaptation efforts.</p>	<p>✓</p>
<p>Monitoring adaptation results</p>	<p>Adaptation results can be monitored and measured against defined indicators and are reviewed by the issuer.</p>	<p>✓</p>

**3. WATER – DO NO SIGNIFICANT HARM CRITERIA**

<p>Water preservation</p>	<p>ZF confirms that environmental degradation risks related to preserving water quality and</p>	<p>✓</p>
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	avoiding water stress are identified and addressed, and appropriate management plans including water are carried out.	
<b>4. CIRCULAR ECONOMY – DO NO SIGNIFICANT HARM CRITERIA</b>		
Recycling and waste management	ZF has implemented adequate measures ensuring recycling and waste management at its manufacturing facilities.	✓
<b>5. POLLUTION – DO NO SIGNIFICANT HARM CRITERIA</b>		
Not applicable		-
<b>6. ECOSYSTEMS – DO NO SIGNIFICANT HARM CRITERIA</b>		
Environmental Impact Assessment or Strategic Environmental Assessment has been conducted and required mitigation measures implemented.	The construction of facilities is subject to ZF’s responsible financing policies, national and international legislation.  These include environmental risk assessments at the planning stage.	✓
<b>CONTROVERSY ASSESSMENT AND MITIGATION ACTION PLAN</b>		
ZF has mitigation action plans in place in case of potential controversies that can ultimately lead to the removal of the assets from the Green project pool.		

### Minimum Social Safeguards

ISS ESG assessed the alignment of the due diligence and selection processes in place with the EU Taxonomy Minimum Social Safeguards. The results are displayed below:

<b>EU TAXONOMY REQUIREMENT</b>	<b>GREEN PROJECTS OWN PERFORMANCE AND SELECTION PROCESSES</b>	<b>ISS ESG ANALYSIS AGAINST REQUIREMENTS</b>
OECD Guidelines on Multinational Enterprises	The OECD Guidelines are included as part of the ZF Code of Conduct and ZF’s Business Partner Principles. Risks analysis processes are in place to identify any potential breach of this guideline in Green Projects. Mitigation plans in case of breach are in place and Green Projects can be removed from the Green project pool in case of non-compliance.	✓
UN Guiding Principles on Business and Human Rights	ZF’s due diligence processes ensure the alignment and compliance with the UN Guiding Principles on Business and Humans Rights. Risks analysis processes are in place to	✓

	identify any potential breach of this guideline in Green Projects. Mitigation plans in case of breach are in place and Green Projects can be removed from the Green project pool in case of non-compliance.	
ILO Core Labour Conventions	ZF's due diligence processes ensure the alignment and compliance with the ILO Core Labour Conventions. Risks analysis processes are in place to identify any potential breach of this guideline in Green Projects. Mitigation plans in case of breach are in place and Green Projects can be removed from the Green project pool in case of non-compliance.	✓

## DISCLAIMER

1. Validity of the SPO: This This SPO is valid as long as no new project categories are added to the Green Finance Framework and there are no material changes to the asset pool (e.g. addition of assets that does not follow the Eligibility Criteria as set out in the Green Finance Framework March 2021).
2. ISS ESG uses a scientifically based rating concept to analyse and evaluate the environmental and social performance of companies and countries. In doing so, we adhere to the highest quality standards which are customary in responsibility research worldwide. In addition, we create a Second Party Opinion (SPO) on bonds based on data from the issuer.
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## ANNEX 1: Methodology

### ASSESSMENT OF THE CONTRIBUTION AND ASSOCIATION TO THE SDG

The 17 Sustainable Development Goals (SDGs) were endorsed in September 2015 by the United Nations and provide a benchmark for key opportunities and challenges toward a more sustainable future. Using a proprietary method, ISS ESG identifies the extent to which the ZF eligible project categories contribute to related SDGs.

## ANNEX 2: ISS ESG Corporate Rating Methodology

The following pages contain methodology description of the ISS ESG Corporate Rating.







## ANNEX 3: Quality management processes

### SCOPE

ZF commissioned ISS ESG to compile a Green Finance Instrument SPO. The Second Party Opinion process includes verifying whether the Green Finance Framework aligns with the ICMA GBPs and LMA's GLPs. Moreover, the assessment included whether the Eligible Green Project Portfolio at the date of publication of the Green Finance Framework aligned with the EU Taxonomy and associated technical annex, on a best effort basis.

### CRITERIA

Relevant Standards for this Second Party Opinion

- ICMA Green Bond Principles
- LMA Green Loan Principles
- EU Taxonomy and associated technical annex.

### ISSUER'S RESPONSIBILITY

ZF responsibility was to provide information and documentation on:

- Framework
- Selection criteria
- Documentation of ESG risks management at the asset level for EU taxonomy

### 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 Green Finance Framework issued by ZF based on ISS ESG methodology and in line with the ICMA Green Bond Principles, LMA Green Loan Principles, and Draft Model of EU Green Bond Standard (EU GBS).

The engagement with ZF took place in March-April 2021.

### 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 behaviour 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.

As part of our Sustainable (Green & Social) Bond Services, we provide support for companies and institutions issuing sustainable bonds, advise them on the selection of categories of projects to be financed and help them to define ambitious criteria.

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/>

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