ZF Group

CDP Corporate Questionnaire 2025 (Reporting Year 2024)

Important: this export excludes unanswered questions

This document is an export of your organization's CDP questionnaire response. It contains all data points for questions that are answered or in progress. There may be questions or data points that you have been requested to provide, which are missing from this document because they are currently unanswered. Please note that it is your responsibility to verify that your questionnaire response is complete prior to submission. CDP will not be liable for any failure to do so.

Contents

C1. Introduction

(1.1) In which language are you submitting your response?

Select from:

☑ English

(1.2) Select the currency used for all financial information disclosed throughout your response.

Select from:

☑ EUR

(1.3) Provide an overview and introduction to your organization.

(1.3.2) Organization type

Select from:

☑ Privately owned organization

(1.3.3) Description of organization

ZF is a global technology company, supplying advanced mobility products and systems for passenger cars, commercial vehicles and industrial technology. Our comprehensive product range is aimed primarily at vehicle manufacturers, mobility providers and start-up companies in the fields of transportation and mobility. ZF electrifies a wide range of vehicle types. With its products, the company contributes to reducing emissions, protecting the climate and enhancing safe mobility. Alongside the automotive sectors - passenger cars and commercial vehicles - we also serve market segments such as construction and agricultural machinery, wind power, marine propulsion, rail drives, special drives and test systems. We sell our aftermarket products under the brands of ZF, Lemförder, Sachs, TRW, WABCO and Boge. ZF is represented with 161 production locations in 30 countries. With some 161,600 employees worldwide, ZF reported sales of 41.4 billion EUR in fiscal year 2024. ZF's main sales markets are Europe, North America and the Region of Asia-Pacific, with China as the core market and India as the growth market. ZF is a corporation headquartered in Friedrichshafen (Germany). The Zeppelin Foundation owns 93.8% of the company. These shares are managed by the city of Friedrichshafen. The remaining 6.2% is owned by the Dr. Jürgen and Irmgard Ulderup Foundation, Lemförde (Germany). The shareholders exercise their voting rights at the ordinary annual shareholders' meeting and/or at extraordinary shareholders' meetings that are held upon requirement. To keep our business activities as customer-oriented, market-specific and innovative as possible, we are working in a global network consisting of divisions, regions and corporate functions. The corporate functions and divisions are managed by the Board of Management. This also applies to the Regions of North America, South America, Asia-Pacific and India. The regions provide local guidelines and services for their respective regions. In the ZF Group, business activities by product segments are organized by

divisions. The Chassis Solutions, Electrified Powertrain Technology, Electronics and ADAS divisions as well as ZF Lifetec operate in the passenger car and light commercial vehicle sector. The Passive Safety Systems Division has been operating under the new brand name ZF Lifetec since March 2024. The business activities were spun off from the ZF Group in fiscal year 2024 to leverage strategic options for the future further development of the division for passive safety systems, such as airbags, steering wheels and seat belts. Our Commercial Vehicle Solutions Division is a systems supplier primarily for truck, bus and trailer manufacturers as well as fleet operators. Activities in the area of industrial applications are pooled in the Industrial Technology Division and include market segments such as construction and agricultural machinery, wind power, marine propulsion, rail drives, special drives and test systems. The Aftermarket Division makes our OEM expertise available to the aftermarket.
[Fixed row]

(1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years.

(1.4.1) End date of reporting year

12/30/2024

(1.4.2) Alignment of this reporting period with your financial reporting period

Select from:
☑ Yes

(1.4.3) Indicate if you are providing emissions data for past reporting years

Select from:
☑ Yes

(1.4.4) Number of past reporting years you will be providing Scope 1 emissions data for

Select from:
☑ 2 years

(1.4.5) Number of past reporting years you will be providing Scope 2 emissions data for

Select from:
☑ 2 years

(1.4.6) Number of past reporting years you will be providing Scope 3 emissions data for

Select from:

☑ 2 years

[Fixed row]

(1.4.1) What is your organization's annual revenue for the reporting period?

41377000000

(1.5) Provide details on your reporting boundary.

	Is your reporting boundary for your CDP disclosure the same as that used in your financial statements?
	Select from: ☑ Yes

[Fixed row]

(1.6) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

ISIN code - bond

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

DE000A14J7G6

ISIN code - equity

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

CUSIP number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

Ticker symbol

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

SEDOL code

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

LEI number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

529900CAYOWB8YIG7X25

D-U-N-S number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

31-501-5446

Other unique identifier

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

DE 145 374 190
[Add row]

(1.7) Select the countries/areas in which you operate.

Select all that apply

☑ China
☑ India
☑ Italy
☑ Japan
☑ Brazil
☑ Canada
☑ France
☑ Mexico

☑ Spain
☑ Serbia
☑ Turkey
☑ Austria
☑ Belgium
☑ Czechia
☑ Portugal
☑ Slovakia
☑ Thailand
☑ Viet Nam
☑ Argentina
☑ Taiwan, China
☑ Republic of Korea
☑ United Arab Emirates
☑ United States of America
☑ United Kingdom of Great Britain and Northern Ireland
☑ Poland
☑ Denmark
☑ Germany
☑ Hungary
☑ Romania
☑ Malaysia
☑ Australia
☑ Singapore
☑ Netherlands
☑ Switzerland
☑ South Africa

(1.8) Are you able to provide geolocation data for your facilities?

(1.8.1) Are you able to provide geolocation data for your facilities?

Select from:
☑ Yes, for all facilities

(1.8.2) Comment

Geological data for all sites worldwide are available on group-level and are used for evaluation according to the WWF Water Risk Filter. The geological data will be considered for further assessment as part of the implementation of the European Sustainability Reporting Standards (ESRS).
[Fixed row]

(1.8.1) Please provide all available geolocation data for your facilities.

Row 1

(1.8.1.1) Identifier

WWF Water Risk Filter

(1.8.1.2) Latitude

0

(1.8.1.3) Longitude

0

(1.8.1.4) Comment

We currently see limited benefit to provide geolocation data manually. We suggest providing an option to upload a data file from the WWF Water Risk Filter. Data are available in the WWF Water Risk Filter.
[Add row]

(1.24) Has your organization mapped its value chain?

(1.24.1) Value chain mapped

Select from:

☑ Yes, we have mapped or are currently in the process of mapping our value chain

(1.24.2) Value chain stages covered in mapping

Select all that apply

☑ Upstream value chain

☑ Downstream value chain

(1.24.3) Highest supplier tier mapped

Select from:

☑ Tier 1 suppliers

(1.24.4) Highest supplier tier known but not mapped

Select from:

☑ Tier 2 suppliers

(1.24.7) Description of mapping process and coverage

To achieve climate neutrality by 2040, ZF analyzed and constantly reviews its value chain to advance decarbonization within upstream, downstream, and own operations. Where primary data is missing, ZF is using macroeconomic input-output models like EXIOBASE. Besides, ZF is an active member of the Value Balancing Alliance (VBA, https://www.value-balancing.com). The cross-industry initiative aims to redefine entrepreneurial value creation. The success of a company should not only be measured by its financial performance, but also by its contributions to society, nature, and the economy. The developed method translates environmental impacts as well as social and economic influences into comparable monetary values. In the year under review, ZF once again participated in a pilot project to test the current methodology in practice and to exchange experiences with members. As part of the VBA initiative, ZF analyzes its upstream, and downstream effects on nature and society. Such a value chain perspective is in line with latest regulation and established frameworks in sustainability (e.g., GHG Protocol).
[Fixed row]

(1.24.1) Have you mapped where in your direct operations or elsewhere in your value chain plastics are produced, commercialized, used, and/or disposed of?

(1.24.1.1) Plastics mapping

Select from:

☑ No, but we plan to within the next two years

(1.24.1.5) Primary reason for not mapping plastics in your value chain

Select from:

☑ No standardized procedure

(1.24.1.6) Explain why your organization has not mapped plastics in your value chain

In 2023, ZF conducted a materiality analysis in accordance with the requirements of the European Corporate Sustainability Reporting Directive (CSRD). As ZF didn't undergo relevant changes regarding business activities and geographical scope, and according to CSRD understanding, there was no need to conduct a full materiality assessment in 2024. Therefore, ZF examined the 2023 results in detail for validation. This was done by internal stakeholders representing all relevant in- and outside stakeholder groups. Circular economy was identified as material topic for ZF. Therefore, ZF is developing a strategy for circular economy for which material use is one of the main focus areas. In general, the selection of sustainable materials is of central importance for an optimized use of resources and further waste reduction. Based on the total material volume, ZF has developed a concept to test and evaluate materials produced with new process technologies and higher recycling contents. The results form the basis of a company-wide roadmap that includes alternative material concepts and production routes for main material groups. Corresponding sub-projects were initiated to validate the resulting changes in material properties.
[Fixed row]

C2. Identification, assessment, and management of dependencies, impacts, risks, and opportunities

(2.1) How does your organization define short-, medium-, and long-term time horizons in relation to the identification, assessment, and management of your environmental dependencies, impacts, risks, and opportunities?

Short-term

(2.1.1) From (years)

1

(2.1.3) To (years)

3

(2.1.4) How this time horizon is linked to strategic and/or financial planning

Definition is based on the time horizon of operational financial planning (current year, next year, next to next year). Top operational risks are included in the Corporate Risk Report based on defined thresholds: Risks are considered as top risks, i. e. those with substantive or strategic impact for ZF Group, if they exceed an occurrence probability of 25% and an impact of 10 mEUR, related to the internal profit figure of the effected reference unit. Those risks are included in our quarterly Corporate Risk Report to the Board of Management (BoM) and Supervisory Board (SB). For non-quantified, i. e. qualitatively assessed risks, no specific thresholds are defined as they shall be included in Corporate Risk Report if they have a relevance for ZF Group. Quantified risk impacts are related to the Group Management Profit, which equals the EBIT adjusted for ZF Group. On Corporate level we distinguish between four impact levels: Minor (up to 20 mEUR impact on Group Management Profit); Low (between 20 mEUR and 50 mEUR); Moderate (> 50 mEUR and < 200 mEUR); Significant (> 200 mEUR). For climate related impact, risk and opportunities ZF considers three different time horizons as required in ESRS 1 – short, medium and long term Short term is based on operation and financial planning and it refers to 2025.

Medium-term

(2.1.1) From (years)

3

(2.1.3) To (years)

7

(2.1.4) How this time horizon is linked to strategic and/or financial planning

Definition is based on the time horizon of strategic planning, which comprises 7 years. The strategic risk landscape is regularly updated in the course of the annual strategic planning. Strategic risks are included in the Corporate Risk Report. For climate related impact, risk and opportunities, medium-term as per August 2025 refers to 2030.

Long-term

(2.1.1) From (years)

7

(2.1.2) Is your long-term time horizon open ended?

Select from:

☑ Yes

(2.1.4) How this time horizon is linked to strategic and/or financial planning

Strategic risks can be projected to longer time periods in the future. In that regard, we consider resilience related risks, such as, e. g. physical risks due to climate change. Climate risk analyses even included a longer timeframe of projection. For climate related impact, risk and opportunities, long-term as per August 2025 refers to 2050, in order to reflect the long-term nature of climate risks including resilience-related risks associated with physical climate change
[Fixed row]

(2.2) Does your organization have a process for identifying, assessing, and managing environmental dependencies and/or impacts?

	Process in place	Dependencies and/or impacts evaluated in this process
	Select from: ☑ Yes	*Select from:* ☑ Both dependencies and impacts

[Fixed row]

(2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities?

	Process in place	Risks and/or opportunities evaluated in this process	Is this process informed by the dependencies and/or impacts process?
	Select from: ☑ Yes	*Select from:* ☑ Both risks and opportunities	*Select from:* ☑ Yes

[Fixed row]

(2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities.

Row 1

(2.2.2.1) Environmental issue

Select all that apply

☑ Climate change

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

☑ Risks

☑ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

(2.2.2.4) Coverage

Select from:

☑ Full

(2.2.2.7) Type of assessment

Select from:

☑ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

☑ Every two years

(2.2.2.9) Time horizons covered

Select all that apply

☑ Short-term

☑ Medium-term

☑ Long-term

(2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

(2.2.2.11) Location-specificity used

Select all that apply

☑ Site-specific

(2.2.2.12) Tools and methods used

Enterprise Risk Management

☑ COSO Enterprise Risk Management Framework

☑ Enterprise Risk Management

☑ Stress tests

International methodologies and standards

☑ IPCC Climate Change Projections

Other

☑ Scenario analysis

(2.2.2.13) Risk types and criteria considered

Acute physical

☑ Drought

☑ Tornado

☑ Avalanche

☑ Landslide

☑ Wildfires

☑ Heavy precipitation (rain, hail, snow/ice)

☑ Heat waves

☑ Subsidence

☑ Cold wave/frost

☑ Glacial lake outburst

☑ Cyclones, hurricanes, typhoons

☑ Flood (coastal, fluvial, pluvial, ground water)
☑ Storm (including blizzards, dust, and sandstorms)

Chronic physical
☑ Heat stress
☑ Soil erosion
☑ Solifluction
☑ Water stress
☑ Sea level rise
☑ Temperature variability
☑ Precipitation or hydrological variability
☑ Changing temperature (air, freshwater, marine water)
☑ Changing precipitation patterns and types (rain, hail, snow/ice)
☑ Other chronic physical driver, please specify **:saline intrusion**
☑ Coastal erosion
☑ Soil degradation
☑ Permafrost thawing
☑ Ocean acidification
☑ Changing wind patterns

Policy
☑ Carbon pricing mechanisms
☑ Other policy, please specify :Enhanced emissions-reporting obligations Mandates on and regulation of existing products and services

Market
☑ Changing customer behavior
☑ Other market, please specify :Use of public-sector incentives Access to new financing option linked to sustainability performance

Reputation
☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback
☑ Stigmatization of sector
☑ Other reputation, please specify :participation in carbon market

Technology
☑ Transition to lower emissions technology and products
☑ Unsuccessful investment in new technologies

Liability

☑ Exposure to litigation

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Employees

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

☑ No

(2.2.2.16) Further details of process

In 2024 ZF conducted a Climate Risk Analysis in line with CSRD and related ESRS E1 Climate change to analyse physical risks and transitional risks and opportunities across 3 different (short, medium and long-term) time horizons. On physical climate risk scenario analysis: • Run across full value chain, focus own operations • Considered climate scenarios: 4C high emission & 2.5C current policy scenario • Considered time horizons: short-term 2025/current, mid-term 2030, long-term 2050; with focus on: 2050 • Qualitative scenario analysis run over all of ZF's ca. 550 spatial units worldwide, i.e. distinct geographically connected properties, incl. production plants, warehouses, tech centers and administration buildings • Insurance values used as proxy for criticality of the spatial unit (property damage – include buildings, machinery and stock values; and business interruption – include annual sales amount) • Consideration of 28 natural hazards (acute and chronic) defined in ESRS E1 Climate change • Thereof 15 natural hazards assessed as relevant for ZF (based on cross-functional internal expertise and experience as well as external expert opinion) • Natural hazards criteria: historical (short-term/today) risk rating means sites exposed already today to e.g. flooding vs. future change rating (long term 2050) of the same risk, i. e.which sites will be exposed in 2050 to the same hazard because of climate change. • Internal prioritization workshop for identification of ZF's most relevant natural hazards to focus on; from 15 ZF relevant natural hazards, considering exposure, hazard and vulnerability, the following 2 hazards considering today risk rating and future change signal were selected for an in-depth scenario analysis, business impact assessment and resilience analysis: o Riverine flooding o Water scarcity. ZF set up internal focus working groups for both riverine flooding and water scarcity risks to align on approach and assumptions and for validation and strategic implication deriving requirements. • First deep dive analysis and quantification for selected sites conducted (focus was on relevant ZF production sites exposed to those hazards) • Validation of results and resilience analysis ongoing. On transition climate risk and opportunity scenario analysis: • Starting point: Screening of ZF business model and value chain against potential transition risk and opportunity 'events' in line with CSRD categories (e.g., Policy and Legal, Market, Technology, Energy source etc.) • Considered climate scenarios: 1.5C decarbonization scenario & 2.5C current policy scenario • Considered time horizons: short-term 2025/current, mid-term 2030, long-term 2050 • Long list of 33 transition risks and opportunities identified. Further screening with ZF internal stakeholders/experts and exclusion of topics with a low degree of change under a 1.5C and/or low potential business impact rating. As result 17 transitional risks and opportunities prioritized. • Internal prioritization workshop with cross-functional stakeholders based on potential impact and climate change signal to identify ZF's top transition risks and opportunities. Final selection of 2 transitional risks

& opportunities to focus on for in-depth scenario analysis, business impact assessment and future resilience analysis: o Steel production costs o Automotive market transition in passenger car segment

Row 2

(2.2.2.1) Environmental issue

Select all that apply

☑ Water

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

☑ Impacts

☑ Risks

(2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

(2.2.2.4) Coverage

Select from:

☑ Full

(2.2.2.7) Type of assessment

Select from:

☑ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

☑ As important matters arise

(2.2.2.9) Time horizons covered

Select all that apply

☑ Short-term

(2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

(2.2.2.11) Location-specificity used

Select all that apply

☑ Site-specific

(2.2.2.12) Tools and methods used

Commercially/publicly available tools

☑ WWF Water Risk Filter

International methodologies and standards

☑ ISO 14001 Environmental Management Standard

(2.2.2.13) Risk types and criteria considered

Chronic physical

☑ Water stress

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Water utilities at a local level

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

☑ No

(2.2.2.16) Further details of process

In 2020, ZF assessed with the WWF Water Risk Filter and operative data all locations for their water risk. Locations that are located in areas of high water stress and have been identified as relevant were then given a stricter water reduction target. The update of the assessment has started in 2024 and is expected to be finalised in 2025.

Row 3

(2.2.2.1) Environmental issue

Select all that apply

☑ Climate change

☑ Water

☑ Plastics

☑ Biodiversity

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

☑ Dependencies

☑ Impacts

☑ Risks

☑ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

☑ End of life management

(2.2.2.4) Coverage

Select from:

☑ Full

(2.2.2.5) Supplier tiers covered

Select all that apply

☑ Tier 1 suppliers

(2.2.2.7) Type of assessment

Select from:

☑ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

☑ Annually

(2.2.2.9) Time horizons covered

Select all that apply

☑ Short-term

☑ Medium-term

☑ Long-term

(2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

(2.2.2.11) Location-specificity used

Select all that apply

☑ Not location specific

(2.2.2.12) Tools and methods used

Commercially/publicly available tools

☑ EcoVadis

☑ WRI Aqueduct

☑ WWF Water Risk Filter

☑ WWF Biodiversity Risk Filter

☑ IBAT – Integrated Biodiversity Assessment Tool

☑ TNFD – Taskforce on Nature-related Financial Disclosures

☑ LEAP (Locate, Evaluate, Assess and Prepare) approach, TNFD

Enterprise Risk Management

☑ COSO Enterprise Risk Management Framework

☑ Enterprise Risk Management

☑ Internal company methods

International methodologies and standards

☑ ISO 14001 Environmental Management Standard

Other

☑ Scenario analysis

☑ Desk-based research

☑ Partner and stakeholder consultation/analysis

☑ Other, please specify **:Planetary Boundaries Science: Planetary Health Check (https://www.planetaryhealthcheck.org/planetary-science); The Lancet Countdown report (https://www.thelancet.com/countdown-health-climate?dgcid=tlcom_infographic_countdown24_lancet#latestreports)**

☑ External consultants

☑ Materiality assessment

☑ Internal company methods

(2.2.2.13) Risk types and criteria considered

Acute physical

☑ Drought
☑ Tornado
☑ Avalanche
☑ Landslide
☑ Wildfires
☑ Heavy precipitation (rain, hail, snow/ice)
☑ Flood (coastal, fluvial, pluvial, ground water)
☑ Storm (including blizzards, dust, and sandstorms)
☑ Heat waves
☑ Subsidence
☑ Cold wave/frost
☑ Glacial lake outburst
☑ Cyclones, hurricanes, typhoons

Chronic physical

☑ Heat stress
☑ Soil erosion
☑ Solifluction
☑ Water stress
☑ Sea level rise
☑ Changing temperature (air, freshwater, marine water)
☑ Changing precipitation patterns and types (rain, hail, snow/ice)
☑ Coastal erosion
☑ Saline intrusion
☑ Permafrost thawing
☑ Ocean acidification
☑ Temperature variability

Policy

☑ Carbon pricing mechanisms
☑ Changes to international law and bilateral agreements
☑ Changes to national legislation
☑ Other policy, please specify :Enhanced emissions-reporting obligations Mandates on and regulation of existing products and services

Market

☑ Changing customer behavior
☑ Other market, please specify **:Use of public-sector incentives Access to new financing option linked to sustainability performance**

☑ Uncertainty in the market signals
☑ Availability and/or increased cost of raw materials
☑ Availability and/or increased cost of recycled or renewable content
☑ Availability and/or increased cost of certified sustainable material

Reputation
☑ Impact on human health
☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback
☑ Stigmatization of sector
☑ Other reputation, please specify :participation in carbon market

Technology
☑ Transition to lower emissions technology and products
☑ Unsuccessful investment in new technologies

Liability
☑ Exposure to litigation

(2.2.2.14) Partners and stakeholders considered

Select all that apply
☑ NGOs
☑ Customers
☑ Employees
☑ Investors
☑ Suppliers
☑ Local communities

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:
☑ Yes

(2.2.2.16) Further details of process

In preparation for CSRD reporting that shall become obligatory for ZF AG as of year under review 2026, in 2024 we updated the Double Materiality Analysis (DMA), which we had already carried out in 2023 in line with the requirements of the CSRD. As a pilot project, in 2023 ZF used the methodology of the Value Balancing Alliance (VBA) to analyze the impacts in the upstream value chain and its own business area. The VBA method uses scientifically proven indices for the upstream value chain or real values from own business area to analyze the impact of individual indicators. Thus, statements from a stakeholder survey can be supplemented by objective data, and risks can be better assessed. In parallel, internal and external stakeholders had been asked to provide their assessments in an online survey. The results of both processes were used for evaluating the topics that we identified as potentially material for reporting during internal expert workshops. In addition to internal technical experts and managers, we had involved external stakeholder groups, including suppliers, NGOs and associations, banks, investors as well as insurance companies, research partners and the media. In addition to content, we also paid attention to a geographical coverage of our activities. We evaluated relevant topics based on the risk assessment thresholds of ZF's Enterprise Risk Management, whereby we considered the ESRS parameters severity, likelihood and impact. If a topic received multiple assessments, we included the highest value in the consolidation. As ZF AG didn't undergo relevant changes regarding business activities and geographical scope, and according to CSRD understanding, there was no need to conduct a full materiality assessment in 2024. Therefore, ZF AG examined the 2023 results in detail for validation. This was done by internal stakeholders representing all relevant in- and outside stakeholder groups. Thus, for the voluntary Sustainability Report 2024, we had identified the following topics as material: ● climate change ● pollution ● water ● biodiversity and ecosystems ● resource use and circular economy ● own workforce ● workers in the value chain ● affected communities ● consumers and end-users ● business conduct

Row 4

(2.2.2.1) Environmental issue

Select all that apply

☑ Climate change

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

☑ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

(2.2.2.4) Coverage

Select from:

☑ Full

(2.2.2.7) Type of assessment

Select from:

☑ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

☑ Annually

(2.2.2.9) Time horizons covered

Select all that apply

☑ Short-term

☑ Medium-term

☑ Long-term

(2.2.2.11) Location-specificity used

Select all that apply

☑ Not location specific

(2.2.2.12) Tools and methods used

Other

☑ Internal company methods

☑ Materiality assessment

☑ Partner and stakeholder consultation/analysis

☑ Scenario analysis

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Customers

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

☑ No

(2.2.2.16) Further details of process

*In the partly disruptive industries in which we operate, we continuously see new opportunities that we take into account for our plans and forecasts, provided they have a sufficient probability of occurrence. We use systematic scenario analyses to record long-term market and technology trends. Using trend and environmental analyses and maintaining close contact with customers, we are continuously working on identifying where there is potential to improve our products' design, production efficiency, effect on humans and the environment, market performance as well as our cost structure. One example is our Wind Power business unit, where we are strengthening cooperation with partners (customers, suppliers and other stakeholders) with what we call the "System Co*Operation." By bundling the innovative power of our products, services and expertise, ZF is to become more flexible in adapting to the changing environment and transformation of the energy sector. We will continue to leverage opportunities through collaborations and strategic partnerships in order to adapt to changing market perspectives and persistently high competitive pressure.*
[Add row]

(2.2.7) Are the interconnections between environmental dependencies, impacts, risks and/or opportunities assessed?

(2.2.7.1) Interconnections between environmental dependencies, impacts, risks and/or opportunities assessed

Select from:

☑ Yes

(2.2.7.2) Description of how interconnections are assessed

Besides the established risk management processes, ZF conducted a materiality analysis in accordance with the requirements of the European Corporate Sustainability Reporting Directive (CSRD) in 2023. In that context, ZF applied a double materiality assessment integrating the "inside out" view with the company's impact on people and the planet (impact materiality) and the outside-in view (financial materiality) on how sustainability matters could affect the company's financial

performance. The process of conducting a double materiality also includes an assessment of environmental dependencies, impacts, risks, and opportunities.. The results of the 2023 assessment had been validated and confirmed in 2024.
[Fixed row]

(2.3) Have you identified priority locations across your value chain?

(2.3.1) Identification of priority locations

Select from:

☑ Yes, we have identified priority locations

(2.3.2) Value chain stages where priority locations have been identified

Select all that apply

☑ Direct operations

(2.3.3) Types of priority locations identified

Sensitive locations

☑ Areas of limited water availability, flooding, and/or poor quality of water

(2.3.4) Description of process to identify priority locations

With regard to water, ZF identifies priority locations by using the WWF Water Risk Filter. By applying the WWF Water Risk Filter, ZF locations are assessed for their water risk and identified as being located in high or medium water scarcity areas due to their geographical position. For production sites in areas of water-stress, the goal is to reduce water withdrawal by 2% annually relative to sales. For all other locations, a 1% reduction is being targeted on an annual basis.

(2.3.5) Will you be disclosing a list/spatial map of priority locations?

Select from:

☑ No, we have a list/geospatial map of priority locations, but we will not be disclosing it
[Fixed row]

(2.4) How does your organization define substantive effects on your organization?

Risks

(2.4.1) Type of definition

Select all that apply

☑ Qualitative

☑ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☑ Other, please specify :EBIT adjusted

(2.4.3) Change to indicator

Select from:

☑ Absolute decrease

(2.4.5) Absolute increase/ decrease figure

10000000

(2.4.6) Metrics considered in definition

Select all that apply

☑ Likelihood of effect occurring

☑ Other, please specify :Impact on internal profit figure

(2.4.7) Application of definition

At ZF Group we offer the possibility to evaluate risks quantitatively and qualitatively. Risk Owners are asked to point out, on which organizational level the risk exists (on group, divisional, site level). We differentiate risks according to their gross risk value (before risk treatment) and net risk value (after risk treatment). Risks are considered as top risks, i. e. those with substantive or strategic impact for ZF Group, if they exceed an occurrence probability > 25% and an impact > 10 mEUR,

related to the internal profit figure of the effected reference unit. Those risks are included in our quarterly Corporate Risk Report to the Board of Management (BoM) and Supervisory Board (SB). For non-quantified, i. e. qualitatively assessed risks, no specific thresholds are defined as they shall be included in Corporate Risk Report if they have a relevance for ZF Group. Quantified risk impacts are related to the Group Management Profit, which equals the EBIT adjusted for ZF Group. On Corporate level we distinguish between four impact levels: Minor (up to 20 mEUR impact on Group Management Profit); Low (> 20 mEUR and <50 mEUR); Moderate (> 50 mEUR and < 200 mEUR); Significant (> 200 mEUR). For qualitatively assessing impacts we offer a qualitative impact matrix which is commonly used by Enterprise Risk Management (ERM), Internal Control System (ICS), Compliance and Corporate Audit to evaluate risks, control issues, compliance cases and audit findings. There the qualitative impact clusters minor, low, moderate and significant are described along the impact categories "Business/Financial Impact", "Environmental, Health & Safety, Human Rights", "Legal/Compliance Relevance", "Impact on Reputation", "Strategic Impact". In 2024 ZF Group enhanced the qualitative evaluation matrix to cover both the outside-in and inside-out perspective. To assess the likelihood of risks we use likelihood categories that cluster ranges of probabilities of occurrence. We distinguish between Unlikely (1-5%; equals an average occurrence between 20 and 100 years), Rare (6-24%), Possible (25-50%), Probable (51-74%), Very likely/Certain (75-100%; equals an average occurrence in the current/every year).

Opportunities

(2.4.1) Type of definition

Select all that apply

☑ Qualitative

☑ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☑ Other, please specify :EBIT adjusted

(2.4.3) Change to indicator

Select from:

☑ Absolute increase

(2.4.5) Absolute increase/ decrease figure

10000000

(2.4.6) Metrics considered in definition

Select all that apply

☑ Likelihood of effect occurring

☑ Other, please specify :Impact on internal profit figure

(2.4.7) Application of definition

ZF defines risks as any internally or externally occurring events or developments that may result in a negative deviation from the business plan, whereas opportunities may result in a positive target deviation. We closely monitor market developments and opportunities as well as customer requirements impacted by climate and the environment on a regular basis. In addition, opportunities may result out of double materiality assessment of ESRS topics. The same ERM thresholds that apply to risks apply to opportunities as well.

Opportunities

(2.4.1) Type of definition

Select all that apply

☑ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☑ Direct operating costs

(2.4.3) Change to indicator

Select from:

☑ Absolute decrease

(2.4.5) Absolute increase/ decrease figure

1

(2.4.6) Metrics considered in definition

Select all that apply

☑ Time horizon over which the effect occurs

☑ Likelihood of effect occurring

(2.4.7) Application of definition

The efficient, environmentally friendly and safe operation of our plants as well as the responsible use of resources are essential parts of our environmental strategy. Efficiency measures are identified and prioritized on local level.
[Add row]

(2.5) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

(2.5.1) Identification and classification of potential water pollutants

Select from:

☑ Yes, we identify and classify our potential water pollutants

(2.5.2) How potential water pollutants are identified and classified

Water pollutants are identified and classified according to the respective legal regulations. This information is being considered when the authorities set the threshold limits for the discharge permit. For example, sites in Germany sent their samples to accredited laboratories (e.g., German Accreditation: DakkS) to get their water pollutants checked and monitored by an independent external third-party, e.g. the concentration indicator of relevant heavy metal pollutants. Example from one site in Germany: The wastewater is analyzed by the employees before, during, and after treatment using photochromatic methods to ensure a continuously functioning purification process. Systematic environmental management according to the ISO 14001:2015 is the standard for all production and main development locations. The pollutants are determined in the course of the approval procedure for the water discharge. Within the framework of the discharge permit, the pollutants are regularly identified, classified and measured in accordance with the legal requirements. Wastewater loads are managed at local level, with relevant deviations from legal requirements and permits being reviewed at Group level through audits and management reviews. ZF has global standards in place which refer to this topic. Each site is expected to have an active program to make proactive assessments of its Environmental, Health & Safety risks as well as of risks, threats and opportunities associated with its EHS relevant contextual issues, compliance obligations and significant EHS hazards. Sites shall identify all the hazards associated with each of their activities which includes considering the potentially affected environmental conditions (groundwater/surface water quality/availability, ground/groundwater contamination, nature sensitive/protected area, flooding area, drinking water protection area, …). A global standard about hazardous materials management ensures that in the releasing-process the impact on wastewater must be assessed. ZF adopted the substance declarations and prohibitions of the Global Automotive Declarable Substance List (GADSL). Water pollutants are identified and classified according to the respective legal regulations.
[Fixed row]

(2.5.1) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Row 1

(2.5.1.1) Water pollutant category

Select from:

☑ Inorganic pollutants

(2.5.1.2) Description of water pollutant and potential impacts

Metalworking contaminates wastewater with a wide variety of pollutants. During machining, grinding, surface treatment or degreasing, hydrocarbons, alkalis, surfactants, phosphates, heavy metals and acids can get into the wastewater. Heavy metals accumulate in the environment and in sewage sludge and are therefore considered particularly problematic. These substances can be a threat to ecosystems on land in water. Especially chromium VI compounds cause allergic and asthmatic reactions and are considered carcinogenic. Chromium and chromium compounds mainly enter the surface waters through the wastewaters of the chromium-processing industry, e.g. from electroplating companies.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Water recycling

☑ Resource recovery

☑ Upgrading of process equipment/methods

☑ Reduction or phase out of hazardous substances

☑ Requirement for suppliers to comply with regulatory requirements

☑ Industrial and chemical accidents prevention, preparedness, and response

☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

(2.5.1.5) Please explain

ZF conducts functional chromium plating through the electroplating process. At our location in Friedrichshafen, for example, we carry out various physico-chemical wastewater treatment in-house, such as ultrafiltration, precipitation and distillation. Treatment steps are chromate reduction by sodium hydrogen sulfite, neutralization, settling of solids, sludge removal & Cr (VI) analysis. By doing that, especially the highly toxic chromium VI and other pollutants are removed or reduced to such an extent that they can no longer have a major negative impact on the environment. Due to the indirect discharge of the treated wastewater into the public sewer system, an additional treatment by a municipal WWTP takes place, before the treated wastewater is then discharged into the drainage system. This ensures a minimal negative environmental impact. The filter cake produced during internal wastewater treatment is properly fed to a safe disposal procedure. The responsible authorities have approved the processes and apply a strict control of the Cr (VI) processes by setting threshold limits regulated in the discharge permit. We send samples to an external accredited laboratory on a weekly basis and use the results to improve the processes and ensure the permit limits are not exceeded. In addition, we also sample the wastewater from the ultrafiltration to check all heavy metal concentrations on a weekly basis. There is a Group-wide reporting obligation in the eventuality of a release.
[Add row]

C3. Disclosure of risks and opportunities

(3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

Climate change

(3.1.1) Environmental risks identified

Select from:

☑ Yes, both in direct operations and upstream/downstream value chain

Water

(3.1.1) Environmental risks identified

Select from:

☑ Yes, both in direct operations and upstream/downstream value chain

Plastics

(3.1.1) Environmental risks identified

Select from:

☑ No

(3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

Select from:

☑ Evaluation in progress

(3.1.3) Please explain

In 2024, ZF reviewed the materiality analysis conducted in 2023 in accordance with the requirements of the European Corporate Sustainability Reporting Directive (CSRD). Circular economy was identified as material topic. Besides the CSRD reporting, ZF developed the strategy for circular economy for which material use (including plastics) is one of the main focus areas. In general, the selection of sustainable materials is of central importance for an optimized use of resources and further waste reduction. Based on the total material volume, ZF has developed a concept to test and evaluate materials produced with new process technologies and higher recycling contents. The results form the basis of a ZF-wide roadmap that includes alternative material concepts and production routes for main material groups. Corresponding sub-projects were initiated to validate the resulting changes in material properties.
[Fixed row]

(3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

Climate change

(3.1.1.1) Risk identifier

Select from:
☑ Risk1

(3.1.1.3) Risk types and primary environmental risk driver

Acute physical
☑ Flooding (coastal, fluvial, pluvial, groundwater)

(3.1.1.4) Value chain stage where the risk occurs

Select from:
☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ China
☑ India
☑ Spain
☑ Latvia
☑ Mexico
☑ United States of America
☑ Sweden
☑ Germany
☑ Ukraine
☑ Portugal
☑ Republic of Korea

(3.1.1.9) Organization-specific description of risk

In July 2021, a ZF plant in the German Ahrtal valley was completely destroyed by a flood disaster. In June 2024, Southern Germany experienced severe flooding, which required a temporary preventive production stop at one plant in Friedrichshafen. Throughout 2024, ZF conducted a scenario analysis in compliance with CSRD/ESRS E1 Climate Change. Therefore, ZF evaluates its historical exposure, the expected degree of change and the potential business impact of each physical climate hazard as classified in the CSRD. The analysis was run across all ca. 550 spatial units of ZF Group, i.e. distinct geographically connected properties, from production plants to warehouses. First results indicate riverine flooding as key hazard for ZF's own operations in terms of property damage and business interruption risk, affecting both inbound and outbound logistics and intercompany transactions, in a 4C scenario. ZF measures riverine flooding risks with the 100-Year Return Period Riverine Flooding Level [m] indicator based on data from the Aqueduct Floods dataset. Recent analyses reveal that ca. 40 units are historically exposed to a very high riverine flooding rating (1.5m). Thereof ca. 88% are located in Europe (mainly Germany) and ca. 8% in Asia Pacific (China and Korea). Under a 4C climate scenario 5 units are rated with a very high (0.5m) increase in flooding risk by 2050.

(3.1.1.11) Primary financial effect of the risk

Select from:
☑ Disruption in production capacity

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply
☑ Long-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:
☑ About as likely as not

(3.1.1.14) Magnitude

Select from:

☑ Medium-low

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Throughout 2024, ZF conducted a climate scenario analysis which is in line with the climate-risk related requirements of CSRD/ ESRS E1 Climate Change. First results of the physical scenario analysis reveal riverine flooding as key hazard for ZF's own operations in a high emission scenario by 2050 (long-term). A first deep dive analysis to evaluate preliminary anticipated financial effects of riverine flooding for production facilities was based on subsequent four steps approach: 1.Exposure: How is ZF exposed to the risk through its locations? 2.Hazard: How might riverine flooding change over different scenarios? Considering flooding projections under various parameters as flood height in metres, 4C and 2C scenarios, different return periods and time horizons 2030 and 2050. 3.Vulnerability: How might ZF be affected by flooding of its facilities? Considering both facility and inventory damage based on flood damage functions and facility downtime based on literature and engagement with plant managers. 4.Impact: What potential direct and indirect impacts might ZF face? Considering direct property damage (PD) per facility, return period, scenario and time horizon in EUR, as well as business interruption (BI) for selected facilities, per scenario, return period, and time horizon in EUR. On PD: • Flood height (m) at each specific location will be the determining factor of strength of the impacting event; •Damage function from Joint Research Center will be used to calculate the percentage of site value lost based on flood height • Insurance data will be used as a proxy of the asset value including buildings, equipment and inventories • Output metrics is annual average loss (AAL) and impact of floods of a certain return period (20y, 50y, 100y) On BI: • Determining factor of strength of the indirect impacting is flood height (m) at each specific location which is translated into a duration of BI due to flooding (month) • Initial output metrics is number of downtime days based on flood heights. • Future output metrics will be annual sales affected and impact of floods of a certain return period (20y, 50y, 100y)

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ Yes

(3.1.1.23) Anticipated financial effect figure in the long-term – minimum (currency)

18000000

(3.1.1.24) Anticipated financial effect figure in the long-term – maximum (currency)

22000000

(3.1.1.25) Explanation of financial effect figure

Figures constitute the anticipated average annual impact (AAL: Average Annual Loss) of property damage at 50 production facilities within ZF's entire site portfolio, under a 4.8°C climate scenario. 50 production sites of all production sites show a flood a risk, i.e. AAL >0 EUR.The indicated anticipated minimum effect refers to the potential impact today, the indicated anticipated maximum effect refers to the potential impact in 2050. Also, the figures refer to direct impact via property damage only (buildings, inventory, machinery), indirect impact via business interruption is currently analyzed in number of downtime days over entire ZF portfolio, including production sites. The anticipated impact does not account for existing or planned ZF adaptation measures (e.g. flood barriers, water retention projects etc.) and thus, constitutes a gross risk. Adaptation measures will be taken into account in the next work stage when assessing business resilience to riverine flooding in the upcoming deep dive analyses.

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☑ Establish organization-wide targets

(3.1.1.27) Cost of response to risk

21000000

(3.1.1.28) Explanation of cost calculation

In 2024, associated investment for the implementation of ca.1000 energy efficiency measures accounted for 21 million.

(3.1.1.29) Description of response

Situation: ZF responses to and mitigates climate-related risks from extreme weather events by setting science-based carbon reduction targets and implementing group-wide decarbonization pathways. ZF Group's target path towards climate neutrality is defined considering the UN Sustainable Development Goals (SDGs), and in accordance with the requirements of the Science Based Targets initiative (SBTi). Task: In January 2022, the SBTi confirmed that the targets for reducing ZF's CO2e emissions are consistent and robust, comply with the GHG Protocol and are planned in line with what the latest climate science deems necessary in order to achieve the objectives of the Paris Agreement. Action: In order to achieve its climate targets approved by the SBTi, ZF invests in carbon reduction initiatives (i.e., energy reduction and energy efficiency) and low-carbon energy consumption across the organization. Result: Overall, 980 energy efficiency projects were implemented or initiated in 2024, which led to more than 144 GWh in energy savings, avoiding ca. 59000 tons of CO2e emissions. In 2024, associated investment for the implementation of the 980 energy efficiency projects accounted for 21 million. In addition, ZF invests in the expansion of low-carbon energy consumption. In 2024, we increased our share of green electricity to 43%, under guaranteed certified green power contracts. This sets the course to achieve our goal of 100% green electricity globally by the end of 2025, as declared by our "ZF Green Power Strategy" The amount of self-generated electricity from renewable sources significantly increased to 23254 MWh due to new photovoltaic power plants installed in 2024 on several sites globally. Those investments strongly support the ZF vision to sustain a low-carbon, sustainable business model.

Water

(3.1.1.1) Risk identifier

Select from:

☑ Risk4

(3.1.1.3) Risk types and primary environmental risk driver

Acute physical

☑ Flooding (coastal, fluvial, pluvial, groundwater)

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ China
☑ India
☑ Spain
☑ Latvia
☑ Mexico
☑ United States of America
☑ Sweden
☑ Germany
☑ Ukraine
☑ Portugal
☑ Republic of Korea

(3.1.1.7) River basin where the risk occurs

Select all that apply

☑ Other, please specify :River basins in Europe and Asia Pacific (China and Korea)

(3.1.1.9) Organization-specific description of risk

In July 2021, a ZF plant in the German Ahrtal valley was completely destroyed by a flood disaster. In June 2024, Southern Germany experienced severe flooding, which required a temporary preventive production stop at one plant in Friedrichshafen. Throughout 2024, ZF conducted a scenario analysis in compliance with CSRD/ESRS E1 Climate Change. Therefore, ZF evaluates its historical exposure, the expected degree of change and the potential business impact of each physical climate hazard as classified in the CSRD. The analysis was run across all ca. 550 spatial units of ZF Group, i.e. distinct geographically connected properties, from production plants to warehouses. First results indicate riverine flooding as key hazard for ZF's own operations in terms of property damage and business interruption risk, affecting both inbound and outbound logistics and intercompany transactions, in a 4C scenario. ZF measures riverine flooding risks with the 100-Year Return Period Riverine Flooding Level [m] indicator based on data from the Aqueduct Floods dataset. Recent analyses reveal that ca. 40 units are historically exposed to a very high riverine flooding rating (1.5m). Thereof ca. 88% are located in Europe (mainly Germany) and ca. 8% in Asia Pacific (China and Korea). Under a 4C climate scenario 5 units are rated with a very high (0.5m) increase in flooding risk by 2050.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Disruption in production capacity

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Long-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ About as likely as not

(3.1.1.14) Magnitude

Select from:

☑ Medium-low

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Throughout 2024, ZF conducted a climate scenario analysis which is in line with the climate-risk related requirements of CSRD/ ESRS E1 Climate Change. First results of the physical scenario analysis reveal riverine flooding as key hazard for ZF's own operations in a high emission scenario by 2050 (long-term). A first deep dive analysis to evaluate preliminary anticipated financial effects of riverine flooding for production facilities was based on subsequent four steps approach:

1.Exposure: How is ZF exposed to the risk through its supply chain locations? 2.Hazard: How might riverine flooding change over different scenarios? Considering flooding projections under various parameters as flood height in metres, 4C and 2C scenarios, different return periods and time horizons 2030 and 2050. 3.Vulnerability: How might ZF be affected by flooding of its facilities? Considering both facility and inventory damage based on flood damage functions and facility downtime based on literature and engagement with plant managers. 4.Impact: What potential direct and indirect impacts might ZF face? Considering direct property damage (PD) per facility, return period, scenario and time horizon in EUR, as well as business interruption (BI) for selected facilities, per scenario, return period, and time horizon in EUR. On PD: • Flood height (m) at each specific location will be the determining factor of strength of the impacting event; • Damage function from Joint Research Center will be used to calculate the percentage of site value lost based on flood height • Insurance data will be used as a proxy of the asset value including buildings, equipment and inventories • Output metrics is annual average loss (AAL) and impact of floods of a certain return period (20y, 50y, 100y) On BI: • Determining factor of strength of the indirect impacting is flood height (m) at each specific location which is translated into a duration of BI due to flooding (month) • Initial output metrics is number of downtime days based on flood heights. • Future output metrics will be annual sales affected and impact of floods of a certain return period (20y, 50y, 100y)

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ Yes

(3.1.1.23) Anticipated financial effect figure in the long-term – minimum (currency)

18000000

(3.1.1.24) Anticipated financial effect figure in the long-term – maximum (currency)

22000000

(3.1.1.25) Explanation of financial effect figure

Figures constitute the anticipated average annual impact (AAL: Average Annual Loss) of property damage at 50 production facilities within ZF's entire site portfolio, under a 4.8°C climate scenario. 50 production sites of all production sites show a flood a risk, i.e. AAL >0 EUR.The indicated anticipated minimum effect refers to the potential impact today, the indicated anticipated maximum effect refers to the potential impact in 2050. Also, the figures refer to direct impact via property damage only (buildings, inventory, machinery), indirect impact via business interruption is currently analyzed in number of downtime days over entire ZF portfolio, including production sites. The anticipated impact does not account for existing or planned ZF adaptation measures (e.g. flood barriers, water retention projects etc.) and thus, constitutes a gross risk. Adaptation measures will be taken into account in the next work stage when assessing business resilience to riverine flooding in the upcoming deep dive analyses.

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☑ Establish organization-wide targets

(3.1.1.27) Cost of response to risk

21000000

(3.1.1.28) Explanation of cost calculation

In 2024, associated investment for the implementation of ca.1000 energy efficiency measures accounted for 21 million.

(3.1.1.29) Description of response

Situation: ZF responses to and mitigates climate-related risks from extreme weather events by setting science-based carbon reduction targets and implementing group-wide decarbonization pathways. ZF Group's target path towards climate neutrality is defined considering the UN Sustainable Development Goals (SDGs), and in accordance with the requirements of the Science Based Targets initiative (SBTi). Task: In January 2022, the SBTi confirmed that the targets for reducing ZF's CO2e emissions are consistent and robust, comply with the GHG Protocol and are planned in line with what the latest climate science deems necessary in order to achieve the objectives of the Paris Agreement. Action: In order to achieve its climate targets approved by the SBTi, ZF invests in carbon reduction initiatives (i.e., energy reduction and energy efficiency) and low-carbon energy consumption across the organization. Result: Overall, 980 energy efficiency projects were implemented or initiated in 2024, which led to more than 144 GWh in energy savings, avoiding ca. 59000 tons of CO2e emissions. In 2024, associated investment for the implementation of the 980 energy efficiency projects accounted for 21 million. In addition, ZF invests in the expansion of low-carbon energy consumption. In 2024, we increased our share of green electricity to 43%, under guaranteed certified green power contracts. This sets the course to achieve our goal of 100% green electricity globally by the end of 2025, as declared by our "ZF Green Power Strategy" The amount of self-generated electricity from renewable sources significantly increased to 23254 MWh due to new photovoltaic power plants installed in 2024 on several sites globally. Those investments strongly support the ZF vision to sustain a low-carbon, sustainable business model.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk2

(3.1.1.3) Risk types and primary environmental risk driver

Market

☑ Changing customer behavior

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Downstream value chain

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ China

☑ India

☑ Italy

☑ Japan

☑ France

☑ Germany

☑ Republic of Korea

☑ United States of America

(3.1.1.9) Organization-specific description of risk

Development of Passenger Cars (PC) Market: Strict environmental regulations and sustainability goals, esp. in the EU and Asia, discussions about the end of the internal combustion engine (ICE) as well as announced or already enforced driving bans are major sources for uncertainty. This leads to changes in consumer behavior, esp. in the PC segment, which is also reflected in stagnating vehicle sales. Global light vehicle production 2024 is still ca. 5.5% below 2017 record level. As a consequence, appreciable risks for our PC divisions consist of a declining demand for ICE vehicles. Our PC segment accounts for 73% of ZF Group sales. Thereof roughly one fourth is still realized with components referring to ICE. A decline in demand for ICE vehicles (scenario -1-2% sales decline) that is greater than assumed in the underlying planning scenarios has the potential for a material decrease in PC sales. ZF expects that around 60% of cars will be hybrids, plug-in hybrids, fuel cell electric vehicles, range extended electrified vehicles or battery electric vehicles in 2030 and targets R&D expenditures accordingly. We already adapt existing products to new vehicles and no longer pursue new developments in the traditional PC sectors that are exclusively suitable for pure ICE vehicles. Note: Amongst others due to global political and regulatory developments, the transition towards e-mobility is slower than expected, which is why this risk may need to be reassessed in future.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Decreased revenues due to reduced demand for products and services

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Medium-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ About as likely as not

(3.1.1.14) Magnitude

Select from:

☑ Medium

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The automotive industry is an important customer base for ZF, above all OEMs of passenger cars and light vehicles <6t; and faces major challenges worldwide, especially in Germany and Europe.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ Yes

(3.1.1.21) Anticipated financial effect figure in the medium-term – minimum (currency)

80000000

(3.1.1.22) Anticipated financial effect figure in the medium-term – maximum (currency)

160000000

(3.1.1.25) Explanation of financial effect figure

In 2024, ZF Group sales accounted for roughly 41.4 bnEUR. The passenger cars segment makes up about 73% of total ZF Group sales (ca. 30 bnEUR), with an anticipated decreasing share over the next years. About one fourth thereof is still achieved with components and products based on the internal combustion engine (ICE) driveline. Assuming, in a scenario, a 1-2% annual decrease in sales with regard to combustion engines, and assuming further that ZF is not able to compensate the decline with its market share for electrified products or drivetrain-independent products in such a scenario, the potential financial impact with regard to sales would be in the range of 80 mEUR (30 bnEUR x 26% x 1%) to 160 mEUR (30 bnEUR x 26% x 2%). Those figures constitute gross risks, not considering existing and future counter measures or orders already received. Rounding lead to deviations. Note: Amongst others due to global political and regulatory developments, the transition towards e-mobility is slower than expected, which is why this risk may need to be reassessed in the reporting years 2025ff.

(3.1.1.26) Primary response to risk

Diversification

☑ Develop new products, services and/or markets

(3.1.1.27) Cost of response to risk

767000000

(3.1.1.28) Explanation of cost calculation

In 2024, ZF invested 3.6 bnEUR in R&D (8.6% of group sales). R&D expenditure is defined as R&D costs in accordance with P&L statement, plus capitalized development costs, less their depreciation. 767 mEUR constitute "green OPEX" in line with ZF's Green Finance Framework, contributing to the EU Environmental Objective 1 "climate change mitigation". Eligible OPEX includes R&D expenditures and maintenance costs necessary to sustain the functionality and performance of green assets. Eligible R&D focuses solely on projects meeting the Green Eligibility Criteria defined in our Green Finance Framework. In scope are products which are specifically developed and finally built into a BEV vehicle. Not in scope are technologies & products that could theoretically also be built into conventional vehicles, although current business cases are purely electric. We disclose our Eligible Green Project Portfolio with green OPEX & CAPEX dedicated to clean transportation annually in our Green Finance Report

(3.1.1.29) Description of response

Situation: The automotive industry is undergoing a major transformation. ZF responds to the risk of changing customer behaviour by investing significantly into research and development (R&D) in the area of clean or green transportation. Task: ZF strives for focused technology transformation. Therefore, in 2024, the focus was on adapting current products, processes and business areas to meet the challenges of the automotive industry and make them future-proof. Action: As a prominent example, ZF invests significantly in the area of e-mobility. Emphasis in 2024 was on improving individual products in terms of efficiency and reducing weight. Reducing weight not only improves driving dynamics and efficiency but also takes sustainability into account as fewer materials and resources are needed. One of the technology highlights in 2024 includes the magnet-free motor (CTR, carbon-taped rotor), which does not require rare-earth elements and thus supports ZF's sustainability strategy in the long term. We expect that around 60% of cars will be hybrids (HEV), plug-in hybrids (PHEV), fuel cell electric vehicles (FCEV), range extended electrified vehicles (REEV) or battery electric vehicles (BEV) in 2030 worldwide. Result: R&D expenditure remains at a high level. ZF is proud of 2880

invention disclosures, leading to 1885 new patent applications, and 26954 people employed in research and development in 2024, spread over 20 main development locations in ten countries.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk3

(3.1.1.3) Risk types and primary environmental risk driver

Market

☑ Changing customer behavior

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Downstream value chain

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ China

☑ Germany

☑ Sweden

☑ United States of America

(3.1.1.9) Organization-specific description of risk

Commercial Vehicles Market: The Transport & Logistics Industry increasingly demands zero-emission vehicles at competitive prices, driven by public pressure and customer expectation (selected risk countries only represent an extract). Given that various zero-emission technologies are likely to co-exist, CV OEM must offer various new technologies, while maintaining their ICE portfolio. This leads to increasing demand towards suppliers to develop zero-emission technologies that help CV OEM to save R&D costs. Our resource planning for R&D, production and sales for CVs > 6t is based on ambitious e-Mobility forecasts. In 2024, ca. half of

division CVS sales is indep. of powertrain technology which remains pretty stable over the planning horizon (non-drivetrain related). EV related powertrain sales share will increase over the planning horizon to ca. 15% in line with a constant ramp up of el. CVs. A decline of current ICE sales share could be faced, if the markets change towards a faster el. penetration compared to our assumptions (scenario -1-2% sales decline). In this case, it is even more crucial to have a strong position in alternative powertrain systems supporting various low/ zero-emission technologies. E.g. the H2 ICE is considered valuable for the continuing sales of our efficient ICE components. Note: Amongst others due to global political developments, the transition towards e-mobility is slower than expected, which is why this risk may need to be reassessed in future.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Decreased revenues due to reduced demand for products and services

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Medium-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ Unlikely

(3.1.1.14) Magnitude

Select from:

☑ Medium

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The progressive electrification in the passenger car and commercial vehicle segment, as well as other technological changes, may jeopardize our market position, and we may not be able to successfully foresee and adapt to these developments by stepping up sufficient activities in these new sectors and to successfully expand our expertise in new technologies. If we are unable to recoup these start-up costs, manage our labor and equipment resources effectively in connection with the development of new technologies or the launch of new platforms, or to correctly estimate required resources, our gross margins and results of operations could be adversely affected. If we fail to innovate and develop new solutions, fail to develop enough new solutions to generate sufficient sales, or if our future solutions fail to receive regulatory approval, or if we fail to introduce new products of sufficient quality or are otherwise unsuccessful to adapt our business to trends, technical

developments or customer demand, this failure could have a material adverse effect on our business, financial condition and results of operations. Transitional risks we face result from, e.g., carbon price increases, affecting amongst others the purchase of energy-intense raw materials and logistic costs, or a decreased demand for fossil fuel-based technologies, e.g., due to stricter regulations on exhaust gas and energy consumption values of vehicles. Globally, greenhouse gas emissions have increasingly become the subject of substantial international, national, regional, state and local attention. Any additional regulation of greenhouse gas emissions, including through a cap-and-trade system, technology mandate, emissions tariffs and tax, reporting requirement or other program, could adversely affect our business, results of operations, financial condition, reputation, product demand and liquidity. Significant past investments were required to improve our environmental performance in preparation for new regulations or customer expectations. Relevant measures regarding legislation and regulation are further substantiated, binding regulations for the implementation of decarbonization and sustainability measures in general are rather expected in the short and medium term. Significant investments are required to improve our environmental performance and prepare for new regulations or customer expectations, as well as to meet our net zero sustainability targets by 2040.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ Yes

(3.1.1.21) Anticipated financial effect figure in the medium-term – minimum (currency)

35000000

(3.1.1.22) Anticipated financial effect figure in the medium-term – maximum (currency)

70000000

(3.1.1.25) Explanation of financial effect figure

In 2024, the division Commercial Vehicle Solutions (CVS) contributed around 19% to ZF Group sales of 41.4 bnEUR, accounting for roughly 7.7 bnEUR. Thereof, not quite a half refer to pure ICE related components. Assuming, in a scenario, a 1-2% annual decrease in sales with regard to combustion engines, and assuming further that ZF is not able to compensate the decline with its market share for electrified products or drivetrain-independent products in such a scenario, the potential financial impact with regard to sales would be in the range of 35 mEUR (7.7 bnEUR x 45% x 1%) to 70 mEUR (7.7 bnEUR x 45% x 2%). Those figures constitute gross risks, not considering existing and future counter measures or orders already received. Rounding lead to deviations. Note: Amongst others due to global political and regulatory developments, the transition towards e-mobility is slower than expected, which is why this risk may need to be reassessed in the reporting years 2025ff.

(3.1.1.26) Primary response to risk

Diversification

☑ Develop new products, services and/or markets

(3.1.1.27) Cost of response to risk

767000000

(3.1.1.28) Explanation of cost calculation

In 2024, ZF invested 3.6 bnEUR in R&D (8.6% of group sales). R&D expenditure is defined as R&D costs in accordance with P&L statement, plus capitalized development costs, less their depreciation. 767 mEUR constitute “green OPEX” in line with ZF’s Green Finance Framework, contributing to the EU Environmental Objective 1 “climate change mitigation”. Eligible OPEX includes R&D expenditures and maintenance costs necessary to sustain the functionality and performance of green assets. Eligible R&D focuses solely on projects meeting the Green Eligibility Criteria defined in our Green Finance Framework. In scope are products which are specifically developed and finally built into a BEV vehicle. Not in scope are technologies & products that could theoretically also be built into conventional vehicles, although current business cases are purely electric. We disclose our Eligible Green Project Portfolio with green OPEX & CAPEX dedicated to clean transportation annually in our Green Finance Report

(3.1.1.29) Description of response

Situation: The automotive industry is undergoing a major transformation. ZF responds to the risk of changing customer behaviour by investing significantly into research and development (R&D) in the area of clean or green transportation. Task: ZF strives for focused technology transformation. Therefore, in 2024, the focus was on adapting current products, processes and business areas to meet the challenges of the automotive industry and make them future-proof. The required transformation of ZFs CV segment was kick-offed in early 1990s already, when first tests with an electric central drive with CV OEMs took place. During the last 30 years several electric drive solutions for buses and trucks have been successfully launched, e.g. Axtrax or CeTrax. Action: To reduce emissions and achieve decarbonization, electrification is seen as the preferred technology path for most commercial vehicle applications. Thus, ZF greatly invests into e-mobility. For instance, a new platform approach (PI10) is used for fully electrified drive systems. ZF will also continue to pursue hybrid concepts (TraXon 2 Hybrid) to enable the use of low-emission or zero-emission fuels. Result: R&D expenditure remains at a high level, also for the commercial vehicle segment. About one fifth of our R&D expenditure is apportioned to our CVS division. Our portfolio already covers today all existing and new drivetrain technologies – with our transmissions incl. Hybrid supporting ICE, H2 combustion or e-Fuel applications, and our e-mobility solutions supporting Battery-Electric, Fuel-Cell Vehicle concepts. ZF is proud of in total 2880 invention disclosures, leading to 1885 new patent applications, and 26954 people employed in research and development in 2024, spread over 20 main development locations in ten countries.
[Add row]

(3.1.2) Provide the amount and proportion of your financial metrics from the reporting year that are vulnerable to the substantive effects of environmental risks.

Climate change

(3.1.2.1) Financial metric

Select from:

☑ Revenue

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

11000000000

(3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

☑ 21-30%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

0

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

☑ Less than 1%

(3.1.2.7) Explanation of financial figures

Throughout 2024, ZF conducted a climate scenario analysis in line with the climate-risk related requirements of the CSRD/ ESRS E1 Climate Change. Starting point was a qualitative scenario analysis for scoping purposes across the entire value chain of ZF, considering various climate scenarios and time horizons. First results of the scenario analysis reveal, amongst others, riverine flooding as relevant climate-driven physical risk and automotive market transition as major climate-driven transition events. On flood risk (physical risk): A first deep dive analysis to evaluate preliminary anticipated financial effects of flooding events focused on direct impact on production sites in terms of property/ asset damage (machinery, inventory, building). 50 production sites show a general flood risk. These 50 sites make up 6.3 bnEUR of insured property damage value, which is ca. 42% of the overall insured value at risk. On automotive market transition (transition risk): The outlined market transformation risks under 3.1.1. assume a scenario with 1-2% annual decrease in sales with regard to combustion engines (ICE), and assume further that ZF is not able to compensate the decline with its market share for electrified products or drivetrain-independent products. The combined ICE sales 2024 in both the passenger

car (passenger car divisions) and the commercial vehicle segment (division Commercial Vehicles Systems) are ca. 11 bnEUR, which makes up ca. 27% of total ZF Group Sales. Note: Amongst others due to global political and regulatory developments and uncertainty, esp. in the US and the EU, the transition towards e-mobility is slower than expected, which is why the transformation risks may need to be reassessed in the reporting years 2025ff. Note: Due to the ongoing analysis, the answers provided to questions 3.1.2.1 to 3.1.2.5 (financial metrics vulnerable to transition and physical risks) are in a very premature stage. Moreover, ZF may make use of the phase-in option described in "Appendix C List of phased-in Disclosure Requirements" of the CSRD/ ESRS 1 General Requirements, which means: ZF may comply with ESRS E1-9 by reporting only qualitative disclosures for the first 3 years of preparation of its sustainability statement, if it is impracticable to prepare quantitative disclosures.

Water

(3.1.2.1) Financial metric

Select from:

☑ Revenue

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

11000000000

(3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

☑ 21-30%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

0

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

☑ Less than 1%

(3.1.2.7) Explanation of financial figures

Throughout 2024, ZF conducted a climate scenario analysis in line with the climate-risk related requirements of the CSRD/ ESRS E1 Climate Change including water-related risks (e.g. flood risk). Starting point was a qualitative scenario analysis for scoping purposes across the entire value chain of ZF, considering various climate scenarios and time horizons. First results of the scenario analysis reveal, amongst others, riverine flooding as relevant climate-driven physical risk and automotive market transition as major climate-driven transition events. On flood risk (physical risk): A first deep dive analysis to evaluate preliminary anticipated financial effects of flooding events focused on direct impact on production sites in terms of property/ asset damage (machinery, inventory, building). 50 production sites show a general flood risk. These 50 sites make up 6.3 bnEUR of insured property damage value, which is ca. 42% of the overall insured value at risk. On automotive market transition (transition risk): The outlined market transformation risks under 3.1.1. assume a scenario with 1-2% annual decrease in sales with regard to combustion engines (ICE), and assume further that ZF is not able to compensate the decline with its market share for electrified products or drivetrain-independent products. The combined ICE sales 2024 in both the passenger car (passenger car divisions) and the commercial vehicle segment (division Commercial Vehicles System) are ca. 11 bnEUR, which makes up ca. 27% of total ZF Group Sales. Note: Amongst others due to global political and regulatory developments and uncertainty, esp. in the US and the EU, the transition towards e-mobility is slower than expected, which is why the transformation risks may need to be reassessed in the reporting years 2025ff. Note: Due to the ongoing analysis, the answers provided to questions 3.1.2.1 to 3.1.2.5 (financial metrics vulnerable to transition and physical risks) are in a very premature stage. Moreover, ZF may make use of the phase-in option described in "Appendix C List of phased-in Disclosure Requirements" of the CSRD/ ESRS 1 General Requirements, which means: ZF may comply with ESRS E1-9 by reporting only qualitative disclosures for the first 3 years of preparation of its sustainability statement, if it is impracticable to prepare quantitative disclosures.

Climate change

(3.1.2.1) Financial metric

Select from:

☑ Assets

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

0

(3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

☑ Less than 1%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

6300000000

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

☑ 41-50%

(3.1.2.7) Explanation of financial figures

Throughout 2024, ZF conducted a climate scenario analysis in line with the climate-risk related requirements of the CSRD/ ESRS E1 Climate Change. Starting point was a qualitative scenario analysis for scoping purposes across the entire value chain of ZF, considering various climate scenarios and time horizons. First results of the scenario analysis reveal, amongst others, riverine flooding as relevant climate-driven physical risk and automotive market transition as major climate-driven transition events. On flood risk (physical risk): A first deep dive analysis to evaluate preliminary anticipated financial effects of flooding events focused on direct impact on production sites in terms of property/ asset damage (machinery, inventory, building). 50 production sites show a general flood risk. These 50 sites make up 6.3 bnEUR of insured property damage value, which is ca. 42% of the overall insured value at risk. On automotive market transition (transition risk): The outlined market transformation risks under 3.1.1. assume a scenario with 1-2% annual decrease in sales with regard to combustion engines (ICE), and assume further that ZF is not able to compensate the decline with its market share for electrified products or drivetrain-independent products. The combined ICE sales 2024 in both the passenger car (passenger car divisions) and the commercial vehicle segment (division Commercial Vehicles System) are ca. 11 bnEUR, which makes up ca. 27% of total ZF Group Sales. Note: Amongst others due to global political and regulatory developments and uncertainty, esp. in the US and the EU, the transition towards e-mobility is slower than expected, which is why the transformation risks may need to be reassessed in the reporting years 2025ff. Note: Due to the ongoing analysis, the answers provided to questions 3.1.2.1 to 3.1.2.5 (financial metrics vulnerable to transition and physical risks) are in a very premature stage. Moreover, ZF may make use of the phase-in option described in "Appendix C List of phased-in Disclosure Requirements" of the CSRD/ ESRS 1 General Requirements, which means: ZF may comply with ESRS E1-9 by reporting only qualitative disclosures for the first 3 years of preparation of its sustainability statement, if it is impracticable to prepare quantitative disclosures.

Water

(3.1.2.1) Financial metric

Select from:

☑ Assets

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

0

(3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

☑ Less than 1%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

6300000000

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

☑ 41-50%

(3.1.2.7) Explanation of financial figures

Throughout 2024, ZF conducted a climate scenario analysis in line with the climate-risk related requirements of the CSRD/ ESRS E1 Climate Change including water-related risks (e.g. flood risk). Starting point was a qualitative scenario analysis for scoping purposes across the entire value chain of ZF, considering various climate scenarios and time horizons. First results of the scenario analysis reveal, amongst others, riverine flooding as relevant climate-driven physical risk and automotive market transition as major climate-driven transition events. On flood risk (physical risk): A first deep dive analysis to evaluate preliminary anticipated financial effects of flooding events focused on direct impact on production sites in terms of property/ asset damage (machinery, inventory, building). 50 production sites show a general flood risk. These 50 sites make up 6.3 bnEUR of insured property damage value, which is ca. 42% of the overall insured value at risk. On automotive market transition (transition risk): The outlined market transformation risks under 3.1.1. assume a scenario with 1-2% annual decrease in sales with regard to combustion engines (ICE), and assume further that ZF is not able to compensate the decline with its market share for electrified products or drivetrain-independent products. The combined ICE sales 2024 in both the passenger car (passenger car divisions) and the commercial vehicle segment (division Commercial Vehicles System) are ca. 11 bnEUR, which makes up ca. 27% of total ZF Group Sales. Note: Amongst others due to global political and regulatory developments and uncertainty, esp. in the US and the EU, the transition towards e-mobility is slower than expected, which is why the transformation risks may need to be reassessed in the reporting years 2025ff. Note: Due to the ongoing analysis, the answers provided to questions 3.1.2.1 to 3.1.2.5 (financial metrics vulnerable to transition and physical risks) are in a very premature stage. Moreover, ZF may make use of the phase-in option described in "Appendix C List of phased-in Disclosure Requirements" of the CSRD/ ESRS 1

General Requirements, which means: ZF may comply with ESRS E1-9 by reporting only qualitative disclosures for the first 3 years of preparation of its sustainability statement, if it is impracticable to prepare quantitative disclosures.
[Add row]

(3.2) Within each river basin, how many facilities are exposed to substantive effects of water-related risks, and what percentage of your total number of facilities does this represent?

Row 1

(3.2.1) Country/Area & River basin

United Arab Emirates
☑ Other, please specify :Arabian Pensinsula

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply
☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

1

(3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin

Select from:
☑ Less than 1%

(3.2.10) % organization's total global revenue that could be affected

Select from:
☑ Unknown

(3.2.11) Please explain

Revenue is confidential. Extrem high water-stress. Water basin according to WWF-water-risk filter.

Row 2

(3.2.1) Country/Area & River basin

South Africa

☑ Other, please specify :Indian Ocean

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

1

(3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ Less than 1%

(3.2.10) % organization's total global revenue that could be affected

Select from:

☑ Unknown

(3.2.11) Please explain

Revenue is confidential. Extrem high water-stress. Water basin according to WWF-water-risk filter.

Row 3

(3.2.1) Country/Area & River basin

Spain

☑ Other, please specify :Mediterranean Sea

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

2

(3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ Less than 1%

(3.2.10) % organization's total global revenue that could be affected

Select from:

☑ Unknown

(3.2.11) Please explain

Revenue is confidential. Extrem high water-stress. Water basin according to WWF-water-risk filter.

Row 5

(3.2.1) Country/Area & River basin

Spain
☑ Douro

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply
☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

1

(3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin

Select from:
☑ Less than 1%

(3.2.10) % organization's total global revenue that could be affected

Select from:
☑ Unknown

(3.2.11) Please explain

Revenue is confidential. Extrem high water-stress. Water basin according to WWF-water-risk filter.

Row 6

(3.2.1) Country/Area & River basin

Mexico
☑ Other, please specify :North Pacific

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

2

(3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ Less than 1%

(3.2.10) % organization's total global revenue that could be affected

Select from:

☑ Unknown

(3.2.11) Please explain

Revenue is confidential. Extrem high water-stress. Water basin according to WWF-water-risk filter.

Row 7

(3.2.1) Country/Area & River basin

United States of America

☑ Colorado River (Caribbean Sea)

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

1

(3.2.4) % of your organization’s total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ Less than 1%

(3.2.10) % organization’s total global revenue that could be affected

Select from:

☑ Unknown

(3.2.11) Please explain

Revenue is confidential. Extrem high water-stress. Water basin according to WWF-water-risk filter.

Row 8

(3.2.1) Country/Area & River basin

Turkey

☑ Other, please specify :Aeagean Sea

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

1

(3.2.4) % of your organization’s total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ Less than 1%

(3.2.10) % organization’s total global revenue that could be affected

Select from:

☑ Unknown

(3.2.11) Please explain

Revenue is confidential. Extrem high water-stress. Water basin according to WWF-water-risk filter.

Row 9

(3.2.1) Country/Area & River basin

Andorra

☑ Ebro

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

1

(3.2.4) % of your organization’s total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ Less than 1%

(3.2.10) % organization’s total global revenue that could be affected

Select from:

☑ Unknown

(3.2.11) Please explain

Revenue is confidential. Extrem high water-stress. Water basin according to WWF-water-risk filter.
[Add row]

(3.3) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

(3.3.1) Water-related regulatory violations

Select from:

☑ Yes

(3.3.2) Fines, enforcement orders, and/or other penalties

Select all that apply

☑ Enforcement orders or other penalties but none that are considered as significant

(3.3.3) Comment

Two cases issued in 2024: Authority stated that a wastewater treatment plant (WWTP) needed a new activated carbon chamber to be more effective: --> environmental protection bureau issued a penalty decision letter. --> The system was retrofitted --> issue closed At a location the online monitoring stated that the discharged domestic wastewater exceeded the standard-value: --> environmental protection bureau issued a penalty decision letter --> after investigation it was found out that the pipeline was blocked --> influenced the measuring which led to wrongly measured parameter --> issue closed
[Fixed row]

(3.5) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Select from:

☑ Yes

(3.5.1) Select the carbon pricing regulation(s) which impact your operations.

Select all that apply

☑ Beijing pilot ETS

☑ Shanghai pilot ETS

(3.5.2) Provide details of each Emissions Trading Scheme (ETS) your organization is regulated by.

Beijing pilot ETS

(3.5.2.1) % of Scope 1 emissions covered by the ETS

0

(3.5.2.2) % of Scope 2 emissions covered by the ETS

0

(3.5.2.3) Period start date

12/31/2023

(3.5.2.4) Period end date

12/30/2024

(3.5.2.5) Allowances allocated

8079

(3.5.2.6) Allowances purchased

0

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

980

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

4215

(3.5.2.9) Details of ownership

Select from:
☑ Facilities we own and operate

(3.5.2.10) Comment

Allowance allocation not confirmed yet; according to the forecast, it should be around 8079 tons

Shanghai pilot ETS

(3.5.2.1) % of Scope 1 emissions covered by the ETS

0

(3.5.2.2) % of Scope 2 emissions covered by the ETS

0

(3.5.2.3) Period start date

12/31/2023

(3.5.2.4) Period end date

12/30/2024

(3.5.2.5) Allowances allocated

23811

(3.5.2.6) Allowances purchased

0

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

3606

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

13464

(3.5.2.9) Details of ownership

Select from:
☑ Facilities we own and operate

(3.5.2.10) Comment

facilities located at two plants we own and operate
[Fixed row]

(3.5.4) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

ZFs strategy is to comply with national, local and/or regional regulation. Climate protection is of strategic importance for ZF. The commitment to climate neutrality in all three emission scopes by 2040 is an integral part of the corporate strategy. That is why we are following an ambitious climate strategy and working to reduce our impact on the environment and climate as much as possible. At the same time, it is important for our company in the long term to be prepared for the consequences of climate change and to adapt our business model, management and processes for this purpose.

(3.6) Have you identified any environmental opportunities which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

	Environmental opportunities identified
Climate change	*Select from:* ☑ Yes, we have identified opportunities, and some/all are being realized
Water	*Select from:* ☑ Yes, we have identified opportunities, and some/all are being realized

[Fixed row]

(3.6.1) Provide details of the environmental opportunities identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp1

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Products and services

☑ Increased sales of existing products and services

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Downstream value chain

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ China
☑ India
☑ Italy
☑ Japan
☑ Spain
☑ Serbia
☑ Turkey
☑ Austria
☑ Belgium
☑ Czechia
☑ Portugal
☑ Slovakia
☑ Thailand
☑ Viet Nam
☑ Argentina
☑ Taiwan, China
☑ Republic of Korea
☑ United Arab Emirates
☑ United States of America
☑ United Kingdom of Great Britain and Northern Ireland
☑ Brazil
☑ Canada
☑ France
☑ Mexico
☑ Poland
☑ Denmark
☑ Germany
☑ Hungary
☑ Romania
☑ Malaysia
☑ Australia
☑ Singapore
☑ Netherlands
☑ Switzerland
☑ South Africa

(3.6.1.8) Organization specific description

ZF has 40 years of experience in gearboxes for wind turbines has proven to be a true innovator in the wind industry. With its Wind Power Business Unit, ZF is a leading global manufacturer of gearboxes for wind turbines. With state-of-the-art manufacturing plants and worldwide service locations, ZF Wind Power is dedicated to delivering advanced gearbox solutions and services on a global scale. About one fourth of all turbines around the globe have a ZF transmission. More than 80,000 ZF gearboxes power wind turbines worldwide, producing a total output of 180 gigawatts. This amount of power is enough to supply 150 million households with climate-neutral energy. As a result, ZF's advanced wind turbines technology and service solutions contribute to the transformation of the global energy system. The demand for wind power is expected to increase further. According to an assessment of the International Renewable Energy Agency (IRENA) in 2020, 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, fulfilling more than one-third of total electricity demand, and this at strongly increasing energy generation needs. ZF considers the expected growth of wind power as business opportunity. ZF anticipates an increased demand for its gearboxes and consequently, an increase in revenues for ZF.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Increased revenues resulting from increased demand for products and services

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Medium-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Likely (66–100%)

(3.6.1.12) Magnitude

Select from:

☑ Medium

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

ZF Wind Power develops, together with its partners, unique gearbox designs and services to guarantee the highest quality at competitive costs. Advanced technology and service solutions contribute to the transformation of the global energy system, in which reliable, robust and efficient products and systems conserve precious resources. This way we empower a sustainable future together with our partners. As part of ZF, ZF Wind Power contributes significantly to the company's success today and in the future.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ Yes

(3.6.1.19) Anticipated financial effect figure in the medium-term - minimum (currency)

1000000000

(3.6.1.20) Anticipated financial effect figure in the medium-term - maximum (currency)

1600000000

(3.6.1.23) Explanation of financial effect figures

ZF's Wind Power Business Unit intends to grow from 2020 to 2027 from about 1 billion to about 1.6 billion in revenues. The potential financial impact figure is based on the projected market development on renewable energies and wind power. The opportunity occurs worldwide. Since an option "worldwide" was not available, we selected the countries in which ZF operates.

(3.6.1.24) Cost to realize opportunity

203000000

(3.6.1.25) Explanation of cost calculation

From 2019 to 2023 ZF's R&D expenditure in its wind power business amounted to 149 million (26 million in 2019;27 million in 2020; 24 million in 2021; 38 million in 2022; 34 million in 2023). In 2024, ZF reviewed and adjusted the Green Finance Framework. Starting in latest Green Finance Report, ZF reports the annual OPEX for the reporting year 2024 of 54 million Euros. The OPEX identified as eligible for allocation are in line with ZFs Green Finance Framework and contribute to the EU Environmental Objective 1 "climate change mitigation". Eligible OPEX includes R&D expenditures and maintenance costs necessary to sustain the functionality and performance of green assets, ensuring compliance with sustainability objectives. R&D expenditures consist of product-related and overhead costs, such as labor costs, materials, and costs for information systems and technology. These R&D expenditures are adjusted for capitalized R&D development costs and their amortization, as well as R&D-related depreciation, to avoid double counting with green capital expenditures. Furthermore, eligible R&D excludes R&D sales and coordinated demanded services (group internal services), focusing solely on projects that meet the Green Eligibility Criteria defined in ZF's Green Finance Framework. For the years 2018-2023 maintenance costs were not included in the scope. See also ZF Green Finance Report 2025, https://kpmg.bryter.io/s/6tNcVPoWRNOuOUgpalzXDg/atlas_automation_report_service_01?id=b86e91ab-80d6-4ee6-9176-e79939ed4a4d&var=a&m=a

(3.6.1.26) Strategy to realize opportunity

Situation: The demand in renewable energy in general and specifically in wind power is expected to grow. Task: The growth of wind power market comes with increasingly demanding technical requirements. Action: Therefore, ZF is investing continuously and significantly in research and development (R&D) of its wind power

business. In 2024 alone, ZF has invested 54 million (OPEX). From 2019 to 2024 ZF's R&D expenditure in its wind power business amounted to 203 million (26 million in 2019;27 million in 2020; 24 million in 2021; 38 million in 2022; 34 million in 2023; 54 million in 2024). See also ZF Green Finance Report 2025, https://kpmg.bryter.io/s/6tNcVPoWRNOuOUgpalzXDg/atlas_automation_report_service_01?id=b86e91ab-80d6-4ee6-9176-e79939ed4a4d&var=a&m=a Result: Specifically, as an important investment in R&D of ZF Wind Power, ZF is building the world's most powerful and largest test bench for wind turbines. Dynamic developments in the wind power market require a whole-new level of testing and validation of modular drivetrains. With the expansion of ZF Wind Power's portfolio from the serial gearbox to serial powertrain production, the manufacturing processes will be adapted, and the end-of-line test process upgraded. ZF Wind Power can design, validate and produce the next generation of wind turbine powertrains up to 30 MW. These advanced wind gearboxes and powertrains will accelerate the shift from climate-damaging fuels to clean wind energy.

Water

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp4

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Resource efficiency

☑ Reduced water usage and consumption

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ China

☑ India

☑ Italy

☑ Japan

☑ Spain

☑ Brazil

☑ Canada

☑ France

☑ Mexico

☑ Poland

☑ Serbia
☑ Turkey
☑ Austria
☑ Belgium
☑ Czechia
☑ Portugal
☑ Slovakia
☑ Thailand
☑ Viet Nam
☑ Argentina
☑ Taiwan, China
☑ Republic of Korea
☑ United Arab Emirates
☑ United States of America
☑ United Kingdom of Great Britain and Northern Ireland
☑ Denmark
☑ Germany
☑ Hungary
☑ Romania
☑ Malaysia
☑ Australia
☑ Singapore
☑ Netherlands
☑ Switzerland
☑ South Africa

(3.6.1.6) River basin where the opportunity occurs

Select all that apply

☑ Colorado River (Pacific Ocean)

(3.6.1.8) Organization specific description

ZF considers water withdrawal for production at all ZF locations a major environmental issue since the use of freshwater will become increasingly restricted in the future. Water is used in production, e.g., for surface treatment processes, washing, rinsing and cleaning, and as a coolant. It is also required for non-production purposes, such as sanitation and construction projects and as drinking water in the cafeteria. ZF is committed to installing water-saving equipment that exceeds statutory requirements. Some of ZF's production locations, e.g., in Spain, Mexico, South Africa and China, are in areas with significant water scarcity or with significant water shortage. In these areas, permits for water withdrawal for production purposes can occasionally be restricted. If water scarcity persists, this situation could worsen or affect further regions. This may result in a need for increased investment or expenses to cover the technical modernization of production equipment. ZF set the target of reducing the intensity of water withdrawal at these sites by 2% per year. For all other locations, a 1% reduction is being targeted on an annual basis. The base year for both targets is 2019. Progress is monitored and managed. ZF includes all production, administrative and research locations in its efficiency programs.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Reduced direct costs

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Likely (66–100%)

(3.6.1.12) Magnitude

Select from:

☑ Low

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Reducing water demand has a positive saving impact and reduces operational risks e.g. in terms of dependency on water especially by considering that water is getting more and more scarce in many areas all over the world which will increase the risk of (temporary) shut-down of water-supply which can lead to production-interruption and thus in financial losses in some cases.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ Yes

(3.6.1.17) Anticipated financial effect figure in the short-term - minimum (currency)

100000

(3.6.1.18) Anticipated financial effect figure in the short-term – maximum (currency)

150000

(3.6.1.23) Explanation of financial effect figures

51 water-related projects were realized at ZF in 2024. They are expected to save about nearly 48,000 m³ water and 125,000 € p.a. The savings result from the reduction of the water-demand by recycling/reusing water, optimizing processes, installing water-saving-equipment and checking existing installations and infrastructure for leakages. The profitability calculation is always carried out by the respective location. The annual financial saving is calculated by offsetting the financial saving due to the reduced water demand against any higher operating costs incurred. The opportunity occurs worldwide. Since a option “worldwide” was not available, we selected the countries in which ZF operates. River basins: One of our locations which is located in the river basin "Colorado River (Pacific Ocean)", is able to save about 7,500 m³ water p.a. The location operates semi-open cooling towers which must be cleaned regularly to avoid contamination and encrustations. That increases the water demand. To save water the location invested in a installation to desalinate the supplied cooling water before it enters the cooling tower. Due to that deeper concentration cycles are possible, which results in a direct reduction of the demanded water because the cleaning of the cooling towers doesn't need to be conducted as often as it had been before.

(3.6.1.24) Cost to realize opportunity

93000

(3.6.1.25) Explanation of cost calculation

The profitability calculation is always carried out by the respective location. The final figures regarding costs and monetary and water savings are then reported in the Group-wide reporting system.

(3.6.1.26) Strategy to realize opportunity

The opportunity to reduce ZF’s water-demand and therefore the dependency on water and to reduce ZF’s indirect/operating costs is realized by increasing water efficiency. To push the agenda ZF has two water-efficiency targets in place (-1% p.a. for all locations, except for location identified as located in high-water stress areas: -2% p.a. until 2025, base-year 2019). With our EHS-management-system, ISO 14001 certificates and water-targets in place the locations are obliged to regularly check for water-efficiency and water-quality improving opportunities. Our regional- and divisional EHS-organization is managing the locations in their area of responsibility. Twice a year, the locations must report their status regarding target achievement and their plan for continual improvement to their respective location manager. Furthermore, since 2023, the locations have been obliged to successively maintain all of their water-saving measures in our global reporting system from the time of conceptualization.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp2

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Resource efficiency

☑ Cost savings

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ China
☑ India
☑ Italy
☑ Japan
☑ Spain
☑ Serbia
☑ Turkey
☑ Austria
☑ Belgium
☑ Czechia
☑ Portugal
☑ Slovakia
☑ Thailand
☑ Viet Nam
☑ Brazil
☑ Canada
☑ France
☑ Mexico
☑ Poland
☑ Denmark
☑ Germany
☑ Hungary
☑ Romania
☑ Malaysia
☑ Australia
☑ Singapore
☑ Netherlands
☑ Switzerland

☑ Argentina
☑ Taiwan, China
☑ Republic of Korea
☑ United Arab Emirates
☑ United States of America
☑ United Kingdom of Great Britain and Northern Ireland
☑ South Africa

(3.6.1.8) Organization specific description

Energy efficiency presents an opportunity to reduce ZF's Scope 1 and 2 emissions and to reduce ZF's indirect/operating costs. Energy efficiency measures pay into ZF's ambition to achieve net zero emissions in all three emission scopes by 2040. To achieve decarbonization of its locations, ZF focuses on two main levers: Energy efficiency and the switch to green energy. Energy efficiency and avoidance of energy consumption are given priorities for the company. ZF includes all production, administrative and research locations in its efficiency programs. By 2030, the energy efficiency of ZF locations is to be increased by minimum of 2% energy efficiency p.a. until 2030, 20% compared to 2019. All ZF locations regularly evaluate their energy profiles and energy related activities. This includes conducting audits, identifying potentials for improvement, and defining measures for increasing energy efficiency and reducing consumption. Campaigns to increase efficiency and reduce energy consumption are planned and implemented at all locations, in accordance with the local levels of consumption and target achievement. Each ZF location is expected to establish and maintain standards to improve employee awareness and to promote behavioural changes as well as standards for demand or peak-load management according to local requirements. In order to reduce energy consumption, detailed energy programs, such as the ZF Energy Basics, help the ZF locations to achieve their targets.

(3.6.1.9) Primary financial effect of the opportunity

Select from:
☑ Reduced indirect (operating) costs

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply
☑ Medium-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:
☑ Likely (66–100%)

(3.6.1.12) Magnitude

Select from:

☑ Medium

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Advancement in energy efficiency have a positive savings effect on the company's cash flow and financial performance today and in the future.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ Yes

(3.6.1.19) Anticipated financial effect figure in the medium-term - minimum (currency)

10000000

(3.6.1.20) Anticipated financial effect figure in the medium-term - maximum (currency)

18000000

(3.6.1.23) Explanation of financial effect figures

ZF has implemented or initiated about 980 projects in 2024 which led to approximately 144 GWh in energy savings. This corresponds to the electricity consumption of 36,000 average households, an avoidance of 59,000 tons of CO2e emissions and to annual savings of 18 million. The savings result from e.g., reductions in energy and maintenance cost. The opportunity occurs worldwide. Since an option "worldwide" was not available, we selected the countries in which ZF operates.

(3.6.1.24) Cost to realize opportunity

25000000

(3.6.1.25) Explanation of cost calculation

To realize the opportunity, we expect yearly investments in the range of 20–30 million EUR by 2030. In 2024, the total investment for the implementation of energy efficiency projects was 21 million EUR.

(3.6.1.26) Strategy to realize opportunity

Situation: The opportunity to reduce ZF's Scope 1 and 2 emissions and to reduce ZF's indirect/operating costs is realized by increasing energy efficiency. Task: By 2030, the energy efficiency of ZF locations is to be increased by minimum of 2% energy efficiency p.a. until 2030, 20% compared to 2019. Action: A cross-functional and cross-divisional team, under coordination of Corporate Operations and with the participation of EHS and Real Estate Management, works on increasing energy efficiency. This team manages a corresponding program and reports to Senior Management. Target achievement on energy efficiency and individual projects are monitored and controlled through KPIs within the environmental and energy management system in conformity with ISO 14001 and ISO 50001. To manage all energy efficiency projects on corporate level a rolling project roadmap is implemented. Progress tracking (including costs, investment and saving data) is conducted on a monthly basis, where all identified projects are monitored and managed related to maturity level.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp3

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Capital flow and financing

☑ Access to new financing options

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ China

☑ India

☑ Brazil

☑ Canada

☑ Italy
☑ Japan
☑ Spain
☑ Serbia
☑ Turkey
☑ Austria
☑ Belgium
☑ Czechia
☑ Portugal
☑ Slovakia
☑ Thailand
☑ Viet Nam
☑ Argentina
☑ Taiwan, China
☑ Republic of Korea
☑ United Arab Emirates
☑ United States of America
☑ United Kingdom of Great Britain and Northern Ireland
☑ France
☑ Mexico
☑ Poland
☑ Denmark
☑ Germany
☑ Hungary
☑ Romania
☑ Malaysia
☑ Australia
☑ Singapore
☑ Netherlands
☑ Switzerland
☑ South Africa

(3.6.1.8) Organization specific description

Until 2024, ZF issued Green Bonds in EUR and USD (last Green USD Bond in April 2024) and used green financial instruments as business opportunity for an increased access to capital. In the context of Sustainable Finance, regulators, financial institutions, and credit rating agencies are calling for greater transparency and ESG commitment. EU-Taxonomy reporting requirements, CSRD, SBTi and further initiatives reduce the needs for additional information sources and as such potential benefits from green financing instruments. According to the original Corporate Sustainability Reporting Directive (CSRD) Directive (EU) 2022/2464, ZF Friedrichshafen AG would have been required to report as a Wave 2 Company for the 2025 reporting year. On February 26, 2025, the European Commission adopted a simplification package (Omnibus) that includes, among other things, a so-called stop-the-clock rule. Specifically, this affects companies in the second and third waves, whose reporting obligations originally applied to fiscal years beginning on January 1, 2025, and January 1, 2026, respectively. The "stop-the-clock" rule postpones these deadlines to fiscal years beginning on January 1, 2027, and January 1, 2028, respectively. Although ZF is thus required to report from 2027 onwards. ZF Group will firstly voluntarily report on green sales, CAPEX, OPEX (eligibility only) for fiscal year 2025.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Increased access to capital

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Virtually certain (99–100%)

(3.6.1.12) Magnitude

Select from:

☑ Medium

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

ZF considered green financial instruments as business opportunity for an increased access to capital and still benefits from its prior issuance. Until 2024 ZF issued Green Bonds in EUR and USD (last Green USD Bond in April 2024) and used green financial instruments as business opportunity for an increased access to capital. In the context of Sustainable Finance, regulators, financial institutions, and credit rating agencies are calling for greater transparency and ESG commitment. EU-Taxonomy reporting requirements, CSRD, SBTi and further initiatives reduce the needs for additional information sources and as such potential benefits from green financing instruments. According to the original Corporate Sustainability Reporting Directive (CSRD) Directive (EU) 2022/2464, ZF Friedrichshafen AG would have been required to report as a Wave 2 Company for the 2025 reporting year. On February 26, 2025, the European Commission adopted a simplification package (Omnibus) that includes, among other things, a so-called stop-the-clock rule. Specifically, this affects companies in the second and third waves, whose reporting obligations originally applied to fiscal years beginning on January 1, 2025, and January 1, 2026, respectively. The "stop-the-clock" rule postpones these deadlines to fiscal years beginning on January 1, 2027, and January 1, 2028, respectively. Although ZF is thus required to report from 2027 onwards. ZF Group will firstly voluntarily report on green sales, CAPEX, OPEX (eligibility only) for fiscal year 2025. The EU-Taxonomy reporting is closely aligned with the ZF Green Finance Report which provides transparent information about the allocated proceeds and the climate effects of the financed projects related to the green bonds. ZF has 5.4bn EUR of green bonds outstanding as of YE2024 and benefited from greeniums and increased investor interests. As such sustainable financing instruments are an important part of the overall financing mix. ZF was in addition the first automotive supplier in Germany to issue green bonds. Besides, ZF also implemented an ESG-concept in its Revolving Credit Facility (RCF). Sustainable finance therefore provided financial opportunities from which ZF still profits as of today. Looking at the

development in sustainability reporting, however, ZF sees sustainable finance as a bridging technology on the path towards positioning ZF as a sustainable company in its entirety.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ Yes

(3.6.1.17) Anticipated financial effect figure in the short-term - minimum (currency)

0

(3.6.1.18) Anticipated financial effect figure in the short-term – maximum (currency)

20000000

(3.6.1.23) Explanation of financial effect figures

The estimated figure captures a refinancing advantage and is based on the existing sustainable financing instruments. The estimated figure is comprised by two input factors. First, we have a financial benefit if we meet the targets of the underlying ESG-concept in the specific financing instruments. Second, we observe a higher investor demand during book building and received specific "greeniums" (pricing advantage) when issuing green bonds compared to conventional bonds. The estimation is based on the current outstanding volumes of our sustainable financing instruments. The opportunity occurs worldwide. Since an option "worldwide" was not available, we selected the countries in which ZF operates.

(3.6.1.24) Cost to realize opportunity

0

(3.6.1.25) Explanation of cost calculation

In setting up sustainable financing instruments, the large majority of cost arises from internal resources. Costs for internal resources are not specified. Comparing a conventional transaction vs. a sustainable one, the additional external costs are minor. Therefore, the cost to realize the opportunity are indicated as "0".

(3.6.1.26) Strategy to realize opportunity

Situation: We actively connected our financing with the sustainability strategy to finance investments towards the company's "Next Generation Mobility" strategy and continue our path with all relevant parties (such as controlling, finance/treasury, sustainability department, R&D) in positioning ZF as a sustainable company in its

entirely. Task: Actively connecting our financing with the sustainability strategy requires us to take action with regard to process and organization. Executing our financing strategy involves decision-making on the concrete financing mix. Action: We make sure to involve all business areas in ZF. Decisions on the financing mix are taken on the basis of a variety of factors, among others strategic fit, sustainability component and financing cost.
[Add row]

(3.6.2) Provide the amount and proportion of your financial metrics in the reporting year that are aligned with the substantive effects of environmental opportunities.

Climate change

(3.6.2.1) Financial metric

Select from:
☑ Other, please specify :confidential

(3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in 1.2)

0

(3.6.2.3) % of total financial metric aligned with opportunities for this environmental issue

Select from:
☑ 100%

(3.6.2.4) Explanation of financial figures

ZF is not yet reporting this financial metrics as this is confidential, but the company prepares for requirements of the European Corporate Sustainability Reporting Directive (CSRD) and the corresponding European Sustainability Reporting Standards (ESRS) to include the relevant financial implications in the future.

Water

(3.6.2.1) Financial metric

Select from:

☑ Other, please specify :confidential

(3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in 1.2)

0

(3.6.2.3) % of total financial metric aligned with opportunities for this environmental issue

Select from:

☑ 100%

(3.6.2.4) Explanation of financial figures

ZF is not yet reporting this financial metrics as this is confidential, but the company prepares for requirements of the European Corporate Sustainability Reporting Directive (CSRD) and the corresponding European Sustainability Reporting Standards (ESRS) to include the relevant financial implications in the future.
[Add row]

C4. Governance

(4.1) Does your organization have a board of directors or an equivalent governing body?

(4.1.1) Board of directors or equivalent governing body

Select from:

☑ Yes

(4.1.2) Frequency with which the board or equivalent meets

Select from:

☑ More frequently than quarterly

(4.1.3) Types of directors your board or equivalent is comprised of

Select all that apply

☑ Executive directors or equivalent

(4.1.4) Board diversity and inclusion policy

Select from:

☑ No

[Fixed row]

(4.1.1) Is there board-level oversight of environmental issues within your organization?

Climate change

(4.1.1.1) Board-level oversight of this environmental issue

Select from:

☑ Yes

Water

(4.1.1.1) Board-level oversight of this environmental issue

Select from:
☑ Yes

Biodiversity

(4.1.1.1) Board-level oversight of this environmental issue

Select from:
☑ No, but we plan to within the next two years

(4.1.1.2) Primary reason for no board-level oversight of this environmental issue

Select from:
☑ Not an immediate strategic priority

(4.1.1.3) Explain why your organization does not have board-level oversight of this environmental issue

So far, there is no complete picture of the impact of our own business and supply chain on biodiversity. We are at the beginning of activities in this field, comparable to early measures of climate protection. We recognize the need to increase biodiversity ambitions and prepare our organization to contribute to a regenerative economy.
[Fixed row]

(4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental issues and provide details of the board's oversight of environmental issues.

Climate change

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

☑ Chief Executive Officer (CEO)

☑ Chief Financial Officer (CFO)

☑ Other C-Suite Officer

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

☑ Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Board mandate

☑ Individual role descriptions

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Scheduled agenda item in some board meetings – at least annually

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

☑ Reviewing and guiding annual budgets

☑ Overseeing and guiding scenario analysis

☑ Overseeing the setting of corporate targets

☑ Monitoring progress towards corporate targets

☑ Approving corporate policies and/or commitments

☑ Overseeing reporting, audit, and verification processes

☑ Monitoring the implementation of a climate transition plan

☑ Overseeing and guiding public policy engagement

☑ Reviewing and guiding innovation/R&D priorities

☑ Approving and/or overseeing employee incentives

☑ Overseeing and guiding major capital expenditures

☑ Monitoring the implementation of the business strategy

☑ Overseeing and guiding the development of a business strategy
☑ Overseeing and guiding acquisitions, mergers, and divestitures
☑ Overseeing and guiding the development of a climate transition plan
☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

(4.1.2.7) Please explain

ZF's CEO assumes leadership and supreme decision-making authority on ZF's climate-related issues. The CEO holds overall responsibility for the ZF strategy and management on climate action. Besides, ZF's CEO is an active member of two key climate-related initiatives of the World Economic Forum: the Alliance of CEO Climate Leaders and the First Movers Coalition. The Alliance of CEO Climate Leaders of the World Economic Forum takes the stand that the private sector must assume responsibility and actively engage in efforts to reduce greenhouse gas emissions, thereby helping to shape the global transition to a low-carbon, climate-resilient economy. Furthermore, the CEO actively engages in the World Economic Forum's First Movers Coalition (FMC). ZF is a founding member and active partner of the FMC. The FMC aims to jumpstart the demand for zero-emission technologies by leveraging collective purchasing power from companies, thereby scaling up critical emerging technologies essential for this net-zero transition. ZF's Chief Financial Officer (CFO) is responsible for ZF's financial strategy and the management of ZF's finances. ZF actively connects its financing with the sustainability strategy to finance investments towards the Group's strategy. As a result, ZF extended its sustainable finance portfolio and linked a Revolving Credit Facility (RCF) to its climate ambition to reduce CO2e emissions to all three scopes of greenhouse gas emissions to achieve climate neutrality by 2040. Moreover, ZF issues green bonds under its Green Finance Framework which proceeds are used for the development, production, and sale of products for clean transportation and renewable energy. ZF's CFO is also responsible for ZF's Risk & Control Management, consisting of the pillars Enterprise Risk Management, Internal Control System and Governance, Risk & Compliance (GRC) Integration Management. ESG- and thus, climate-related risk and control implications are considered in an integrated manner within the GRC approach. ZF's Chief Human Resources Officer (CHRO) holds responsibility within the Board of Management for climate-related issues. The CHRO is responsible for Labor Relations, Human Resources, Corporate Governance and Sustainability for the Group. ZF's Sustainability Department that actively drives ZF's climate ambition directly reports to the CHRO.

Water

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply
☑ Other C-Suite Officer

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:
☑ Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Individual role descriptions

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Sporadic – agenda item as important matters arise

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

☑ Reviewing and guiding annual budgets

☑ Overseeing the setting of corporate targets

☑ Monitoring progress towards corporate targets

☑ Approving corporate policies and/or commitments

☑ Overseeing and guiding major capital expenditures

☑ Monitoring the implementation of the business strategy

☑ Overseeing reporting, audit, and verification processes

☑ Overseeing and guiding the development of a business strategy

☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

(4.1.2.7) Please explain

ZF's Chief Human Resources Officer (CHRO) holds responsibility within the Board of Management for water-related issues. The CHRO is responsible for Labor Relations, Human Resources, Corporate Governance and Sustainability for the Group. The CHRO approves the biannual EHS Management Review which includes water-related topics. Moreover, ZF's Sustainability and Environment, Health, & Safety (EHS) Department that drives ZF's water ambition directly reports to the CHRO. [Fixed row]

(4.2) Does your organization's board have competency on environmental issues?

Climate change

(4.2.1) Board-level competency on this environmental issue

Select from:

☑ Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

☑ Consulting regularly with an internal, permanent, subject-expert working group

☑ Engaging regularly with external stakeholders and experts on environmental issues

☑ Having at least one board member with expertise on this environmental issue

(4.2.3) Environmental expertise of the board member

Experience

☑ Executive-level experience in a role focused on environmental issues

☑ Management-level experience in a role focused on environmental issues

Water

(4.2.1) Board-level competency on this environmental issue

Select from:

☑ Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

☑ Consulting regularly with an internal, permanent, subject-expert working group

☑ Engaging regularly with external stakeholders and experts on environmental issues

☑ Having at least one board member with expertise on this environmental issue

(4.2.3) Environmental expertise of the board member

Experience

☑ Executive-level experience in a role focused on environmental issues

☑ Management-level experience in a role focused on environmental issues

[Fixed row]

(4.3) Is there management-level responsibility for environmental issues within your organization?

Climate change

(4.3.1) Management-level responsibility for this environmental issue

Select from:

☑ Yes

Water

(4.3.1) Management-level responsibility for this environmental issue

Select from:

☑ Yes

Biodiversity

(4.3.1) Management-level responsibility for this environmental issue

Select from:

☑ No, but we plan to within the next two years

(4.3.2) Primary reason for no management-level responsibility for environmental issues

Select from:

☑ Not an immediate strategic priority

(4.3.3) Explain why your organization does not have management-level responsibility for environmental issues

Biodiversity and ecosystems are central to sustaining the livelihoods of our planet and preserving a livable environment for its inhabitants. But despite continued efforts, biodiversity is decreasing worldwide. ZF recognizes the need to promote biodiversity more systematically in the future. Effective protection of biodiversity and ecosystems requires decisive action. Given the social urgency of the issue, we must not postpone the measures that have been identified as necessary, especially in those areas with the greatest levers. ZF endorses the objectives of the EU Biodiversity Strategy and supports the goals of the Kunming-Montreal Global Biodiversity Framework. For ZF, this means intensifying its efforts for biodiversity and consistently reducing the negative impacts of our operating activities.
[Fixed row]

(4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals).

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Other C-Suite Officer, please specify :Chief Human Resources Officer (CHRO), responsible for Labor Relations, Human Resources, Corporate Governance and Sustainability

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

Policies, commitments, and targets

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Measuring progress towards environmental science-based targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Conducting environmental scenario analysis

☑ Managing annual budgets related to environmental issues

☑ Implementing the business strategy related to environmental issues

☑ Developing a business strategy which considers environmental issues

☑ Managing environmental reporting, audit, and verification processes

Other

☑ Providing employee incentives related to environmental performance

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ More frequently than quarterly

(4.3.1.6) Please explain

The Chief Human Resources Officer (CHRO) holds responsibility within the Board of Management on climate-and water-related issues. ZF's CHRO assumes responsibility for Labor Relations, Human Resources, Corporate Governance and Sustainability. The Sustainability and Environment, Health, and Safety (EHS) domain driving climate- and water-related aspects, report to the CHRO.

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Other C-Suite Officer, please specify :Chief Human Resources Officer (CHRO), responsible for Labor Relations, Human Resources, Corporate Governance and Sustainability

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

Policies, commitments, and targets

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Implementing the business strategy related to environmental issues

☑ Managing annual budgets related to environmental issues

☑ Managing environmental reporting, audit, and verification processes

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Half-yearly

(4.3.1.6) Please explain

The Chief Human Resources Officer (CHRO) holds responsibility within the Board of Management on climate-and water-related issues. ZF's CHRO assumes responsibility for Labor Relations, Human Resources, Corporate Governance and Sustainability. The Sustainability and Environment, Health, and Safety (EHS) domain driving climate- and water-related aspects, report to the CHRO.
[Add row]

(4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets?

Climate change

(4.5.1) Provision of monetary incentives related to this environmental issue

Select from:
☑ Yes

(4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue

10

(4.5.3) Please explain

ZF has set science-based targets approved by the Science Based Targets initiative (SBTi) in January 2022 to reduce its Scope 1 and Scope 2 emissions by an absolute figure of 80% and its Scope 3 emissions by 40% relative to sales by 2030. Overall, ZF has the strategic ambition to become climate-neutral in all three emission scopes by 2040. To support target achievement, the Supervisory Board and the Board of Management decided to integrate the reduction of Scope 1 and Scope 2 emissions into the long-term incentive of ZF's senior management from 2023 onwards. In 2024 it was decided to additionally include the reduction of Scope 3 Upstream emission into the long-term incentive (LTI) plans from 2025 onwards. Overall, 10% of the total LTI is linked to our climate targets.

Water

(4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

☑ No, and we do not plan to introduce them in the next two years

(4.5.3) Please explain

ZF integrated the reduction of Scope 1, Scope 2, and Scope 3 Upstream emissions as an indicator for the long-term incentive (LTI) of ZF's senior management. 10% of the total LTI is linked to our climate targets. A specific consideration of water-related issues is currently not planned.
[Fixed row]

(4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals).

Climate change

(4.5.1.1) Position entitled to monetary incentive

Board or executive level
☑ Board/Executive board

(4.5.1.2) Incentives

Select all that apply
☑ Bonus - % of salary

(4.5.1.3) Performance metrics

Targets
☑ Progress towards environmental targets
☑ Reduction in absolute emissions in line with net-zero target

Emission reduction
☑ Reduction in absolute emissions

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Long-Term Incentive Plan, or equivalent, only (e.g. contractual multi-year bonus)

(4.5.1.5) Further details of incentives

ZF decided to link the reduction of Scope 1, 2, and 3 Upstream emissions as an indicator for the long-term incentive (LTI) of ZF's Board of Management and senior management. While the integration of Scope 1 and 2 emission reduction into the LTI was decided in 2022 (for 2023 onwards), the integration of Scope 3 Upstream was decided in 2024 (for 2025 onwards). 10% of the total LTI is linked to our climate targets.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

ZF aims to become climate-neutral in all emissions scopes by 2040 with science-based targets for Scope 1, 2, & 3 by 2030. Linking the reduction of absolute Scope 1, 2, and Scope 3 Upstream emissions to the long-term incentive (LTI) of ZF's Board of Management and its entire senior management team support significantly target achievement.

Climate change

(4.5.1.1) Position entitled to monetary incentive

Senior-mid management

☑ Management group

(4.5.1.2) Incentives

Select all that apply

☑ Bonus - % of salary

(4.5.1.3) Performance metrics

Targets

☑ Progress towards environmental targets

☑ Reduction in absolute emissions in line with net-zero target

Emission reduction

☑ Reduction in absolute emissions

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Long-Term Incentive Plan, or equivalent, only (e.g. contractual multi-year bonus)

(4.5.1.5) Further details of incentives

ZF decided to link the reduction of Scope 1, 2, and 3 Upstream emissions as an indicator for the long-term incentive (LTI) of ZF's Board of Management and senior management. 10% of the total LTI is linked to our climate targets. While the integration of Scope 1 and 2 emission reduction into the LTI was decided in 2022, the integration of Scope 3 Upstream was decided in 2024.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

ZF aims to become climate-neutral in all emissions scopes by 2040 with science-based targets for Scope 1, 2, & 3 by 2030. Linking the reduction of absolute Scope 1, 2, and Scope 3 Upstream emissions to the long-term incentive (LTI) of ZF's Board of Management and its entire senior management team support significantly target achievement.
[Add row]

(4.6) Does your organization have an environmental policy that addresses environmental issues?

	Does your organization have any environmental policies?
	Select from:

	Does your organization have any environmental policies?
	☑ Yes

[Fixed row]

(4.6.1) Provide details of your environmental policies.

Row 1

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Climate change

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(4.6.1.4) Explain the coverage

ZF has several environmental policies in place. The company addresses and operationalizes a range of environmental topics through its comprehensive Environmental, Health and Safety (EHS) policy. ZF's EHS targets cover the timeframe 2021–2025. Moreover, ZF's climate ambition address the requirements of the Science Based Targets initiative (SBTi). Moreover, ZF fosters the concept of circular economy and developed a strategic circularity framework.

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to a circular economy strategy

☑ Commitment to comply with regulations and mandatory standards

☑ Commitment to stakeholder engagement and capacity building on environmental issues

Climate-specific commitments

☑ Commitment to 100% renewable energy

☑ Commitment to net-zero emissions

Social commitments

☑ Adoption of the UN International Labour Organization principles

☑ Commitment to respect internationally recognized human rights

Additional references/Descriptions

☑ Description of environmental requirements for procurement

☑ Description of grievance/whistleblower mechanism to monitor non-compliance with the environmental policy and raise/address/escalate any other greenwashing concerns

☑ Description of renewable electricity procurement practices

(4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

☑ Yes, in line with the Paris Agreement

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

BOM_approved_ZF_Corporate_Environmental_Health_and_Safety_Targets_2021-2025.pdf

Row 2

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Water

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

(4.6.1.4) Explain the coverage

ZF has several environmental policies in place. The company addresses and operationalizes a range of environmental topics through its comprehensive Environmental, Health and Safety (EHS) policy. ZF's EHS targets cover the timeframe 2021–2025. ZF is member of the UN Global Compact since 2012. As part of our membership, we are committed to all Sustainable Development Goals (SDGs) including SDG 6 on water. ZF's commitment to using water sparingly and sustainably — including water stewardship and collective actions — is published on www.zf.com. (https://www.zf.com/mobile/en/sustainability/climate_and_nature/climate_and_nature.html#accordeon_3_1426947_6)

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to a circular economy strategy

☑ Commitment to comply with regulations and mandatory standards
☑ Commitment to respect legally designated protected areas

Water-specific commitments
☑ Commitment to reduce water consumption volumes
☑ Commitment to reduce water withdrawal volumes
☑ Commitment to reduce or phase out hazardous substances
☑ Commitment to control/reduce/eliminate water pollution
☑ Commitment to safely managed WASH in local communities
☑ Commitment to water stewardship and/or collective action

(4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply
☑ Yes, in line with Sustainable Development Goal 6 on Clean Water and Sanitation

(4.6.1.7) Public availability

Select from:
☑ Publicly available

(4.6.1.8) Attach the policy

BOM_approved_ZF_Corporate_Environmental_Health_and_Safety_Targets_2021-2025.pdf

Row 3

(4.6.1.1) Environmental issues covered

Select all that apply
☑ Biodiversity

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Upstream value chain

(4.6.1.4) Explain the coverage

ZF's activities and that of its value chain depend on biodiversity and have an impact on it. Therefore, ZF endorses the draft of the Kunming-Montreal Global Biodiversity Framework (GBF) adopted at the 2022 United Nations Biodiversity Conference in Montreal (COP15). ZF complies with the legal requirements regarding the protection of biodiversity and expects the same from its business partners. ZF welcomes the objectives of the EU Biodiversity Strategy. ZF expects business partners to analyze the interrelation between their dependencies and impacts on nature and set an adequate level of ambition for their business to support the targets of the Kunming-Montreal Global Biodiversity Framework (GBF) and not contribute to deforestation or the degradation of natural forests and include the preservation of ecosystems or species protection. Business partners should protect ecosystems, especially key biodiversity areas, impacted by their operations, avoid illegal deforestation and minimize land-use in accordance with international biodiversity regulations, including the IUCN Resolutions and Recommendations on Biodiversity. Where appropriate, business partners should monitor and control their impact on soil quality to prevent soil erosion, nutrient degradation, subsidence and contamination.

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to a circular economy strategy

☑ Commitment to avoidance of negative impacts on threatened and protected species

☑ Commitment to comply with regulations and mandatory standards

☑ Commitment to respect legally designated protected areas

Social commitments

☑ Commitment to respect and protect the customary rights to land, resources, and territory of Indigenous Peoples and Local Communities

(4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

☑ Yes, in line with the Kunming-Montreal Global Biodiversity Framework

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

zf_bpc_en.pdf

Row 4

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Climate change

☑ Water

☑ Biodiversity

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(4.6.1.4) Explain the coverage

ZF Policy Statement on Respect for Human Rights: In times of transformation, we as a globally active company shoulder particular social responsibility. It is our task to identify environmental and human rights risks in connection with our business activities along the entire value chain and to reduce them. Sustainability is an integral part of our Group strategy and spans a wide range of topics related to the environment, society and responsible corporate governance. In the field of the environment and climate protection, the focus is on measures to achieve our climate targets and the development of circular business models, products and processes. With regard to social responsibility, the safety of our employees, the promotion of fair working conditions and the rights of all people along our value chain represent our top priority. In terms of responsible corporate governance, we focus on the question of how we can create lasting values for our society and our business alike. Our actions are based on international standards and frameworks that focus on the rights holders and help us to systematically comply with our due diligence. The United Nations 2030 Agenda should be mentioned in particular. The 17 Sustainable Development Goals (SDGs) are a global plan to promote sustainable peace and prosperity and to protect our planet.

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to a circular economy strategy

☑ Commitment to comply with regulations and mandatory standards

☑ Commitment to take environmental action beyond regulatory compliance

☑ Commitment to stakeholder engagement and capacity building on environmental issues

Climate-specific commitments

☑ Commitment to net-zero emissions

Water-specific commitments

☑ Commitment to reduce or phase out hazardous substances

☑ Commitment to control/reduce/eliminate water pollution

☑ Commitment to safely managed WASH in local communities

(4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

☑ Yes, in line with the Paris Agreement

☑ Yes, in line with Sustainable Development Goal 6 on Clean Water and Sanitation

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

ZF_Policy_Statement_on_Respect_for_Human_Rights.pdf
[Add row]

(4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

(4.10.1) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

Select from:

☑ Yes

(4.10.2) Collaborative framework or initiative

Select all that apply

☑ Science-Based Targets Initiative (SBTi)

☑ UN Global Compact

☑ Other, please specify :World Economic Forum (WEF) First Movers Coalition and the Alliance of CEO Climate Leaders; Responsible Supply Chain Initiative; Catena-X

(4.10.3) Describe your organization’s role within each framework or initiative

UN Global Compact: ZF committed itself to acting in a socially responsible manner by signing the United Nations Global Compact in 2012. Since joining ZF has also become a member of the Global Compact Network Germany and actively participates in exchanges between the member companies. World Economic Forum (WEF): ZF actively engages in two initiatives of the World Economic Forum (WEF) the First Movers Coalition FMC and the Alliance of CEO Climate Leaders: 1) The FMC is a coalition of companies using their purchasing power to create early markets for innovative clean technologies in hard to abate sectors. FMC members pledged publicly to purchase at least 10 % (by volume) of their industrial material from using near-zero or zero-carbon solutions by 2030. ZF is a founding member and active partner of the FMC. 2) The Alliance of CEO Climate Leaders represents a CEO-led community committed to raising bold climate ambition and accelerating the net zero transition by setting science-based targets disclosing emissions and catalyzing decarbonization and partnerships across global value chains. Responsible Supply Chain Initiative e.V. (RSCI): ZF joined the initiative for sustainable supply chains in the automotive industry At its core the RSCI has developed a standard and a central platform for a standardized sustainability assessment of production locations. Catena-X: ZF is a founding member of the joint data ecosystem of the automotive industry Catena-X. ZF launched the initiative as an open network for the automotive industry and adjacent industries. It focuses on secure standardized

information and data exchange between companies and enables the digital flow of information across the entire supply chain. This can make supply chains more transparent and thus meet demanding sustainability criteria such as reducing the carbon footprint of products.
[Fixed row]

(4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may (positively or negatively) impact the environment?

(4.11.1) External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the environment

Select all that apply

☑ Yes, we engaged directly with policy makers

☑ Yes, we engaged indirectly through, and/or provided financial or in-kind support to a trade association or other intermediary organization or individual whose activities could influence policy, law, or regulation

(4.11.2) Indicate whether your organization has a public commitment or position statement to conduct your engagement activities in line with global environmental treaties or policy goals

Select from:

☑ Yes, we have a public commitment or position statement in line with global environmental treaties or policy goals

(4.11.3) Global environmental treaties or policy goals in line with public commitment or position statement

Select all that apply

☑ Paris Agreement

☑ Sustainable Development Goal 6 on Clean Water and Sanitation

(4.11.4) Attach commitment or position statement

ZFFR-GER-001-OFF__Validation Certificate_SBTI.pdf

(4.11.5) Indicate whether your organization is registered on a transparency register

Select from:

☑ Yes

(4.11.6) Types of transparency register your organization is registered on

Select all that apply

☑ Mandatory government register

(4.11.7) Disclose the transparency registers on which your organization is registered & the relevant ID numbers for your organization

ZF is registered in the European transparency register (ID: 194094423131-36) and the German transparency register (ID: R001500)

(4.11.8) Describe the process your organization has in place to ensure that your external engagement activities are consistent with your environmental commitments and/or transition plan

ZF observes the debates on the various political levels, collects and checks for effects on the product portfolio, locations, investments, etc. An assessment is obtained via internal technical experts and translated into political messages. We specifically introduce these into the political process via associations, direct talks, or in writing to the relevant stakeholders.
[Fixed row]

(4.11.1) On what policies, laws, or regulations that may (positively or negatively) impact the environment has your organization been engaging directly with policy makers in the reporting year?

Row 1

(4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

EU Green Deal, Revision of CO2 fleet targets for PassCars, LCV and HDV, Type approval regulation (UN ECE & EU), End-of-Life Vehicle Regulation, EU Net-Zero-Industry Act, RePower EU, Company Car taxation Germany, US plug-in vehicle tax credit, US Fuel Economy and emissions standards, EU Taxonomy (Climate Delegated Act), Eurovignette, EPA GHG Emissions Standards (LD, MD, HD), CARB ACCII, ACT, ACF, US e-mobility tax credits

(4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

☑ Climate change

(4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Environmental impacts and pressures

☑ Emissions – CO2

(4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

☑ Global

(4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

☑ Support with minor exceptions

(4.11.1.7) Details of any exceptions and your organization's proposed alternative approach to the policy, law, or regulation

Revision of CO2 Fleet targets: arguing for an approach that is technology open and including renewable fuels (E-Fuels) to also decarbonize the existing fleet.

(4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

☑ Regular meetings

☑ Discussion in public forums

☑ Participation in working groups organized by policy makers

☑ Responding to consultations

☑ Submitting written proposals/inquiries

(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

We are part of the activities of associations (CLEPA, VDA, MEMA) as well as from industry groups. Furthermore, we are in direct contacts with MPs, ministries, EU commissioners, and US regulators and legislators. ZF does not provide funding to policy makers.

(4.11.1.11) Indicate if you have evaluated whether your organization’s engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

☑ Paris Agreement

Row 2

(4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

The EU Corporate Sustainability Reporting Directive (CSRD), The European Sustainability Reporting Standards (ESRS), The Corporate Sustainability Due Diligence Directive (CSDDD)

(4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

☑ Climate change

☑ Water

(4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Environmental impacts and pressures

☑ Emissions – CO2

(4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

☑ Global

(4.11.1.6) Your organization’s position on the policy, law, or regulation

Select from:

☑ Support with minor exceptions

(4.11.1.7) Details of any exceptions and your organization’s proposed alternative approach to the policy, law, or regulation

Revision of timeline / postponement of reporting deadline (OMNIBUS) and simplification of reporting requirements.

(4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

☑ Regular meetings

☑ Discussion in public forums

☑ Participation in working groups organized by policy makers

☑ Responding to consultations

☑ Submitting written proposals/inquiries

(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

We are part of the activities of associations (CLEPA, VDA, MEMA) as well as from industry groups. Furthermore, we are in direct contacts with MPs, ministries, EU commissioners, and US regulators and legislators. ZF does not provide funding to policy makers.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

☑ Paris Agreement

[Add row]

(4.11.2) Provide details of your indirect engagement on policy, law, or regulation that may (positively or negatively) impact the environment through trade associations or other intermediary organizations or individuals in the reporting year.

Row 1

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

☑ German Automotive Association (VDA)

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

☑ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

☑ Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

Environmental and climate protection regulations are the driving force behind automotive developments. Increased efficiency, recycling, and a reduction in emissions benefit both companies and consumers. Preserving natural resources is an integral part of national and European regulation. The Association represents the interests of the automotive industry and supports the regulatory processes with its viewpoints and information. https://www.vda.de/en. Furthermore, ZF joined the VDA-led initiative for sustainable supply chains in the automotive industry called Responsible Supply Chain Initiative e.V. (RSCI). At its core, the RSCI has developed a standard and a central platform for a standardized sustainability assessment of production locations. The initiative also carries out on-site assessments and tracing. The annual RSCI membership fee amounts to 35,000 EUR.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

35000

(4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

The VDA-led Responsible Supply Chain Initiative e.V. (RSCI) aims to support members, suppliers, and stakeholders within the automotive industry and affiliated industries to strive for more responsible supply chains. RSCI aims to join forces for a common and coherent assessment standard to mitigate social and environmental risks and roll out on-site assessments in the supply chain. RSCI membership depends on the previous year's annual turnover of the member company and the type of membership.

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

☑ Paris Agreement

Row 2

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

☑ Other trade association in Europe, please specify :European Association of Automotive Suppliers (CLEPA)

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

☑ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

☑ Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

Protection of the environment and the improvement of air quality are important objectives for the automotive supplier industry. From the conception to the production, suppliers strive to make their products and services ever more environmentally friendly and energy efficient. In general, we do not disclose funding figures/membership fees and therefore set the figure to "zero".

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

☑ Paris Agreement

Row 3

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

☑ Other trade association in Europe, please specify :German Engineering Federation e.V. (VDMA)

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

☑ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

☑ Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The German engineering sector supports the climate change concept of the German government with the committed reduction target in the transport sector and the activities of the national energy efficiency action plan. The federal government presented a draft of the new edition of the German sustainability strategy and invited all stakeholders to comment. The federal government adapts its strategy to the Global Agenda 2030 and to the 17 SGDs. VDMA very much welcomes this alignment. http://www.vdma.org. In general, we do not disclose funding figures/membership fees and therefore set the figure to "zero".

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

☑ Paris Agreement

Row 4

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

North America

☑ Other trade association in North America, please specify :US Motor & Equipment Manufacturers Association (MEMA)

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

☑ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

☑ Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ Yes, and they have changed their position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

MEMA vehicle suppliers are committed to achieving a cleaner transportation future by engaging with U.S. Environmental Protection Agency (EPA) and National Highway Traffic Safety Administration (NHTSA) on the next iteration of vehicle emissions and fuel economy standards for passenger vehicles and heavy trucks, and reaching the Administration's economy-wide carbon neutral goal by 2050. ZF has emphasized the importance of both component/system efficiency and the value of multiple avenues to carbon reduction – including BEV, PHEV, and alternative/renewable fuels. In general, we do not disclose funding figures/membership fees and therefore set the figure to "zero".

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

☑ Paris Agreement

Row 5

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via other intermediary organization or individual

(4.11.2.2) Type of organization or individual

Select from:

☑ Non-Governmental Organization (NGO) or charitable organization

(4.11.2.3) State the organization or position of individual

UN Global Compact

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

☑ Climate change

☑ Water

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

☑ Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

ZF is member of the United Nations Global Compact (UNGC) since 2012 - the world's largest corporate sustainability and corporate social responsibility initiative. Since joining ZF has also become a member of the Global Compact Network Germany and actively participates in exchanges between the member companies. The membership fee of the UNGC depends on the amount of the annual turnover and amounts to 30,000 USD.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

30000

(4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

The United Nations Global Compact (UNGC) fosters sustainable and socially responsible policies and report on their implementation. The annual membership fees are used to further develop programs and services of the UNGC in cooperation with the German network.

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

☑ Paris Agreement

☑ Sustainable Development Goal 6 on Clean Water and Sanitation

[Add row]

(4.12) Have you published information about your organization's response to environmental issues for this reporting year in places other than your CDP response?

Select from:

☑ Yes

(4.12.1) Provide details on the information published about your organization's response to environmental issues for this reporting year in places other than your CDP response. Please attach the publication.

Row 1

(4.12.1.1) Publication

Select from:

☑ In mainstream reports, in line with environmental disclosure standards or frameworks

(4.12.1.2) Standard or framework the report is in line with

Select all that apply

☑ ESRS

☑ TCFD

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

☑ Water

☑ Biodiversity

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Strategy

☑ Governance

☑ Emission targets

☑ Emissions figures

☑ Risks & Opportunities

☑ Value chain engagement

☑ Water accounting figures

☑ Water pollution indicators

☑ Content of environmental policies

(4.12.1.6) Page/section reference

Pages 58 - 105 of ZF annual report

(4.12.1.7) Attach the relevant publication

ZF_AnnualReport24.pdf

(4.12.1.8) Comment

ZF's annual report 2024 incorporating the sustainability report 2024 is publicly available:
https://www.zf.com/master/media/en/corporate/m_zf_com/company/bonds_relations_/financial_reports/annual_report/2024_3/ZF_AnnualReport24.pdf
[Add row]

C5. Business strategy

(5.1) Does your organization use scenario analysis to identify environmental outcomes?

Climate change

(5.1.1) Use of scenario analysis

Select from:
☑ Yes

(5.1.2) Frequency of analysis

Select from:
☑ Every two years

Water

(5.1.1) Use of scenario analysis

Select from:
☑ Yes

(5.1.2) Frequency of analysis

Select from:
☑ Every two years
[Fixed row]

(5.1.1) Provide details of the scenarios used in your organization’s scenario analysis.

Climate change

(5.1.1.1) Scenario used

Climate transition scenarios

☑ IEA NZE 2050

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Liability

☑ Reputation

☑ Technology

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.5°C or lower

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2025

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Speed of change (to state of nature and/or ecosystem services)

☑ Climate change (one of five drivers of nature change)

Finance and insurance

☑ Cost of capital

☑ Sensitivity of capital (to nature impacts and dependencies)

Stakeholder and customer demands

☑ Consumer sentiment

☑ Consumer attention to impact

☑ Impact of nature footprint on reputation

☑ Impact of nature service delivery on consumer

Regulators, legal and policy regimes

☑ Global regulation

☑ Political impact of science (from galvanizing to paralyzing)

☑ Level of action (from local to global)

☑ Global targets

☑ Methodologies and expectations for science-based targets

Relevant technology and science

☑ Granularity of available data (from aggregated to local)

Direct interaction with climate

☑ On asset values, on the corporate

Macro and microeconomy

☑ Domestic growth

☑ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

• Scenario pathways, whereby the Net Zero Emissions by 2050 scenario presents one possible pathway to net zero emissions, and STEPS represents one possible pathway based on current policy settings, and there are many uncertainties that could affect these pathways. • Policy uncertainties, including future developments in, and timing of, policy action and level of ambition. • Socioeconomic uncertainties, including assumptions on population growth and economic activity/ growth, which are kept constant across the scenarios, societal and behavioral changes, and fossil fuel and other commodity price trajectories and markets, which do not reflect fluctuations and price cycles, or unexpected shocks, that characterise markets in practice. • Technological uncertainties, including the pace of technology progress, costs, and the level of support and international cooperation on clean energy innovation. • Geopolitical uncertainties, including assumptions about the level of geopolitical cooperation, which influences the energy sector and global energy system. • Modeling Uncertainties, whereby the scenarios are based on one model (the Global Energy and Climate Model).

(5.1.1.11) Rationale for choice of scenario

This normative scenario portrays a pathway for the energy sector to help limit the global temperature rise to 1.5 °C above pre-industrial levels in 2100 (with at least a 50% probability) with limited overshoot. The NZE Scenario has been fully updated and is the focus of the recently released Net Zero Roadmap. The NZE Scenario meets the key energy-related UN Sustainable Development Goals (SDGs): universal access to reliable modern energy services is reached by 2030, and major improvements in air quality are secured. Each passing year of high emissions and limited progress towards the SDGs makes achieving the goals of the NZE Scenario more difficult but, based on IEA analysis, the recent acceleration in clean energy transitions means that there is still a pathway open to achieving its goals.

Water

(5.1.1.1) Scenario used

Water scenarios

☑ WWF Water Risk Filter

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Acute physical

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2025

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Climate change (one of five drivers of nature change)

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

In 2020, ZF assessed with the WWF Water Risk Filter and operative data all locations for their water risk. Locations that are located in areas of high water stress and have been identified as relevant were then given a stricter water reduction target. The update of the assessment has started in 2024 and is expected to be finalized in 2025.

(5.1.1.11) Rationale for choice of scenario

We conducted a qualitative and quantitative climate scenario analysis. We leverage the climate insights for water security with regards to physical risks. For that, we used climate-related scenario selected for the physical risk of flooding.

Climate change

(5.1.1.1) Scenario used

Climate transition scenarios

☑ IEA STEPS (previously IEA NPS)

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Liability

☑ Reputation

☑ Technology

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 2.0ºC - 2.4ºC

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2025

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Speed of change (to state of nature and/or ecosystem services)

☑ Climate change (one of five drivers of nature change)

Finance and insurance

☑ Cost of capital

☑ Sensitivity of capital (to nature impacts and dependencies)

Stakeholder and customer demands

☑ Consumer sentiment

☑ Consumer attention to impact

☑ Impact of nature footprint on reputation

☑ Impact of nature service delivery on consumer

Regulators, legal and policy regimes

☑ Global regulation

☑ Political impact of science (from galvanizing to paralyzing)

☑ Level of action (from local to global)

☑ Global targets

☑ Methodologies and expectations for science-based targets

Relevant technology and science

☑ Granularity of available data (from aggregated to local)

Direct interaction with climate

☑ On asset values, on the corporate

Macro and microeconomy

☑ Domestic growth

☑ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

• Scenario pathways, whereby the Net Zero Emissions by 2050 scenario presents one possible pathway to net zero emissions, and STEPS represents one possible pathway based on current policy settings, and there are many uncertainties that could affect these pathways. • Policy uncertainties, including future developments in, and timing of, policy action and level of ambition. • Socioeconomic uncertainties, including assumptions on population growth and economic activity/ growth, which are kept constant across the scenarios, societal and behavioral changes, and fossil fuel and other commodity price trajectories and markets, which do not reflect fluctuations and price cycles, or unexpected shocks, that characterize markets in practice. • Technological uncertainties, including the pace of technology progress, costs, and the level of support and international cooperation on clean energy innovation. • Geopolitical uncertainties, including assumptions about the level of geopolitical cooperation, which influences the energy sector and global energy system. • Modeling Uncertainties, whereby the scenarios are based on one model (the Global Energy and Climate Model).

(5.1.1.11) Rationale for choice of scenario

● This scenario is designed to provide a sense of the prevailing direction of energy system progression, based on a detailed review of the current policy landscape. ● Whereas the APS reflects what governments say they will achieve, the STEPS looks in detail at what they are actually doing to reach their targets and objectives across the energy economy. ● Outcomes in the STEPS reflect a detailed sector-by-sector review of the policies and measures that are actually in place or that have been announced; aspirational energy or climate targets are not automatically assumed to be met.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 4.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ SSP2

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Liability

☑ Reputation

☑ Technology

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 2.5ºC - 2.9ºC

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2025

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Speed of change (to state of nature and/or ecosystem services)

☑ Climate change (one of five drivers of nature change)

Finance and insurance

☑ Cost of capital

☑ Sensitivity of capital (to nature impacts and dependencies)

Stakeholder and customer demands

☑ Consumer sentiment

☑ Consumer attention to impact

☑ Impact of nature footprint on reputation

☑ Impact of nature service delivery on consumer

Regulators, legal and policy regimes

☑ Global regulation

☑ Political impact of science (from galvanizing to paralyzing)
☑ Level of action (from local to global)
☑ Global targets
☑ Methodologies and expectations for science-based targets

Relevant technology and science
☑ Granularity of available data (from aggregated to local)

Direct interaction with climate
☑ On asset values, on the corporate

Macro and microeconomy
☑ Domestic growth
☑ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

● *Socio Economic and Technological Uncertainties, including assumptions on i) population growth (energy demand, land use, and emissions), ii) economic growth, iii) technological change (innovation in energy production, carbon capture, and efficiency improvements), iv) policy responses (global and regional climate policies)* ● *Climate System Uncertainties, including climate sensitivity analyses, feedback mechanisms, and regional climate variability* ● *Modeling Uncertainties, including varying model parameterization and assumptions as well as different downscaling techniques* ● *Overall constraints, in general data availability, limitation of computational models and scenario assumptions*

(5.1.1.11) Rationale for choice of scenario

SSP2-4.5 scenario describes a "middle-of-the-road" pathway with moderate progress towards sustainability and limited climate policy interventions. It results in a best estimate global temperature rise of around 2.7°C by the end of the 21st century

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios
☑ RCP 8.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ SSP5

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Liability

☑ Reputation

☑ Technology

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 4.0°C and above

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2025

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Speed of change (to state of nature and/or ecosystem services)

☑ Climate change (one of five drivers of nature change)

Finance and insurance

☑ Cost of capital

☑ Sensitivity of capital (to nature impacts and dependencies)

Stakeholder and customer demands

☑ Consumer sentiment

☑ Consumer attention to impact

☑ Impact of nature footprint on reputation

☑ Impact of nature service delivery on consumer

Regulators, legal and policy regimes

☑ Global regulation

☑ Political impact of science (from galvanizing to paralyzing)

☑ Level of action (from local to global)

☑ Global targets

☑ Methodologies and expectations for science-based targets

Relevant technology and science

☑ Granularity of available data (from aggregated to local)

Direct interaction with climate

☑ On asset values, on the corporate

Macro and microeconomy

☑ Domestic growth

☑ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

● Socio Economic and Technological Uncertainties, including assumptions on i) population growth (energy demand, land use, and emissions), ii) economic growth, iii) technological change (innovation in energy production, carbon capture, and efficiency improvements), iv) policy responses (global and regional climate policies) ● Climate System Uncertainties, including climate sensitivity analyses, feedback mechanisms, and regional climate variability ● Modeling Uncertainties, including varying model parameterization and assumptions as well as different downscaling techniques ● Overall constraints, in general data availability, limitation of computational models and scenario assumptions

(5.1.1.11) Rationale for choice of scenario

SSP5-8.5 scenario, also called business as usual (BAU) scenario, outlines a pathway driven by rapid economic growth and a strong reliance on fossil fuels, leading to a very high-carbon global economy.

Water

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 4.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ SSP2

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Liability

☑ Reputation

☑ Technology

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 2.5ºC - 2.9ºC

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2025

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Speed of change (to state of nature and/or ecosystem services)

☑ Climate change (one of five drivers of nature change)

Finance and insurance

☑ Cost of capital

☑ Sensitivity of capital (to nature impacts and dependencies)

Stakeholder and customer demands

☑ Consumer sentiment

☑ Consumer attention to impact

☑ Impact of nature footprint on reputation

☑ Impact of nature service delivery on consumer

Regulators, legal and policy regimes

☑ Global regulation

☑ Political impact of science (from galvanizing to paralyzing)

☑ Level of action (from local to global)

☑ Global targets

☑ Methodologies and expectations for science-based targets

Relevant technology and science

☑ Granularity of available data (from aggregated to local)

Direct interaction with climate

☑ On asset values, on the corporate

Macro and microeconomy

☑ Domestic growth

☑ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

● Socio Economic and Technological Uncertainties, including assumptions on i) population growth (energy demand, land use, and emissions), ii) economic growth, iii) technological change (innovation in energy production, carbon capture, and efficiency improvements), iv) policy responses (global and regional climate policies) ● Climate System Uncertainties, including climate sensitivity analyses, feedback mechanisms, and regional climate variability ● Modeling Uncertainties, including varying model parameterization and assumptions as well as different downscaling techniques ● Overall constraints, in general data availability, limitation of computational models and scenario assumptions

(5.1.1.11) Rationale for choice of scenario

SSP2-4.5 scenario describes a "middle-of-the-road" pathway with moderate progress towards sustainability and limited climate policy interventions. It results in a best estimate global temperature rise of around 2.7°C by the end of the 21st century

Water

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 8.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ SSP5

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy
☑ Market
☑ Liability
☑ Reputation
☑ Technology
☑ Acute physical
☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 4.0°C and above

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2025
☑ 2030
☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature
☑ Speed of change (to state of nature and/or ecosystem services)
☑ Climate change (one of five drivers of nature change)

Finance and insurance

☑ Cost of capital

☑ Sensitivity of capital (to nature impacts and dependencies)

Stakeholder and customer demands

☑ Consumer sentiment

☑ Consumer attention to impact

☑ Impact of nature footprint on reputation

☑ Impact of nature service delivery on consumer

Regulators, legal and policy regimes

☑ Global regulation

☑ Political impact of science (from galvanizing to paralyzing)

☑ Level of action (from local to global)

☑ Global targets

☑ Methodologies and expectations for science-based targets

Relevant technology and science

☑ Granularity of available data (from aggregated to local)

Direct interaction with climate

☑ On asset values, on the corporate

Macro and microeconomy

☑ Domestic growth

☑ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

● *Socio Economic and Technological Uncertainties, including assumptions on i) population growth (energy demand, land use, and emissions), ii) economic growth, iii) technological change (innovation in energy production, carbon capture, and efficiency improvements), iv) policy responses (global and regional climate policies)* ● *Climate System Uncertainties, including climate sensitivity analyses, feedback mechanisms, and regional climate variability* ● *Modeling*

Uncertainties, including varying model parameterization and assumptions as well as different downscaling techniques ● Overall constraints, in general data availability, limitation of computational models and scenario assumptions

(5.1.1.11) Rationale for choice of scenario

SSP5-8.5 scenario, also called business as usual (BAU) scenario, outlines a pathway driven by rapid economic growth and a strong reliance on fossil fuels, leading to a very high-carbon global economy.
[Add row]

(5.1.2) Provide details of the outcomes of your organization's scenario analysis.

Climate change

(5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

☑ Risk and opportunities identification, assessment and management

☑ Strategy and financial planning

☑ Resilience of business model and strategy

☑ Capacity building

☑ Target setting and transition planning

(5.1.2.2) Coverage of analysis

Select from:

☑ Organization-wide

(5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

• The Climate Risk Analysis conducted in 2024 included both physical risks and transitional risks/opportunities assessment. • On physical climate risk scenario analysis: • Run across full value chain, focus own operations • Considered climate scenarios: 4C high emission & 2.5C current policy scenario • Considered time horizons: short-term 2025/current, mid-term 2030, long-term 2050; with focus on: 2050 • Qualitative scenario analysis run over all of ZF's ca. 550 spatial units worldwide, i.e. distinct geographically connected properties, incl. production plants, warehouses, tech centers and administration buildings • Insurance values used as proxy for criticality of the spatial unit (property damage – include buildings, machinery and stock values; and business interruption –

include annual sales amount) • Consideration of 28 natural hazards (acute and chronic) defined in ESRS E1 Climate change • Thereof 15 natural hazards assessed as relevant for ZF (based on cross-functional internal expertise and experience as well as external expert opinion) • Natural hazards criteria: historical (short-term/today) risk rating means sites exposed already today to e.g. flooding vs. future change rating (long term 2050) of the same risk, i. e. which sites will be exposed in 2050 to the same hazard because of climate change. • Internal prioritization workshop for identification of ZF's most relevant natural hazards to focus on; from 15 ZF relevant natural hazards, considering exposure, hazard and vulnerability, the following 2 hazards considering today risk rating and future change signal were selected for an in-depth scenario analysis, business impact assessment and resilience analysis: o Riverine flooding o Water scarcity • ZF set up internal focus working groups for both riverine flooding and water scarcity risks to align on approach, assumptions and for validations and strategic deriving requirements. First deep dive analysis and quantification for selected sites conducted (focus was on relevant ZF production sites exposed to those hazards) Validation of results and resilience analysis ongoing. First operational and /or strategic implications triggered, as outcome of the scenario analysis: Internal alignment for additional adaptation and mitigation measures of climate risks based on locations and portfolio initiated, with focus on readiness and resilience need for flooding-related events, Incorporation in manufacturing footprint process, Prioritization of Business Continuity Management activities with regard to response plans, Optimization of insurance coverage, with focus on water-related events • On transition climate risk and opportunity scenario analysis: • Starting point: Screening of ZF business model and value chain against potential transition risk and opportunity 'events' in line with CSRD categories (e.g., Policy and Legal, Market, Technology, Energy source etc.) • Considered climate scenarios: 1.5C decarbonization scenario & 2.5C current policy scenario • Considered time horizons: short-term 2025/current, mid-term 2030, long-term 2050 • Long list of 33 transition risks and opportunities identified. Further screening with ZF internal stakeholders/experts and exclusion of topics with a low degree of change under a 1.5C and/or low potential business impact rating. As result 17 transitional risks and opportunities prioritized. • Internal prioritization workshop with cross-functional stakeholders based on potential impact and climate change signal to identify ZF's top transition risks and opportunities. Final selection of 2 transitional risks & opportunities to focus on for in-depth scenario analysis, business impact assessment and future resilience analysis: Steel production costs: o Automotive market transition in the passenger segment: First operational and /or strategic implications triggered, as outcome of the scenario analysis: Incorporation into strategic planning, with focus on capital allocations, Consideration in purchasing and procurement strategy, Prioritization of Business Continuity Management activities with regard to response plans.

Water

(5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

☑ Risk and opportunities identification, assessment and management

☑ Strategy and financial planning

☑ Resilience of business model and strategy

☑ Capacity building

☑ Target setting and transition planning

(5.1.2.2) Coverage of analysis

Select from:

☑ Organization-wide

(5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

• The Climate Risk Analysis conducted in 2024 included both physical risks and transitional risks/opportunities assessment. • On physical climate risk scenario analysis: • Run across full value chain, focus own operations • Considered climate scenarios: 4C high emission & 2.5C current policy scenario • Considered time horizons: short-term 2025/current, mid-term 2030, long-term 2050; with focus on: 2050 • Qualitative scenario analysis run over all of ZF's ca. 550 spatial units worldwide, i.e. distinct geographically connected properties, incl. production plants, warehouses, tech centers and administration buildings • Insurance values used as proxy for criticality of the spatial unit (property damage – include buildings, machinery and stock values; and business interruption – include annual sales amount) • Consideration of 28 natural hazards (acute and chronic) defined in ESRS E1 Climate change • Thereof 15 natural hazards assessed as relevant for ZF (based on cross-functional internal expertise and experience as well as external expert opinion) • Natural hazards criteria: historical (short-term/today) risk rating means sites exposed already today to e.g. flooding vs. future change rating (long term 2050) of the same risk, i. e. which sites will be exposed in 2050 to the same hazard because of climate change. • Internal prioritization workshop for identification of ZF's most relevant natural hazards to focus on; from 15 ZF relevant natural hazards, considering exposure, hazard and vulnerability, the following 2 hazards considering today risk rating and future change signal were selected for an in-depth scenario analysis, business impact assessment and resilience analysis: o Riverine flooding o Water scarcity • ZF set up internal focus working groups for both riverine flooding and water scarcity risks to align on approach, assumptions and for validations and strategic deriving requirements. First deep dive analysis and quantification for selected sites conducted (focus was on relevant ZF production sites exposed to those hazards) Validation of results and resilience analysis ongoing. First operational and /or strategic implications triggered, as outcome of the scenario analysis: Internal alignment for additional adaptation and mitigation measures of climate risks based on locations and portfolio initiated, with focus on readiness and resilience need for flooding-related events, Incorporation in manufacturing footprint process, Prioritization of Business Continuity Management activities with regard to response plans, Optimization of insurance coverage, with focus on water-related events • On transition climate risk and opportunity scenario analysis: • Starting point: Screening of ZF business model and value chain against potential transition risk and opportunity 'events' in line with CSRD categories (e.g., Policy and Legal, Market, Technology, Energy source etc.) • Considered climate scenarios: 1.5C decarbonization scenario & 2.5C current policy scenario • Considered time horizons: short-term 2025/current, mid-term 2030, long-term 2050 • Long list of 33 transition risks and opportunities identified. Further screening with ZF internal stakeholders/experts and exclusion of topics with a low degree of change under a 1.5C and/or low potential business impact rating. As result 17 transitional risks and opportunities prioritized. • Internal prioritization workshop with cross-functional stakeholders based on potential impact and climate change signal to identify ZF's top transition risks and opportunities. Final selection of 2 transitional risks & opportunities to focus on for in-depth scenario analysis, business impact assessment and future resilience analysis: Steel production costs: o Automotive market transition in the passenger segment: First operational and /or strategic implications triggered, as outcome of the scenario analysis: Incorporation into strategic planning, with focus on capital allocations, Consideration in purchasing and procurement strategy, Prioritization of Business Continuity Management activities with regard to response plans
[Fixed row]

(5.2) Does your organization's strategy include a climate transition plan?

(5.2.1) Transition plan

Select from:

☑ Yes, we have a climate transition plan which aligns with a 1.5°C world

(5.2.3) Publicly available climate transition plan

Select from:

☑ Yes

(5.2.4) Plan explicitly commits to cease all spending on, and revenue generation from, activities that contribute to fossil fuel expansion

Select from:

☑ No, and we do not plan to add an explicit commitment within the next two years

(5.2.6) Explain why your organization does not explicitly commit to cease all spending on and revenue generation from activities that contribute to fossil fuel expansion

ZF is a global technology company. We supply mobility systems for passenger cars, commercial vehicles, and industrial technology. ZF offers comprehensive product and software solutions In the four technology domains of Vehicle Motion Control, Integrated Safety, Automated Driving and Electric Mobility. While we believe in the growing electric mobility business and drive the technological transformation towards electric mobility, we do not refrain from doing business with internal combustion engines.

(5.2.7) Mechanism by which feedback is collected from shareholders on your climate transition plan

Select from:

☑ Our climate transition plan is voted on at AGMs and we also have an additional feedback mechanism in place

(5.2.8) Description of feedback mechanism

ZF's shareholders regularly review and decide upon the company strategy. Within ZF's company strategy "Next Generation Mobility", climate neutrality by 2040 in all three emission scopes represents one of four key performance indicators. Moreover, ZF shareholders are involved in the release of ZF's annual report. The annual report incorporates ZF's sustainability report and includes climate transition-related aspects.

(5.2.9) Frequency of feedback collection

Select from:

☑ Annually

(5.2.10) Description of key assumptions and dependencies on which the transition plan relies

The transition plan builds on the premises of the Paris Agreement. Moreover, the transition plan assumes a worldwide increase of climate-related regulation and depends on market developments and customer requirements.

(5.2.11) Description of progress against transition plan disclosed in current or previous reporting period

ZF set science-based targets approved by the Science Based Targets initiative (SBTi) in January 2022. Accordingly, ZF aims to reduce Scope 1 and Scope 2 by 80% and Scope 3 by 40% relative to sales by 2030 with 2019 as a base year. Furthermore, ZF committed to increase its annual procurement of electricity from renewable energies from 10% in 2019 to 100% by 2030. In 2023, the Board of Management decided to bring forward the target of 100% renewable energies in all plants from 2030 to 2025. The decision takes into account increasing social and market requirements, underscores ZF's climate ambition, and illustrates the progress of ZF's climate transition plan. Besides, ZF's annual reports and ZF's CDP reports annually disclose GHG emissions. The reporting illustrates an annual reduction of each Scope 1, Scope 2, and Scope 3 emissions over the last years.

(5.2.12) Attach any relevant documents which detail your climate transition plan (optional)

ZF_AnnualReport24.pdf,ZFFR-GER-001-OFF__Validation Certificate_SBTI.pdf,85019281_ZFGreenFinanceReport2025_RY_2024.pdf

(5.2.13) Other environmental issues that your climate transition plan considers

Select all that apply

☑ No other environmental issue considered

[Fixed row]

(5.3) Have environmental risks and opportunities affected your strategy and/or financial planning?

(5.3.1) Environmental risks and/or opportunities have affected your strategy and/or financial planning

Select from:

☑ Yes, both strategy and financial planning

(5.3.2) Business areas where environmental risks and/or opportunities have affected your strategy

Select all that apply

☑ Products and services

☑ Upstream/downstream value chain

☑ Investment in R&D

☑ Operations

[Fixed row]

(5.3.1) Describe where and how environmental risks and opportunities have affected your strategy.

Products and services

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

For ZF as a technology company, climate-related risks and opportunities have a significant influence on the company's strategic direction. Situation: ZF incorporated climate action in our "Next Generation Mobility" Strategy and our sustainability strategy. Climate neutrality in all three emission scopes by 2040 represents one of four key performance indicators in ZF's strategy, next to sales growth, EBIT and regional sales split. Moreover, in ZF's sustainability framework, climate action is prominent and operationalized by the reduction of emissions across the value chain and the use and production of renewable energy. Task: ZF's climate strategy targets to achieve net zero emissions in all three scopes by 2040. ZF committed to reduce our corporate carbon footprint until 2030 by an absolute figure of 80% regarding Scope 1 and Scope 2 and by 40% relative to sales regarding Scope 3. These mid-term targets were approved by the Science Based Target initiative (SBTi) in January 2022. Action: We support automotive manufacturers in reducing the CO2 emissions of their products. Regarding Scope 3 emissions, the strategy focuses on improving product design, material selection, electrification, and supply chain structures. Moreover, in 2020 ZF announced to cease investments in transmissions exclusively designed for internal combustion engine vehicles but to focus its development activities on flexible platform technologies for e-mobility. Result: Climate action is strategically incorporated into ZF's product development process (GDPEP Global Development and Product Evolution Process). It entails necessary

activities and check points that require the development teams i.e., to create transparency on the product carbon footprint, assess potential suppliers for sustainable materials, or to define a conclusive service strategy to enable remanufacturing or recycling.

Upstream/downstream value chain

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Environmental risks/opportunities have significantly shaped ZF´s upstream supply chain strategy, particularly in response to climate change, regulatory pressure, and stakeholder expectations. ZF focuses on the supply chain in order to realize its strategic goal of climate neutrality in all three emission scopes by 2040. The double materiality assessment from 2024 helped to identify material risks and opportunities in the supply chain, which had been integrated in the supplier strategy. ZF Suppliers must implement the below (amongst the others) decarbonization requirements, which are measured and tracked and are the prerequisite for the awarding process 1.To be able to evaluate the sustainability performance of suppliers, we apply the ZF Sustainability Score in sourcing and a New Supplier Approval Process. It requires compliance with minimum requirements and measures sustainability performance using three key values: the green electricity share in 2025, the result of the NQC sustainability questionnaire and the acceptance of the ZF Business Partner. Code of Conduct. In December 2024 almost 61% (2023: 47) of responsible spend PM Suppliers reached the 65% SUS Score benchmark. 2.Green Electricity is one of the most powerful decarbonization levers and became a knock- out criterion for new sourcing cases. Our PM Suppliers are requested to submit their 100% Green Electricity commitment by 2025. It means they need to produce ZF parts with 100% renewable electricity. Number of suppliers who agreed to this transition in December 2024 increased to 64,4 % (2023: 42%). Green Electricity campaign was actively driven through 2024 on multiple levels. In 2025 we tightened the requirements and added GE verification process and updated ZF Supplier Guide on Green Energy. 3.Since 2023 our Suppliers are required to provide their product carbon footprint for each produced part for ZF. Supplier' s PCF is continuously tracked and challenged. In 2024 our Suppliers were expected to provide PCF primary data according to ZF Calculation Method Supply Chain (2023), which was replaced by Catena X rulebook in March 2025. Furthermore, to be awarded our PM Suppliers need to accept and fulfill ZFs Corporate Sustainability Bid Condition. This set of sustainability corporate requirements inc. climate/ decarbonization and environmental topics alongside social compliance and responsible sourcing was introduced in 2023 and was continuously implemented in 2024. The bid conditions go under review on regular basis to capture new sustainability expectations (Data transparency, Decarb. Materials, Energy efficiency, critical raw materials etc.) from our stakeholders. To track progress of decarbonization activities, in 2024 we created a PowerBi report- 'Decarbonization roadmap', which provides transparency on carbon emissions and breaks down CCF into divisional and cluster levels. Its analysis helps us to derive the follow up actions with the Suppliers.

Investment in R&D

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

ZF's strategy aims at ensuring a clean, safe, comfortable, and affordable mobility. Developing green and sustainable products is an integral part of this strategy. Situation: Sustainability in product development is a key objective of Research and Development (R&D) at ZF. One of ZF's strategic goals is to significantly lower mobility-related carbon emissions by offering new products to the market and reduce our own specific product-related emissions. Task: ZF's aim is to achieve a 40% reduction of Scope 3 emissions (CO2e per sales) by 2030 compared to 2019. Key performance indicators for target achievement include product-related CO2e reduction and to develop and offer a strong product portfolio suitable for the clean transportation and renewable energy industry. Action: ZF pursues investments in product development by addressing our existing product portfolio, invest in developing new products and researching ways to contribute to a circular economy. ZF is investing in technologies and innovations that focus on the efficient use of energy. We are working of on efficient drives for all types of vehicles as well as efficient energy management. Therefore, we are researching and developing opportunities to improve the conversion of energy, including systematic algorithms for an optimized driving strategy. ZF also continues the development, manufacture and distribution of wind turbine gear units that supports the global energy transition from fossil fuels to renewables. To address our current products, calculated product carbon footprint (PCF) serves as a basis for identifying CO2e emitters and prioritizing CO2e reduction measures. PCF helps to determine appropriate levers for product development and to offer sustainable products to our customers. ZF has integrated PCF to its global development process. ZF has established the "Green Material Project", that invests R&D efforts focused on the assessment and testing of materials that provide a better CO2e performance with increased recycling content, alternative manufacturing processes and alternate materials. With this, ZF takes care to develop products and selects materials that produce as few emissions as possible in our upstream supply chain but also promote the use of recycled and renewable materials. ZF aims to contribute to a circular economy and achieve the long-term goal of climate-neutral products. ZF aims to integrate circular aspects in the innovation phase and to establish them in fundamental research and customer-specific applications. An example of such an initiative would be ZF's participation in the EU SUSMAGPRO initiative, which considers how to use rare-earth magnets based on neodymium-iron boron that were recycled from motors at the end of lifecycle. Result: R&D investments are vital for advancing ZF's sustainable and green product portfolio. In 2024, ZF's R&D expenditure accounted for 3.557 billion compared to 3.543 billion in 2023.

Operations

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Situation: ZF's ambition is to achieve net zero emissions in all three emission scopes by 2040. As for Scope 1 and Scope 2 emissions ZF's climate strategy focuses on reduction and substitution. ZF undertakes to reduce its absolute Scope 1 and 2 GHG emissions by 80% by 2030, with 2019 as the base year. Task: ZF is represented with 168 production locations in 32 countries. To achieve decarbonization of its locations, ZF focuses on two main levers: Energy efficiency and the switch to green energy. Energy efficiency and avoidance of energy consumption are given priorities for the company. ZF includes all production, administrative and research locations in its efficiency programs. By 2030, the energy efficiency of ZF locations is to be increased by minimum 2% Energy Efficiency p.a. until 2030, 20 percent compared to 2019. Action: All locations regularly evaluate their energy profiles and energy related activities. This includes conducting audits, identifying potentials for improvement, and defining measures for increasing energy efficiency and reducing consumption. All German and European locations regularly undergo external audits based on country- specific standards such as ISO 50001, EN 16247 or ESOS (UK) to meet the European Directive 2012/27/EU (Energy Efficiency Directive, EED). Campaigns to increase efficiency and reduce energy consumption are planned and implemented at all locations, in accordance with the local levels of consumption and target achievement. Each location is expected to establish and maintain standards to improve employee awareness and to promote behavioral changes as well as standards for demand or peak-load management according to local requirements. In order to reduce energy consumption, detailed energy programs, such as the ZF Energy Basics, help the ZF locations to achieve their targets. Result: These measures, in conjunction with the EHS and Energy Management System, considerably improve energy efficiency worldwide. By the end of 2024, 102 locations gained certification. Moreover, renewables accounted for 43% of the total electricity in 2024.
[Add row]

(5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning.

Row 1

(5.3.2.1) Financial planning elements that have been affected

Select all that apply

☑ Revenues
☑ Direct costs
☑ Indirect costs
☑ Access to capital
☑ Capital allocation
☑ Capital expenditures

(5.3.2.2) Effect type

Select all that apply

☑ Risks
☑ Opportunities

(5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

☑ Climate change

(5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

Our Next Generation Mobility strategy aims at ensuring clean, safe, comfortable, and affordable individual mobility – for everyone and everywhere. Our strategy is the answer to the ongoing transformation of our industry and addresses climate-related challenges. Consequently, climate-related risks and opportunities find consideration in our financial planning. Situation: Our Next Generation Mobility identifies climate neutrality in all three emission scopes by 2040 as one out of four key performance indicators for the company. As a mid-term target, ZF commits to reduce its corporate carbon footprint until 2030 by an absolute figure of 80% regarding Scope 1 and Scope 2 and by 40% relative to sales regarding Scope 3. These mid-term targets are approved by the Science Based Target initiative (SBTi) in January 2022. Task: ZF implements the goal of climate neutrality in all emission scopes by 2040 and the mid-term SBTi-targets into its strategic and financial planning. Action: Two examples illustrate this implementation and the consideration of climate-related risks and opportunities in ZF's planning. First, ZF combines its sustainability strategy with its finance strategy. Consequently, ZF extended its sustainable finance portfolio and relies on a Green Finance Framework under which we issued green bonds. The Green Finance Framework was updated in 2024 and is in alignment with EU Taxonomy requirements. The corresponding green bond proceeds are used for the development, production, and sale of products for battery electric vehicles (clean transportation) and for the development, production, and sale of gearboxes for wind turbines (renewable energy). Furthermore, ZF linked a Revolving Credit Facility (RCF) to its sustainability goal of reducing CO2e emissions in all three scopes to achieve climate neutrality by 2040. Second, to support achieving ZF's climate targets, ZF decided link the reduction of Scope 1 and Scope 2 emissions as an indicator for the long-term incentive of ZF's senior management from 2023 onwards. Result: With our approach to anchor ZF's climate ambition, in our financial planning we are well-positioned to meet the needs and requirements of ZF's Next Generation Mobility strategy and to address climate-related risk and opportunities.

[Add row]

(5.4) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition
	Select from: ☑ No, but we plan to in the next two years

[Fixed row]

(5.9) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

(5.9.1) Water-related CAPEX (+/- % change)

-38

(5.9.2) Anticipated forward trend for CAPEX (+/- % change)

0

(5.9.3) Water-related OPEX (+/- % change)

5

(5.9.4) Anticipated forward trend for OPEX (+/- % change)

0

(5.9.5) Please explain

CAPEX change (decrease): less invest due to economic situation and in 2023 there was a huge invest at one location (new wastewater treatment plant) OPEX change (increase): maintenance projects
[Fixed row]

(5.10) Does your organization use an internal price on environmental externalities?

	Use of internal pricing of environmental externalities	Environmental externality priced
	Select from: ☑ Yes	*Select all that apply* ☑ Carbon

[Fixed row]

(5.10.1) Provide details of your organization's internal price on carbon.

Row 1

(5.10.1.1) Type of pricing scheme

Select from:
☑ Shadow price

(5.10.1.2) Objectives for implementing internal price

Select all that apply
☑ Drive low-carbon investment
☑ Conduct cost-benefit analysis
☑ Setting and/or achieving of climate-related policies and targets
☑ Incentivize consideration of climate-related issues in decision making

☑ Reduce upstream value chain emissions
☑ Identify and seize low-carbon opportunities
☑ Influence strategy and/or financial planning
☑ Incentivize consideration of climate-related issues in risk assessment

(5.10.1.3) Factors considered when determining the price

Select all that apply

☑ Alignment with the price of allowances under an Emissions Trading Scheme
☑ Benchmarking against peers
☑ Scenario analysis

(5.10.1.4) Calculation methodology and assumptions made in determining the price

The approximate price level of allowances of the EU Emission Trading Scheme (ETS) in 2023 & 2024 and a benchmark analysis for the automotive sector was used for setting the initial price level. Different price scenarios were discussed and considered. In 2024, we decided to keep a fixed price for the first year of implementation.

(5.10.1.5) Scopes covered

Select all that apply

☑ Scope 1
☑ Scope 2
☑ Scope 3, Category 1 - Purchased goods and services

(5.10.1.6) Pricing approach used – spatial variance

Select from:

☑ Uniform

(5.10.1.8) Pricing approach used – temporal variance

Select from:

☑ Evolutionary

(5.10.1.9) Indicate how you expect the price to change over time

In 2024, we decided to keep a fixed price for the internal carbon price (ICP) for the first year of implementation. For the following years, as climate experts estimate the cost of carbon and climate regulation to increase worldwide, accordingly, price levels for ICP are expected to increase. Within our organization an annual re-evaluation will be conducted to set future price levels in line with external international carbon prices.

(5.10.1.10) Minimum actual price used (currency per metric ton CO2e)

80

(5.10.1.11) Maximum actual price used (currency per metric ton CO2e)

80

(5.10.1.12) Business decision-making processes the internal price is applied to

Select all that apply

☑ Capital expenditure

☑ Operations

☑ Procurement

☑ Product and R&D

☑ Opportunity management

(5.10.1.13) Internal price is mandatory within business decision-making processes

Select from:

☑ No

(5.10.1.14) % total emissions in the reporting year in selected scopes this internal price covers

5

(5.10.1.15) Pricing approach is monitored and evaluated to achieve objectives

Select from:

☑ Yes

(5.10.1.16) Details of how the pricing approach is monitored and evaluated to achieve your objectives

ZF conducted a pilot to analyze the impact and feasibility of an internal carbon price (ICP) in 2023. The ICP was designed as non-binding shadow price within one of ZF's business divisions. The ICP has been rolled out by the end of 2024 within the respective division. The ICP implementation was conducted by end of 2024, monitoring and evaluation started accordingly. Evaluation of the implementation and the effects of the mechanism are planned for 2025.
[Add row]

(5.11) Do you engage with your value chain on environmental issues?

Suppliers

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:
☑ Yes

(5.11.2) Environmental issues covered

Select all that apply
☑ Climate change
☑ Water

Customers

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:
☑ Yes

(5.11.2) Environmental issues covered

Select all that apply

☑ Climate change

Investors and shareholders

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

☑ Yes

(5.11.2) Environmental issues covered

Select all that apply

☑ Climate change

Other value chain stakeholders

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

☑ No, and we do not plan to within the next two years

(5.11.3) Primary reason for not engaging with this stakeholder on environmental issues

Select from:

☑ Judged to be unimportant or not relevant

(5.11.4) Explain why you do not engage with this stakeholder on environmental issues

ZF considers customers, suppliers, investors, and shareholders as most relevant for engaging on environmental issues. Besides, the company prepares for the stakeholder-related requirements of the European Corporate Sustainability Reporting Directive (CSRD) and the corresponding European Sustainability Reporting Standards (ESRS).
[Fixed row]

(5.11.1) Does your organization assess and classify suppliers according to their dependencies and/or impacts on the environment?

Climate change

(5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

Select from:

☑ Yes, we assess the dependencies and/or impacts of our suppliers

(5.11.1.2) Criteria for assessing supplier dependencies and/or impacts on the environment

Select all that apply

☑ Contribution to supplier-related Scope 3 emissions

(5.11.1.3) % Tier 1 suppliers assessed

Select from:

☑ 100%

(5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment

The SUS Score provides ZF with binding instruments for evaluating all suppliers with regard to their sustainability performance. We measure sustainability performance of suppliers based on various criteria, including commitment to 100 % Green Electricity by 2025, acceptance of Business Partner Code of Conduct and NQC self- questionnaire score. Suppliers must achieve a SUS score of over 65%. If the value is below 65%, the supplier must work on improvement measures to achieve the minimum value.

(5.11.1.5) % Tier 1 suppliers meeting the threshold for substantive dependencies and/or impacts on the environment

Select from:

☑ 51-75%

(5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

1500

Water

(5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

Select from:

☑ No, we do not currently assess the dependencies and/or impacts of our suppliers, but we plan to do so within the next two years

[Fixed row]

(5.11.2) Does your organization prioritize which suppliers to engage with on environmental issues?

Climate change

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

☑ Yes, we prioritize which suppliers to engage with on this environmental issue

(5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

☑ In line with the criteria used to classify suppliers as having substantive dependencies and/or impacts relating to climate change

(5.11.2.4) Please explain

For the running business, we always prioritize the suppliers taking into consideration sustainability factors. Suppliers with high emission factors and highest spend are approached by ZF in the first place and engaged in multiple ways with follow up actions ensuring their carbon emissions levels can be decreased. Moreover, we also engage with the suppliers who want to start business with ZF. All suppliers need to fulfill sustainability requirements in the first place (bid conditions incl. decarbonization targets). SUS Score and Product Carbon Footprint (PCF) transparency are to be considered in every sourcing case. In addition, ZF requests all relevant suppliers of production material to disclose the origin of the resources annually using the Conflict Minerals Reporting Template of the Responsible Minerals

Initiative (RMI). The selection of relevant suppliers is based on a due diligence process and follows the OECD five-step plan. The annual conflict minerals report covers about 1000 suppliers. In 2023, ZF introduced the Measure Tracking Reporting Tool for tracking the Supplier's PCF. Since then, the tool enables more purposeful collaboration with suppliers whose PCF sourcing criteria are not met.

Water

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

☑ Yes, we prioritize which suppliers to engage with on this environmental issue

(5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

☑ Regulatory compliance

(5.11.2.4) Please explain

Water related requirements are part of the ZF Sustainability Bid Conditions and are specifically embedded in Environmental Protection section. Here we refer to sustainable water consumption and water pollution management. On top of it there is also a clear requirement on the ISO 14001 implementation and corresponding certificate is to be submitted by the suppliers for evidence. In water related section of the ISO 14001, additional water management guidelines inc. water related risks and opportunities are discussed. Confirmation of the bid conditions and the ISO 14001 certificate provides us with transparency and helps to choose best performing players. Apart from that, suppliers Code of Conduct (Business Partner Code of Conduct) requires sustainable water consumption and reduction in use to minimum in every business activity. Our suppliers need to accept BPCOC and sign ZF Sustainability Bid Conditions as a prerequisite to be considered in sourcing process. In 2025, ZF started the new project on water analysis of impacts, risks, opportunities and dependencies in the suppliers' base. We plan to develop the strategy on qualitative and quantitative water assessment and start with the pilot project for the high risk/ water intensive suppliers in 2026. Our main focus areas will be 'Dependence on water and ecosystem services/systems, Impact on water availability and/or on pollution levels. This will enable us to select and prioritize suppliers we will need to engage with.
[Fixed row]

(5.11.5) Do your suppliers have to meet environmental requirements as part of your organization’s purchasing process?

Climate change

(5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

☑ Yes, environmental requirements related to this environmental issue are included in our supplier contracts

(5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

☑ Yes, we have a policy in place for addressing non-compliance

(5.11.5.3) Comment

ZF may draw legal consequences for violations of the human rights and environmental standards defined in the ZF Business Partner Code of Conduct. This also applies if business partners do not cooperate appropriately or fail to take necessary or agreed measures. In these cases, ZF reserves the right to temporarily suspend the business relationship insofar as this is appropriate and appears to be necessary for the implementation of its Business Partner Code of Conduct and is made with appropriate notice. As a further escalation level, ZF sets the business partner to "New Business on Hold", i.e. this business partner is excluded from new awards. ZF reserves the right to terminate any business relationship for cause with a business partner who fails to comply with the human rights and/or environmental standards defined in the ZF Business Partner Code of Conduct and thus makes it unreasonable for ZF to continue the relationship. ZF will render notice to that business partner in advance of any termination for cause and, if feasible, allow for a remedy period. ZF Sustainability Bid Conditions - contractual document applied in all in sourcing cases - reflect clear mandatory, among others decarbonization targets for our suppliers. Suppliers need to develop their climate neutrality roadmap with SBTi support as preference, create Product Carbon Footprint (PCF) transparency, fulfill recycled material share targets and meet multiple green electricity and energy efficiency requirements.

Water

(5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

☑ Yes, environmental requirements related to this environmental issue are included in our supplier contracts

(5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

☑ Yes, we have a policy in place for addressing non-compliance

(5.11.5.3) Comment

ISO 14001 relates to the design and implementation of an effective environmental management system (EMS) and comprises water-related aspects. All ZF plants are ISO 14001 certified. We, therefore, expect our suppliers to show voluntary commitment to environmental protection by implementing an environmental management system. Suppliers operating foundries, galvanizing and paint shops, manufacturers of Printed Circuit Boards (PCB), primary and secondary cells, electronic components or performing any surface treatment using chemicals or dyes, resins, leather etc., grease and oil shall provide a certificate according to ISO 14001 or an equivalent system. If this certificate is not available, then a time schedule for certification needs to be presented. Water related requirements are part of the ZF Sustainability Bid Conditions and ZF Business Partner Code of Conduct (BPCoC). Both are contractual requirements. In case the supplier is not compliant with BPCoC, ZF has specific processes in place to ensure that its business partners uphold the core values laid out in this BPCoC. In particular, ZF has implemented the Business Partner Integrity Management to help identify and mitigate potential compliance and ethical risks. In this regard, ZF conducts business partner checks and may request its business partners to support these efforts appropriately and reasonably by providing specific information. New water related requirements in the supply chain to follow.
[Fixed row]

(5.11.6) Provide details of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance measures in place.

Climate change

(5.11.6.1) Environmental requirement

Select from:
☑ Monitoring and reduction of Product Carbon Footprint (PCF)/ product life-cycle emissions

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply
☑ Supplier scorecard or rating

☑ Supplier self-assessment

☑ Other, please specify :ZF Sustainability Score Dashboard, Commodity Purchasing Supplier Cockpit, Green Energy (GE) roadmap 2023-2030 for ZF in Supply On Business Directory is to be maintained by the suppliers.

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

☑ 100%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

☑ 51-75%

(5.11.6.7) % tier 1 supplier-related scope 3 emissions attributable to the suppliers required to comply with this environmental requirement

Select from:

☑ 100%

(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers in compliance with this environmental requirement

Select from:

☑ 51-75%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

☑ Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ 100%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics

☑ Developing quantifiable, time-bound targets and milestones to bring suppliers back into compliance

☑ Providing information on appropriate actions that can be taken to address non-compliance

☑ Re-integrating suppliers back into upstream value chain based on the successful and verifiable completion of activities

(5.11.6.12) Comment

In our Bid Conditions we request from our Suppliers to develop a detailed climate neutrality roadmap and set clear science-based targets for carbon reduction. For this purpose, we recommend SBTI as a guidance, but other tools are also acceptable. Green Electricity is mandatory requirement for all new sourcing of production material at year Start of Production (SOP) (latest 2025). The suppliers are also required to request the usage of 100% green electricity also from their own suppliers. The overall ZF decarbonization target was in a first step split into targets on Cluster and Divisional levels, which contribute to the corporate climate neutrality target in 2040. The further detailing of the target into Commodity Team targets and on the business side Product Line targets has been established. Introduced in 2024 Materials Management: Measure Tracking Tool ensures Clusters and Divisions' transparency on carbon emissions levels against the agreed targets and enables the follow up actions with the Suppliers. Clusters and Divisions engage with the supplier base in the Suppliers Dialogues, organize the Supplier events, etc. and introduce required carbon reduction measures in DOC approach: from idea to implementation/ verification. After new activities have been identified and implemented, the Supplier need to provide his PCF again in the SupplyOn.

Water

(5.11.6.1) Environmental requirement

Select from:

☑ Compliance with an environmental certification, please specify :ISO14001

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Certification

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

☑ 100%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

☑ 76-99%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

☑ Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ 100%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics

☑ Developing quantifiable, time-bound targets and milestones to bring suppliers back into compliance

☑ Providing information on appropriate actions that can be taken to address non-compliance

(5.11.6.12) Comment

This is a requirement for new business. ISO 14001 relates to the design and implementation of an effective environmental management system (EMS) and comprises water-related aspects. All ZF plants are ISO 14001 certified. We therefore expect our suppliers to show voluntary commitment to environmental protection by implementing an environmental management system. Suppliers operating foundries, galvanizing and paint shops, manufacturers of Printed Circuit Boards (PCB), primary and secondary cells, electronic components or performing any surface treatment using chemicals or dyes, resins, leather etc., grease and oil shall provide a certificate according to ISO 14001 or an equivalent system. If this certificate is not available, then a time schedule for certification needs to be presented. Our next step will be implementation of the water strategy to assess impacts, risks and opportunities of water related activities in the supply chain. We plan to establish clear water policy, actions and targets which will enable us to draw new water requirements for the suppliers identified in the risk analysis. Currently in the concept phase.

Climate change

(5.11.6.1) Environmental requirement

Select from:

☑ Environmental disclosure through a non-public platform

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Supplier scorecard or rating

☑ Supplier self-assessment

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

☑ 100%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

☑ 51-75%

(5.11.6.7) % tier 1 supplier-related scope 3 emissions attributable to the suppliers required to comply with this environmental requirement

Select from:

☑ 100%

(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers in compliance with this environmental requirement

Select from:

☑ 26-50%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

☑ Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ 100%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics

☑ Providing information on appropriate actions that can be taken to address non-compliance

☑ Re-integrating suppliers back into upstream value chain based on the successful and verifiable completion of activities

(5.11.6.12) Comment

ZF Material Management sustainability team together with cross functional support developed a tool combining different criteria of a supplier's sustainability performance in one solution: the ZF Sustainability Score. Basis for this was to manage and assess the broad variety of supplier information. This was a complex and essential task for our company, especially when this information needs to be easy understandable for everyone. The Sustainability Score, which was launched in May 2023, expects Suppliers' compliance with minimum requirements and measures sustainability performance using different KPI such as: •green electricity share in 2025, • result of the NQC sustainability questionnaire •and acceptance of the ZF Business Partner Code of Conduct. In case the suppliers do not provide the required KPIs, ZF sends them automatic reminders during sourcing with the information they cannot be accepted if they are not compliant. Moreover, ZF Sustainability Business Support is working with the suppliers to improve their targets KPI in the e.g. Supplier's dialogues, theme-specific events, suppliers training courses, etc.

Climate change

(5.11.6.1) Environmental requirement

Select from:

☑ Measuring product-level emissions

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Supplier scorecard or rating

☑ Supplier self-assessment

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:
☑ 100%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:
☑ 51-75%

(5.11.6.7) % tier 1 supplier-related scope 3 emissions attributable to the suppliers required to comply with this environmental requirement

Select from:
☑ 100%

(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers in compliance with this environmental requirement

Select from:
☑ 51-75%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:
☑ Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:
☑ 100%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics

☑ Developing quantifiable, time-bound targets and milestones to bring suppliers back into compliance

(5.11.6.12) Comment

In the end of 2024, we introduced a new tool enabling to track supplier's carbon emissions for running business. PCF Supply On application sends the requests to the suppliers to provide their PCF data, which is to be supported by corresponding PCF verification certificate (e.g. TUV or DEKRA) via SupplyOn Business Directory. Suppliers also need to populate additional fields in the application for plausibility check. The projects started with the first 60 suppliers in 2024 and we continue in 2025 after some lessons learned and further improvements of the application with additional 150 suppliers being onboarded. Our Suppliers were offered lots of training and received communication during the pilot phase. Whether it is a sourcing process or running business, all suppliers are requested to provide their PCF calculations based on the primary data input. If primary data is not available, our tool provides a secondary PCF based on commodity-based emission factors modeled for ZF commodities for each and every purchased part to ensure we have the full transparency. Our target is to increase the share of purchased parts where we have a supplier PCF compared to the parts where we do not have a PCF calculated by the supplier yet. Our Suppliers received the training material on PCF calculation in 2024 on basic and deep dive levels. Moreover, ZF Calculation Method Supply Chain was available for the Suppliers to support in the requirements and calculation guidelines.

Climate change

(5.11.6.1) Environmental requirement

Select from:

☑ Adoption of the UN International Labour Organization Principles

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Supplier scorecard or rating

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

☑ 100%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

☑ 51-75%

(5.11.6.7) % tier 1 supplier-related scope 3 emissions attributable to the suppliers required to comply with this environmental requirement

Select from:

☑ 100%

(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers in compliance with this environmental requirement

Select from:

☑ 51-75%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

☑ Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ 100%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics

(5.11.6.12) Comment

ZF has pledged to uphold globally recognized human rights, such as the principles outlined by the United Nations Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises. We prioritize the rights defined in the International Bill of Human Rights and the fundamental labor standards of the International Labour Organization (ILO). ZF clearly expects its business partners to observe and comply with the principles outlined by the United Nations Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises, all applicable compliance laws and regulations, as well as the core values and principles as defined in this Business Partner Code of Conduct. In December 2024, BPCoC was accepted by 53,7% Production Material Suppliers (with high spend and high risk).

Climate change

(5.11.6.1) Environmental requirement

Select from:

☑ Monitoring and reduction of Product Carbon Footprint (PCF)/ product life-cycle emissions

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Supplier scorecard or rating

☑ Supplier self-assessment

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

☑ 100%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

☑ 51-75%

(5.11.6.7) % tier 1 supplier-related scope 3 emissions attributable to the suppliers required to comply with this environmental requirement

Select from:

☑ 100%

(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers in compliance with this environmental requirement

Select from:

☑ 51-75%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

☑ Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ 100%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics

☑ Developing quantifiable, time-bound targets and milestones to bring suppliers back into compliance

☑ Providing information on appropriate actions that can be taken to address non-compliance

(5.11.6.12) Comment

Product Carbon Footprint (PCF) data of sourced parts is key to transparency on ZF´s scope 3 upstream emissions. In 2022, ZF introduced a CO2e reporting tool for tracking and reporting PCF information. In 2023, the suppliers' PCF became mandatory for cases of high-spend sourcing of production material. As the process of PCF data collection in new sourcings was newly introduced, the number of available PCFs stayed limited in 2023 (25% transparency). Throughout 2023 and 2024 intense live webinars (internal and external) took place: PCF general and PCF Deep Dives training courses were followed by the Q and A with the Suppliers. More than 800 Suppliers took part in these sessions. Furthermore, it was decided to make the disclosure of the PCF data mandatory for all high-volume sourcing cases. The PCF disclosure is requested from our suppliers as part of the Request for Quote (RfQ) process from July 2023 on. Suppliers' PCF data is automatically transferred to ZF's internal sourcing and awarding system. This way, lifecycle costs and PCF values are evaluated by the Sourcing Decision Board (SDB). As a result of our activities, PCF provision rate increased from 25 % in 2023 to 75 % in 2024.

Climate change

(5.11.6.1) Environmental requirement

Select from:

☑ Environmental disclosure through a public platform

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Supplier self-assessment

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

☑ 100%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

☑ 76-99%

(5.11.6.7) % tier 1 supplier-related scope 3 emissions attributable to the suppliers required to comply with this environmental requirement

Select from:

☑ 100%

(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers in compliance with this environmental requirement

Select from:

☑ 76-99%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

☑ Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ 100%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics

☑ Developing quantifiable, time-bound targets and milestones to bring suppliers back into compliance

(5.11.6.12) Comment

According to our Sustainability Bid Conditions, all our Suppliers must complete and share the latest version of the Self-Assessment Questionnaire (SAQ) on sustainability on plant level via the NQC Supplier Assurance Platform. The score is transferred to our internal ZF Sustainability Score tool which helps to identify the compliant suppliers.

Climate change

(5.11.6.1) Environmental requirement

Select from:

☑ Waste and resource reduction and material circularity

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Supplier scorecard or rating

☑ Supplier self-assessment

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:
☑ 100%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:
☑ 76-99%

(5.11.6.7) % tier 1 supplier-related scope 3 emissions attributable to the suppliers required to comply with this environmental requirement

Select from:
☑ 100%

(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers in compliance with this environmental requirement

Select from:
☑ 76-99%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:
☑ Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:
☑ 100%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply
☑ Providing information on appropriate actions that can be taken to address non-compliance

(5.11.6.12) Comment

ZF is aware of the risks to humankind and nature which are linked to material handling and use. As stated in the ZF Business Partners Code of Conduct, ZF expects business partners to reduce material input, use recycled/renewable materials, contribute to closed material and product cycles and promote circularity within their value chain. Circular economy is embedded in the souring process. According to our requirements, suppliers have to produce material in line with circular economy principles. Moreover, Suppliers have to increase the share of secondary raw material (both: recycled material as defined in ISO 14021 and reutilization materials within the process) for all materials. For products with a precise material specification, suppliers shall follow the defined requirements, but parallelly achieve the maximum share of secondary raw material. ZF is also defines disposal of waste in general and from the disposal of hazardous substances. ZF expects business partners to reduce the generation of waste to a minimum. Hence, specific requirements regarding care for natural environment and waste reduction were also considered in sourcing. Recyclables must always be separated and in the best case reused or recycled. Hazardous substances, chemicals and substances must be labeled, and their safe handling, movement, storage, and reuse must be ensured. Waste reduction and Hazardous Substances topic is part of the Business Partner Code of Conduct (2023)

Water

(5.11.6.1) Environmental requirement

Select from:

☑ Environmental disclosure through a public platform

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Supplier scorecard or rating

☑ Supplier self-assessment

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

☑ 100%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

☑ 76-99%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

☑ Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ 100%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Other, please specify

(5.11.6.12) Comment

Basic water related requirements are part of the SAQ self assessment questionnaire maintained by the NQC platform. Our Suppliers are requested to implement water policy, specifically on water quality, water consumption and sustainable water management. There are also questions if the Supplier receives CDP score related to Water and when. Moreover, ZF Suppliers are also expected to develop and introduce a similar approach in their own supply chain. More ZF Group specific supplier requirements will be developed soon.
[Add row]

(5.11.7) Provide further details of your organization's supplier engagement on environmental issues.

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Emissions reduction

(5.11.7.3) Type and details of engagement

Capacity building

☑ Other capacity building activity, please specify :Expanded sustainability organization to drive sustainability across the commodities, divisions and ZF regions

Innovation and collaboration

☑ Collaborate with suppliers on innovations to reduce environmental impacts in products and services

☑ Collaborate with suppliers on innovative business models and corporate renewable energy sourcing mechanisms

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☑ 100%

(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

Select from:

☑ 100%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

To ensure responsible procurement practices, in 2024 ZF Materials Management continued to work with cross-functional Sourcing Alignment Board (SAB). This is the cross - functional awarding committee on divisional level which takes decisions according to the WICF S3_0009 Supplier Selection and Awarding and ensures that the selected suppliers fulfil sustainability, quality, technical, logistics and pricing requirements. Target conflicts are also solved within the SAB. To strengthen the collaboration and communication on an operational level, a Sustainability Business Support (SBS) Organization drove sustainability topics throughout the globe. SBS collaborate within their structures and cover all cross - functional and regional activities, drive sustainability topics and collaborate in sustainability projects with the supplier base. This allows for comprehensive transparency, helps to reduce carbon emissions and identify potential risks, vulnerabilities, and opportunities for improvement. By understanding the practices and operations of our supplier base, ZF can better manage and mitigate risks associated with environmental impacts, labor practices, ethical considerations, and regulatory compliance. By actively assessing and addressing these risks, ZF can minimize potential disruptions, reputational damage, legal liabilities. Our collaboration set up and extra created supportive functions are to reach to 100 % suppliers in long-term scenario. Engaging

with 100% of suppliers ensures that all adhere to the same standards, policies, and regulations set by ZF. This approach helps create a level playing field and fosters a culture of responsibility and ethical conduct.

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☑ Yes, please specify the environmental requirement :Improved sustainability performance in e.g. green electricity procurement, PCF transparency, NQC reqs. Requirements are included in the ZF SUS Score and ZF Bid Conditions.

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Yes

Water

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Other, please specify :ZF is working towards water transparency topics in the supply chain. There will be policy and requirements set for the most impacted suppliers (dependent on water availability and / or water consumption/withdrawal).

(5.11.7.3) Type and details of engagement

Capacity building

☑ Other capacity building activity, please specify :concept phase only

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☑ None

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

ZF Materials Management Concept phase: ZF is working towards water transparency topics in the supply chain. There will be policy and requirements set for the most impacted suppliers (dependent on water availability and / or water consumption/withdrawal).

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☑ No, this engagement is unrelated to meeting an environmental requirement

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ No

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Upstream value chain transparency and human rights

(5.11.7.3) Type and details of engagement

Capacity building

☑ Develop or distribute resources on how to map upstream value chain

☑ Provide training, support and best practices on how to mitigate environmental impact

Information collection

☑ Collect environmental risk and opportunity information at least annually from suppliers

☑ Collect targets information at least annually from suppliers

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☑ 100%

(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

Select from:

☑ 100%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

The extraction of raw materials comes with environmental and social risk. The mining and trading of conflict minerals may contribute to financing armed conflicts or human rights violations. As ZF is aware of these risks, the company strives to comply with environmental and human rights standards along the entire value chain. ZF requests all relevant suppliers of production material to disclose the origin of the resources annually using the Conflict Minerals Reporting Template of the Responsible Minerals Initiative (RMI). The selection of relevant suppliers is based on a due diligence process and follows the OECD five-step plan. The annual conflict minerals reporting covers about 1,000 suppliers. Since these minerals are necessary for technical functions in some of the company's products, ZF works to avoid sourcing from potentially critical smelters. All relevant suppliers receive written notification explaining that ZF is committed to eliminating critical smelters from their supply chains. We also encourage the supplier to source critical raw material from verified sources, using independent third party certification, such as the Initiative for Responsible Mining Assurance (IRMA) standard for responsible mining. Suppliers of 3TG (tin, tantalum, tungsten, and gold), Cobalt, Mica and suppliers that use these raw materials in their products must exercise due diligence following the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict Affected and High-Risk Areas. All requirements which are transparency related are among other mandatory sustainability requirements and part of the contractual agreements for Production Material Suppliers such as ZF Corporate Bid Conditions and ZF Business Partners Code of Conduct. To support our Supplier's transparency, in 2024 we conducted our annual responsible minerals campaign for conflict Minerals and Extended Minerals. Together with our external partner Assent, ZF provided supplier training, conflict minerals due diligence guidelines and ongoing support available via e-mail, chat and phone. In the training, our suppliers could learn about human rights risks in mineral supply chains and relevant international legislation. In addition, the suppliers were instructed how to complete reporting templates and could raise their questions in a Q&A session. In 2024 we published MM HuR due diligence training for the Suppliers identified with risks in social standards (HR DD and Conflict Minerals).

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☑ Yes, please specify the environmental requirement :Sustainable sourcing: Natural Rubber, Critical Raw Materials, Conflict Minerals with Cobalt and Mica as part of the sustainability requirements in sourcing (in ZF Corporate Bid Conditions)

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Yes

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Adaptation to climate change

(5.11.7.3) Type and details of engagement

Capacity building

☑ Provide training, support and best practices on how to make credible renewable energy usage claims

☑ Provide training, support and best practices on how to measure GHG emissions

☑ Support suppliers to set their own environmental commitments across their operations

Information collection

☑ Collect GHG emissions data at least annually from suppliers

Innovation and collaboration

☑ Collaborate with suppliers on innovative business models and corporate renewable energy sourcing mechanisms

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☑ 100%

(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

Select from:

☑ 100%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

To support the rollout of sustainability requirements and to raise awareness on sustainability focus topics in the supply chain, ZF set up a new training platform for the Suppliers: ZF Supplier Academy. It has many functionalities allowing a new training program set up or an option to assign the training to the chosen Suppliers. Moreover, it allows for tracking the participation ratio and supports the Suppliers with the follow up communication topics. Our trainings are available on demand and all of them are free of charge. In 2024 we expanded our training offer with additional deep dives on green electricity. They were provided in multiple languages with focus on selected countries, where GE commitment was the lowest. The aim of this initiative was to support Suppliers whose English is not the first language (e.g. PL, ESP, etc.) Over the course of 2024, ZF offered multiple training sessions on Product Carbon Footprint (PCF) calculation and reporting, Climate Ambition/Sustainability in the Supply Chain. Moreover, Green Electricity procurement and ZF Sustainability requirements: ZF Sustainability Score, ZF Sustainability Bid Conditions including all decarbonization and social responsibility expectations were available for the Suppliers on demand on ZF Supplier Academy. More deep-dive training sessions on sustainability topics were offered free of charge. As green electricity is the most relevant lever to achieving decarbonization of the supply chain, we also developed the "ZF Supplier Guide and FAQ on Green Electricity". It contains definitions and ZF's expectations as well as different procurement options to obtain green electricity (GE). The guide is available for all suppliers in ZF's Supplier Business Portal. Our suppliers benefit from these trainings which is reflected in their consistent approach to switching to Green Power. The share of green power has improved steadily during the year up to 45.9% in 2024 (increase form 41.4% in 2023) and will continue to be driven by ZF until our target of "Increase Green Electricity Spend Coverage with ZF's direct suppliers for Production Material to 100% by 2025 is reached.

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☑ Yes, please specify the environmental requirement :Green electricity requirements, PCF transparency in sourcing, ZF sustainability strategy targets: green material procurement, energy efficiency, responsible sourcing,

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Yes

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Emissions reduction

(5.11.7.3) Type and details of engagement

Capacity building

☑ Develop or distribute resources on how to map upstream value chain

☑ Provide training, support and best practices on how to measure GHG emissions

☑ Support suppliers to develop public time-bound action plans with clear milestones

Information collection

☑ Collect GHG emissions data at least annually from suppliers

Innovation and collaboration

☑ Collaborate with suppliers on innovations to reduce environmental impacts in products and services

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☑ 100%

(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

Select from:

☑ 100%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

Product Carbon Footprint (PCF) data of sourced parts is key to transparency on ZFs scope 3 upstream emissions and ensure that CO2 conscient decisions are taken. In 2023 it was decided to make the disclosure of the PCF data mandatory for all high-volume sourcing cases. The PCF disclosure is requested from our suppliers as part of the Request for Quote (RfQ) process from July 2023 on. Suppliers' PCF data is automatically transferred to ZF's internal sourcing and awarding system. In the beginning of this process, the number of available PCFs stayed limited. To increase the impact of engagement, ZF Materials Management decided to intensify the internal but also external training for suppliers on PCF. PCF general and PCF Deep Dives training courses were provided in the live and on demand sessions followed by the Q and A with the Suppliers. Across 2023 and 2024 more than 800 Suppliers took part in these sessions. Our Suppliers re required commit to 100% green electricity by 2025. To support this transition ZF organize regional Supplier Green Electricity Days, where renewable energy options and verification measures are discussed in detail by internal and external energy experts. In the live events, such as regional Green Electricity Days USA and Mexico, September, 2024 the Suppliers where raised their questions relating to regional energy market and available procurement options. Switch to green fuel also supports the lower Carbon Footprint of the delivered products. To gain full transparency on the product emission level, we developed the tracking system in the Power BI which identifies the supplier's PCF status. As a result of our activities, PCF provision rate increased from 1 % in 2022 to 25 % in 2023. In 2024 we had set a target for Path 1 SWAT Cases- our Suppliers were to provide PCF in 70% nominated cases. We reached this target with 72% cases in Sep,2024and in the end of December 2024 we were close to 90%.

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☑ Yes, please specify the environmental requirement :PCF transparency (ZF Corporate Bid Conditions)

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Yes

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Emissions reduction

(5.11.7.3) Type and details of engagement

Capacity building

☑ Provide training, support and best practices on how to make credible renewable energy usage claims

☑ Support suppliers to set their own environmental commitments across their operations

Innovation and collaboration

☑ Collaborate with suppliers on innovations to reduce environmental impacts in products and services

☑ Collaborate with suppliers to develop reuse infrastructure and reuse models

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☑ 100%

(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

Select from:

☑ 100%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

Careful and efficient use of resources is of central importance to ZF. We expect our suppliers to continuously reduce environmental impacts and hazards and to continuously improve environmental protection within their own sphere of influence. It is necessary to reduce the consumption of resources (especially energy, water,

primary raw primary materials) and environmental impacts (especially emissions, pollutants, waste) must be constantly minimized. Suppliers have to implement an environmental management system in accordance with ISO 14001 or Eco-Management and Audit Scheme (EMAS) and provide evidence thereof by submitting a corresponding certificate. ZF is aware of the hazards to humans and the environment resulting from the disposal of waste in general and from the disposal of hazardous substances. ZF expects business partners to reduce the generation of waste to a minimum. Hence, specific requirements regarding care for natural environment and waste reduction were also considered in sourcing. Recyclables must always be separated and in the best case reused or recycled. Hazardous substances, chemicals and substances must be labeled, and their safe handling, movement, storage, and reuse must be ensured. Waste reduction and Hazardous Substances topic is part of the Business Partner Code of Conduct (2023). To boost decarbonization activities and support the supplier's commitment 100% green electricity (GE) by 2025, ZF Group organized regional green electricity days deep dives with the focus on regions and suppliers who struggled mostly in their transition activities. Together with external experts we provided live sessions where we explained the regional GE market overview, held Q and A sessions and actively engaged our Suppliers in their Best Practices demonstration. To provide the best transparency, we created the sessions in supplier's mother tongue and ensured the recordings/ handouts serve as a training material available to all ZF Suppliers.

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☑ Yes, please specify the environmental requirement :Share of secondary material and Environmental Protection

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Yes

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Emissions reduction

(5.11.7.3) Type and details of engagement

Information collection

☑ Other information collection activity, please specify :Corporate Bid Conditions required in sourcing

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☑ 100%

(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

Select from:

☑ 100%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

In 2024 sustainability related tender conditions were revised. The update made in 2023 including extended requirements regarding climate and environment as well as new requirements for social responsibility and responsible sourcing was still valid. No further adaptions were needed as they covered all sustainability expectations from the external stakeholders. Since the end of 2023, acceptance of the requirements has been mandatory for production material suppliers to be awarded new business. These bid conditions reflect our sustainability strategy, legal and customers' requirements and are regularly maintained according to legislative obligations and international strategies. The main focus in our sustainability bid conditions were 100% Green Electricity commitment at year Start of Production (latest 2025), climate strategy/ roadmap disclosure, Product Carbon Footprint (PCF) disclosure, material specific decarbonization requirements, share of recycled material among others. These initiatives helped the suppliers to incorporate sustainability in their decision making process and improved their sustainability scores.

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☑ Yes, please specify the environmental requirement :PCF transparency, Circularity, Share of recycled material, Green Electricity, etc.

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Yes

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Adoption of the United Nation's International Labour Organization principles

(5.11.7.3) Type and details of engagement

Innovation and collaboration

☑ Engage with suppliers to advocate for policy or regulatory change to address environmental challenges

☑ Facilitate adoption of a unified climate transition approach with suppliers

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☑ 100%

(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

Select from:

☑ 100%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

ZF has pledged to uphold globally recognized human rights, such as the principles outlined by the United Nations Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises. We prioritize the rights defined in the International Bill of Human Rights and the fundamental labor standards of the International Labour Organization (ILO). ZF clearly expects its business partners to observe and comply with the principles outlined by the United Nations

Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises, all applicable compliance laws and regulations, as well as the core values and principles as defined in this Business Partner Code of Conduct.

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☑ No, this engagement is unrelated to meeting an environmental requirement

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Unknown

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Circular economy

(5.11.7.3) Type and details of engagement

Information collection

☑ Collect GHG emissions data at least annually from suppliers

Innovation and collaboration

☑ Collaborate with suppliers on innovations to reduce environmental impacts in products and services

☑ Collaborate with suppliers to develop reuse infrastructure and reuse models

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☑ 100%

(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

Select from:

☑ 100%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

ZF currently runs a number of pilot projects with suppliers, were waste reduction and concept of circularity are continuously developed and improved, e.g. with Voestalpine. Since 2023, in cooperation with Voestalpine ZF has developed a circular concept for tooling steel. ZF is today deeply involved into the tooling planning of our value chain partners for HPDC Tools and has a good understanding when tools need to be replaced. ZF sends the tooling assembled back to Voestalpine (locations/partners are available in each region). Voestapline is recycling those tooling steel (frames and insert separately as different type of steel) and send a new steel block to the tooling makers. With that a significant reduction in CO2 is being achieved which goes along with a cost reduction. With that our value chain partners become more decarbonized and be more competitive. In 2024 ZF continued the work on Tool Steel Loop 5.0 project, in a number of locations globally. Currently the project is still in implementation phase and we work on how to achieve sustainability goals: real generated CO2 credits above 2000 tonnes/ year and integration into Catena X network. Moreover, ZF has worked intensively with key raw material suppliers for aluminum and has performed excessive testing trials. One of the target was to reduce the CO2 footprint of primary aluminum parts and increase the possibility of circularity. This resulted in a reworked Norm for aluminum (ZFN1188 – ZF Delivery Conditions Aluminum casting alloys) which was fully released in 2024. Alloys which were specified in the past only as a primary alloy have now been released also as a recycled alloy which allows use of recycling up to 80%. In addition to that further testing and trials are being performed with the rheo-casting technology to further optimize the CO2 footprint of aluminum parts and replace further the content of primary alloys in ZF´s applications.

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☑ Yes, please specify the environmental requirement :Circular Economy (ZF Corporate Bid Conditions)

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Yes

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Removal of plastic from the environment

(5.11.7.3) Type and details of engagement

Capacity building

☑ Support suppliers to set their own environmental commitments across their operations

Innovation and collaboration

☑ Other innovation and collaboration activity, please specify :Engage and encourage suppliers to reduce plastic in the production line

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☑ 100%

(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

Select from:

☑ 100%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

In June 2024 Division CVS and Corporate Commodity Purchasing organized Supplier's Green Material and Technology Innovation Day 2024, which aimed to showcase latest advancements and innovations in green materials and technology within our industry. It provided a platform for networking, knowledge sharing and

collaboration between ZF employees and suppliers. 20Suppliers had an opportunity to present their sustainable materials, cutting-edge Technologies and innovating process also excluding plastic from operations. Furthermore, there was a deep dive session with the Suppliers where all ZF employees could join for the respective suppliers sessions,. This hybrid event provided a day of exploration, collaboration and insight into sustainable materials and innovative technologies. Commercial Vehicle Solutions (CVS) Division decided to package the mechatronics module for the TraXon commercial vehicle transmission on ZF-internal transport in new, environmentally friendly material and eliminate harmful plastic PET. A new packaging material with a high proportion of reed grass helps to preserve the peatlands that are vital for the climate and to reduce the use of plastic and to cut costs. Reed grass from the peatland, is processed together with recycled paper into transport packaging for transmission components. Manufactured from the more sustainable and even cheaper molded-pulp material, the carbon footprint per tray drops to a tenth of a PET equivalent. In September 2023, the first prototype was available in two different compositions. Two batches of 100 molded-pulp trays were each used as part of daily processes. The second prototype was tested in 2024 with 200 sample trays again under real production conditions. The composite material of paper and reed grass has decisive advantages over PET: It can be produced from sustainably sourced raw materials and recycled efficiently at the end of the product's life. Recycling to return the material to the manufacturing process of alternative packaging would be a perfect contribution to the circular economy. In 2024 the project aimed to start series production and introduce Suppliers to enable sustainable transporting between our plants, but currently on hold.

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☑ Yes, please specify the environmental requirement :circularity

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Yes

Water

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Other, please specify :Business Partner Code of Conduct

(5.11.7.3) Type and details of engagement

Capacity building

☑ Support suppliers to set their own environmental commitments across their operations

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☑ 100%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

Suppliers Code of Conduct (Business Partner Code of Conduct) requires sustainable water consumption and reduction in use to minimum in every business activity. Our suppliers need to accept BPCOC as a prerequisite to be considered in sourcing process. BPCOC requires them to adopt water related KPI and ensure sustainable water consumption and care for natural environment in their operations. Further requirements followed by collaboration with the suppliers and engagement activities will be introduced once the water strategy is complete and becomes part of the sourcing.

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☑ Yes, please specify the environmental requirement :sustainable water management

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Unknown

[Add row]

(5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information on environmental initiatives, progress and achievements

Innovation and collaboration

☑ Align your organization’s goals to support customers’ targets and ambitions

☑ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 100%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ 100%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

ZF regularly aligns with its customers (OEMs) and offers to increase the share of electricity from renewable sources to 100% in all production lines by the end of 2025. Regular discussions and alignments with customers (OEMs) take place during new project sourcing and ongoing program management discussions. With the target to maximize the renewable energy shares across all ZF’s operations and corporate functions, ZF is engaging with our customers (OEMs) to align on the roadmaps to solely deliver parts to them that will have been produced in plants that use 100% electricity from renewable sources. In 2023, the target was brought forward from 2030 to 2025, five years earlier than originally planned.

(5.11.9.6) Effect of engagement and measures of success

Measures implemented for all ZF plants globally, across all product lines, to achieve 100% electricity usage from renewable sources by 2025. “Renewable energy fast tracks” have been implemented for various plants globally to achieve 100% renewable energy already before 2025, in close alignment with customers receiving parts from these plants. Measures to increase the shares of renewable energy are, among others, the installation of renewable energy production capabilities for own

usage at ZF plants and investments in the built up of new renewable energy production facilities, like offshore wind power stations. The measure of success for this initiative is therefore based on ZF being able to achieve a share of 100% electricity from renewable sources for all global plants by 2025. The successful implementation of this measure will result in a significant Scope 2 emissions reduction for ZF and correspondingly, Scope 3 emissions reductions for customers.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information about your products and relevant certification schemes

Innovation and collaboration

☑ Align your organization’s goals to support customers’ targets and ambitions

☑ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ Less than 1%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ 1-25%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

ZF cooperates with one of our braking product line customers (OEM). The specific project focuses on the new sourcing for a battery electric vehicle (BEV) platform with start of production (SOP) in 2025/2026. Specifically, the project aims to significantly increase the share of recycled aluminum. This contributes to a significant CO2 and waste reduction and thereby implements circularity aspects.

(5.11.9.6) Effect of engagement and measures of success

A switch to 100% green electricity in the whole sub-supply chain of the brake controls aluminum valve body (down to electrolysis process) is planned to be implemented in time for the start of production (SOP). In addition, the share of secondary material will be increased by relying on a closed loop for scrap re-usage. The combination of both measures, that will be implemented with the start of SOP of the braking system, is expected to achieve a significant product carbon footprint (PCF) reduction, compared to the usage of the average European electricity mix during the electrolysis process and without a closed-loop aluminum re-usage process.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information about your products and relevant certification schemes

☑ Share information on environmental initiatives, progress and achievements

Innovation and collaboration

☑ Align your organization’s goals to support customers’ targets and ambitions

☑ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

☑ Engage with stakeholders to advocate for policy or regulatory change

☑ Other innovation and collaboration, please specify :Standardization and exchange of environmental data

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 1-25%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ 51-75%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Understanding the importance of cooperation and standardization within the automotive data ecosystem, ZF is a founding member of the joint data platform of the automotive industry, Catena-X. This is an alliance of companies that uses a cloud to enable transparent, standardized and cross-company data exchange and to create a closely cooperating manufacturer and supplier network. ZF experts actively participate in its various working groups. ZF is closely working with all companies engaged within Catena-X, with various of our biggest customers. Further information can be found here: https://press.zf.com/press/en/releases/release_50882.html

(5.11.9.6) Effect of engagement and measures of success

ZF expects five key impact areas through its engagement with Catena-X: 1. Data Ecosystem: Establishing a secure and collaborative data ecosystem for the automotive industry to enhance data sharing and integration across the supply chain. 2. Standardization: Promoting standardized data formats and interfaces to ensure seamless interoperability between different systems and stakeholders. 3. Sustainability: Focusing on sustainability by enabling transparency and traceability of materials and products throughout their lifecycle, supporting circular economy practices. 4. Innovation: Driving innovation through collaborative projects and partnerships, leveraging cutting-edge technologies like AI, IoT, and blockchain. 5. Member Collaboration: Facilitating collaboration among a diverse group of members, including automotive manufacturers, suppliers, technology providers, and research institutions.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Investors and shareholders

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information about your products and relevant certification schemes

Innovation and collaboration

☑ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 100%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ 100%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

ZF engages with investors in Sustainable Finance to fund specific projects with environmental benefits. For that purpose, ZF has published a Green Finance Framework (GFF) based on the Sustainable Development Goals, the ICMA Green Bond Principles and the LMA Green Loan Principles. The company is constantly developing the framework in accordance with current market standards and the EU taxonomy. Under the GFF, ZF issues green bonds in in euros and U.S. dollars. The financing proceeds from green bonds are used for the development, production and sale of products for battery electric vehicles (clean transportation) and for the development, production and sale of gearboxes for wind turbines (renewable energy). Allocated proceeds, climate effects of the financed projects and further details are published in the annual Green Finance Report. For further information see: https://www.zf.com/mobile/en/company/investor_relations/sustainable_finance/sustainable_finance.html#sftaxonomyalignment_acc_493020_0

(5.11.9.6) Effect of engagement and measures of success

The Green Finance Framework (GFF) was established in 2021 and updated in 2024 with EU Taxonomy requirements. Based on the GFF, green bonds were issued over the last years. Green bonds offer financing options for projects that contribute to a lower-emission and climate-friendly economy. This accelerates the transformation of the industry and also offers new opportunities for investors. An annual Green Finance Report provide investors and the public with transparent information about the allocated proceeds and the climate effects of the financed projects. The Green Finance Report 2025 can be accessed here: https://kpmg.bryter.io/s/wEstKqupRqOpUAw27LPLHw/atlas_automation_report_service_01_en?id=b86e91ab-80d6-4ee6-9176-e79939ed4a4d&var=a&m=a

[Add row]

C6. Environmental Performance - Consolidation Approach

(6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data.

Climate change

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

The basis of consolidation corresponds to that of our financial reporting. Accordingly, the consolidated quantitative data of the environmental dimension include the parent company and the subsidiaries controlled by ZF. Associates and joint ventures are not included. Further information can be found in the Annual Report Chapter "Sustainability - General Information", page 59 and Chapter "Basis of consolidation", page 115, 116.

Water

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

The basis of consolidation corresponds to that of our financial reporting. Accordingly, the consolidated quantitative data of the environmental dimension include the parent company and the subsidiaries controlled by ZF. Associates and joint ventures are not included. Further information can be found in the Annual Report Chapter "Sustainability - General Information", page 59 and Chapter "Basis of consolidation", page 115, 116.

Plastics

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

The basis of consolidation corresponds to that of our financial reporting. Accordingly, the qualitative information includes the parent company and the subsidiaries controlled by ZF. Associates and joint ventures are not included. Further information can be found in the Annual Report Chapter "Sustainability - General Information", page 59 and Chapter "Basis of consolidation", page 115, 116.

Biodiversity

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

The basis of consolidation corresponds to that of our financial reporting. Accordingly, the qualitative information includes the parent company and the subsidiaries controlled by ZF. Associates and joint ventures are not included. Further information can be found in the Annual Report Chapter "Sustainability - General Information", page 59 and Chapter "Basis of consolidation", page 115, 116.
[Fixed row]

C7. Environmental performance - Climate Change

(7.1) Is this your first year of reporting emissions data to CDP?

Select from:
☑ No

(7.1.1) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

	Has there been a structural change?	Name of organization(s) acquired, divested from, or merged with	Details of structural change(s), including completion dates
	Select all that apply ☑ Yes, a divestment	*ZF Foxconn Chassis Modules GmbH*	*As of April 30, 2024, Foxconn acquires 50 percent of the shares in ZF Chassis Modules GmbH*

[Fixed row]

(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?
	Select all that apply ☑ No

[Fixed row]

(7.1.3) Have your organization’s base year emissions and past years’ emissions been recalculated as a result of any changes or errors reported in 7.1.1 and/or 7.1.2?

(7.1.3.1) Base year recalculation

Select from:

☑ No, because we have not evaluated whether the changes should trigger a base year recalculation

(7.1.3.3) Base year emissions recalculation policy, including significance threshold

In line with SBTi requirements we apply a 5% significance threshold. The evaluation of Scope 3 emissions, whether the changes should trigger a base year recalculation is ongoing and not yet finalized. Impact of Scope 1 & 2 was evaluated with 1% and well below our threshold of 5%.

(7.1.3.4) Past years’ recalculation

Select from:

☑ No

[Fixed row]

(7.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Select all that apply

☑ 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories

☑ The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

☑ The Greenhouse Gas Protocol: Scope 2 Guidance

☑ The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard

☑ Other, please specify :ZF tool using VDA emission factors

(7.3) Describe your organization’s approach to reporting Scope 2 emissions.

(7.3.1) Scope 2, location-based

Select from:

☑ We are reporting a Scope 2, location-based figure

(7.3.2) Scope 2, market-based

Select from:

☑ We are reporting a Scope 2, market-based figure

(7.3.3) Comment

We have a number of operations where we are able to access electricity supplier emission factors or residual emission factors. Where no specific emission factors are available, we use the same emission factors as for the location-based approach. location-based figure: gross global Scope 2 emissions (metric tons CO2e) consider CO2 fossil, CH4 and N2O; CO2 biogenic is excluded. market-based figure: gross global Scope 2 emissions (metric tons CO2e) consider CO2 fossil, CH4 and N2O; CO2 biogenic is excluded.
[Fixed row]

(7.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

Select from:

☑ No

(7.5) Provide your base year and base year emissions.

Scope 1

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

406000.0

(7.5.3) Methodological details

Energy consumption volumes of all relevant energy types are reported in a standardized process. Volumes are based on supplier invoices if available, otherwise meter status or professional estimations are used. Emissions are calculated using VDA emission factors (provided by German trade association VDA - Association of German automotive industry).

Scope 2 (location-based)

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

1437000.0

(7.5.3) Methodological details

Energy consumption volumes of all relevant energy types are reported in a standardized process. Volumes are based on supplier invoices if available, otherwise meter status or professional estimations are used. Emissions are calculated using VDA emission factors (provided by German trade association VDA - Association of German automotive industry).

Scope 2 (market-based)

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

1371000.0

(7.5.3) Methodological details

Energy consumption volumes of all relevant energy types are reported in a standardized process. Volumes are based on supplier invoices if available, otherwise meter status or professional estimations are used. Emissions are calculated using supplier-specific emission factors which are provided by ZF's energy suppliers.

Scope 3 category 1: Purchased goods and services

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

21688000

(7.5.3) Methodological details

Category 1 Purchased Goods and Services carbon footprint calculation is built on the commodity structure of ZF, using purchasing data. Weights are the main input needed for calculating emissions. Weights and emissions have been calculated based on quantitative and qualitative information for each sub-commodity, where the specific weights per commodity were calculated by multiplying the individual weights of purchased goods and services by their volumes. The emission factors convert the weights per commodity into CO2e emissions. To guarantee accuracy and representativeness, the emissions factor for each sub-commodity were individually determined based on reference technology mixes in the supply chain. The “Scope 3.1” relevant non-production materials calculation is based on spend data, applying the same calculation logic, and is based on environmental input-output databases (World Input-Output Database (WIOD) and the Open IO Database, using the GHG Protocol Scope 3 Evaluator (https://ghgproto-col.org/scope-3-evaluator)).

Scope 3 category 2: Capital goods

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

1485000

(7.5.3) Methodological details

Category 2 relevant non-production materials calculation is based on spend data, applying the same calculation logic as for NPM materials covered in Category 1, and is based on environmental input-output databases (World Input-Output Database (WIOD) and the Open IO Database, using the GHG Protocol Scope 3 Evaluator (https://ghgproto-col.org/scope-3-evaluator)).

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

222000.0

(7.5.3) Methodological details

Category 3 Fuel-and-energy-related activities carbon footprint calculation is based on the calculation process of Scope 1 and 2 revering to the energy consumption. The supply chain and grid losses were calculated separately by using VDA emission factors from German trade association VDA - Association of German automotive industry. No reliable primary data from suppliers available at this time. Supply chain sustainability program for development to enable suppliers is in place.

Scope 3 category 4: Upstream transportation and distribution

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

1127000

(7.5.3) Methodological details

Category 4 Upstream transportation and distribution carbon footprint calculation is based on data of transport distances and weights (ton kilometers) per transportation mode, subdivided by different means of transport (land, water, air). 25% of final emissions of category 3.4 is based on data received from suppliers. Supply chain sustainability program for development to enable suppliers is in place.

Scope 3 category 5: Waste generated in operations

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

131000.0

(7.5.3) Methodological details

Category 5 emission calculation is derived from waste amounts reported by ZF sites in a standardized process. Generic emission factors are determined and applied for the calculation.

Scope 3 category 6: Business travel

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

113000.0

(7.5.3) Methodological details

Category 6 Business travel carbon footprint calculation is based on data on travel distances per transportation mode, subdivided by different means of transport (car, air) and DEFRA emission factors.

Scope 3 category 7: Employee commuting

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

149000.0

(7.5.3) Methodological details

Category 7 Employee commuting carbon footprint calculation is based on data on employees, subdivided by different countries and regions and different means of transport (private, public). No reliable primary data available at this time. Program for development of data quality is in place.

Scope 3 category 8: Upstream leased assets

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

0.0

(7.5.3) Methodological details

not relevant

Scope 3 category 9: Downstream transportation and distribution

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

415000.0

(7.5.3) Methodological details

Category 9 Downstream transportation and distribution carbon footprint is derived from category 4 Upstream transportation and distribution emissions by applying a fixed percentage which has been defined together with ZF's external consultant in 2021. No reliable primary data available at this time. Program for development of data quality is in place.

Scope 3 category 10: Processing of sold products

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

60000.0

(7.5.3) Methodological details

Category 10 Processing of sold products carbon footprint calculation is based on Scope 1&2 emissions of OEMs and other manufacturers and ZF's market share/sales figures. No reliable primary data available at this time. Due to low share of total emissions, it was categorized as less relevant.

Scope 3 category 11: Use of sold products

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

77235000.0

(7.5.3) Methodological details

Category 11 Use of sold products carbon footprint calculation is based on the top sales representative products of ZF. To address the CO2e emissions of the top sales products, the following was taken into account: the fraction of the vehicle weight; the fleet mix (ICE, Hybrid, or electric); the application (passenger cars, utility vehicles, or non-automotive); and the vehicle CO2e emissions per kilometre or CO2e emissions per hour for non-automotive applications. After the calculation of the

top sales representative products, the emissions of the whole range of ZF products have been calculated extrapolating by the sales volume. No reliable primary data available at this time. Program for development of data quality is in place. ZF continuously develops the calculation of use phase emissions of their products: More simulations will be carried out to determine the fuel consumption of their automotive parts. This will enhance the overall result, when the extrapolation to the whole product range will have a broader basis.

Scope 3 category 12: End of life treatment of sold products

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

71000.0

(7.5.3) Methodological details

Category 12 End of life treatment of sold products carbon footprint calculation is based on the top sales representative products of each ZF division. ZF produces mainly automotive parts made of metal or other recyclable materials. The share of recyclable content per top sales product was estimated, revealing that most parts will undergo a considerable recycling process. Electronics scrap is the exemption, whose CO2e emissions were calculated based on a final incineration process. No reliable primary data available at this time. Program for development of data quality is in place.

Scope 3 category 13: Downstream leased assets

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

0.0

(7.5.3) Methodological details

not relevant

Scope 3 category 14: Franchises

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

0.0

(7.5.3) Methodological details

not relevant

Scope 3 category 15: Investments

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

22000.0

(7.5.3) Methodological details

Category 15 Investments carbon footprint calculation is based on the assumption of an average footprint according to ZF Group and the investment spent based data. No reliable primary data available at this time.

Scope 3: Other (upstream)

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

0.0

(7.5.3) Methodological details

not relevant

Scope 3: Other (downstream)

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

0.0

(7.5.3) Methodological details

not relevant
[Fixed row]

(7.6) What were your organization’s gross global Scope 1 emissions in metric tons CO2e?

Reporting year

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

229000

(7.6.3) Methodological details

The Greenhouse Gas Protocol (GHG) sets an international standard to categorize direct and indirect sources of emissions. Scope 1 includes direct emissions resulting from the combustion of natural gas and fossil fuels (fuel oil, gasoline, diesel, LPG, acetylene and methanol) in ZF’s own production. Scope 1 emission calculation based on actual energy consumption volumes and VDA emission factors. The calculation is based on the primary energy sources used

Past year 1

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

247000

(7.6.2) End date

12/30/2023

(7.6.3) Methodological details

The Greenhouse Gas Protocol (GHG) sets an international standard to categorize direct and indirect sources of emissions. Scope 1 includes direct emissions resulting from the combustion of natural gas and fossil fuels (fuel oil, gasoline, diesel, LPG, acetylene and methanol) in ZF's own production. Scope 1 emission calculation based on actual energy consumption volumes and VDA emission factors. The calculation is based on the primary energy sources used

Past year 2

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

391000

(7.6.2) End date

12/30/2022

(7.6.3) Methodological details

The Greenhouse Gas Protocol (GHG) sets an international standard to categorize direct and indirect sources of emissions. Scope 1 includes direct emissions resulting from the combustion of natural gas and fossil fuels (fuel oil, gasoline, diesel, LPG, acetylene and methanol) in ZF's own production. Scope 1 emission calculation based on actual energy consumption volumes and VDA emission factors. The calculation is based on the primary energy sources used
[Fixed row]

(7.7) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

1144000

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e)

649000

(7.7.4) Methodological details

The Greenhouse Gas Protocol (GHG) sets an international standard to categorize direct and indirect sources of emissions. Scope 2 involves emissions from purchased energy, e.g., electricity. We have a number of operations where we are able to access electricity supplier emission factors (market-based) or residual emission factors. Where no specific emission factors are available, we use the same emission factors as for the location-based approach.criteria on auditability.

Past year 1

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

1184000

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e)

805000

(7.7.3) End date

12/30/2023

(7.7.4) Methodological details

The Greenhouse Gas Protocol (GHG) sets an international standard to categorize direct and indirect sources of emissions. Scope 2 involves emissions from purchased energy, e.g., electricity. We have a number of operations where we are able to access electricity supplier emission factors (market-based) or residual emission factors. Where no specific emission factors are available, we use the same emission factors as for the location-based approach.criteria on auditability.

Past year 2

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

1079000

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e)

776000

(7.7.3) End date

12/30/2022

(7.7.4) Methodological details

The Greenhouse Gas Protocol (GHG) sets an international standard to categorize direct and indirect sources of emissions. Scope 2 involves emissions from purchased energy, e.g., electricity. We have a number of operations where we are able to access electricity supplier emission factors (market-based) or residual emission factors. Where no specific emission factors are available, we use the same emission factors as for the location-based approach.criteria on auditability. [Fixed row]

(7.8) Account for your organization’s gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

12345000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

☑ Spend-based method

☑ Average product method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

The ZF Corporate Carbon Footprint CCF Calculation Model has been reviewed in early 2021 during the ZF Climate Ambition Initiative with external consultant. Based on the calculation model and analysis of reduction levers the target setting process to all categories for internal and external stakeholders has been set up. This calculation model has been designed to calculate the potential of CO2e reduction levers. Category 1 Purchased Goods and Services carbon footprint calculation is built on the commodity structure of ZF, using purchasing data. Weights are the main input needed for calculating emissions. Weights and emissions have been calculated based on quantitative and qualitative information for each sub-commodity, where the specific weights per commodity were calculated by multiplying the individual weights of purchased goods and services by their volumes. The emission factors convert the weights per commodity into CO2e emissions. To guarantee accuracy and representativeness, the emissions factor for each sub-commodity were individually determined applying a conservative estimation approach from relevant databases. For individual commodities for electronic parts, reference PCFs have been calculated and included into the CCF as emission factor modelling would show inaccurate results. The "Scope 3.1" relevant non-production materials calculation is based on spend data, applying the same calculation logic, and is based on environmental input-output databases (World Input-Output Database (WIOD) and the Open IO Database, using the GHG Protocol Scope 3 Evaluator (https://ghgproto-col.org/scope-3-evaluator)). No reliable primary data from suppliers available at this time. Supply chain sustainability program for development to enable suppliers is in place. To drive forward the topic of climate neutrality in the supply chain, ZF communicated quantified expectations for essential carbon reduction levers. These include, among other things, the use of renewable energies and secondary raw materials. In addition, so-called decarbonization dialogues were initiated with important suppliers of production and non-production materials. A significant outcome of this dialogue has been the identification of measures that will be implemented through joint projects and materialize over the coming years.

Capital goods

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

1418000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Spend-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

The ZF Corporate Carbon Footprint CCF Calculation Model has been reviewed in early 2021 during the ZF Climate Ambition Initiative with external consultant. Based on the calculation model and analysis of reduction levers the target setting process to all categories for internal and external stakeholders has been set up. This calculation model has been designed to calculate the potential of CO2e reduction levers. Category 2 Capital Goods carbon footprint calculation is based on spend data. No reliable primary data from suppliers available at this time. Supply chain sustainability program for development to enable suppliers is in place.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

230000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

The ZF Corporate Carbon Footprint CCF Calculation Model has been reviewed in early 2021 during the ZF Climate Ambition Initiative with external consultant. Based on the calculation model and analysis of reduction levers the target setting process to all categories for internal and external stakeholders has been set up. This calculation model has been designed to calculate the potential of CO2e reduction levers. Category 3 Fuel-and-energy-related activities carbon footprint calculation is based on the calculation process of Scope 1 and 2 revering to the energy consumption. The supply chain and grid losses were calculated separately by using VDA emission factors from German trade association VDA - Association of German automotive industry. No reliable primary data from suppliers available at this time. Supply chain sustainability program for development to enable suppliers is in place.

Upstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

986000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Distance-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

26

(7.8.5) Please explain

The ZF Corporate Carbon Footprint CCF Calculation Model has been reviewed in early 2021 during the ZF Climate Ambition Initiative with external consultant. Based on the calculation model and analysis of reduction levers the target setting process to all categories for internal and external stakeholders has been set up. This calculation model has been designed to calculate the potential of CO2e reduction levers. Category 4 Upstream transportation and distribution carbon footprint

calculation is based on data of transport distances and weights (ton kilometers) per transportation mode, subdivided by different means of transport (land, water, air). Approx. 25% of final emissions of category 3.4 is based on data received from suppliers. For 2023 emissions were calculated on shipping level using specific emission factors and numbers then consolidated to regional level by transport type. To simplify the calculation for 2024, results of 2023 have been interpolated based on sales developments. Supply chain sustainability program for development to enable suppliers is in place.

Waste generated in operations

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

123000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

☑ Waste-type-specific method

☑ Site-specific method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

The ZF Corporate Carbon Footprint CCF Calculation Model has been reviewed in early 2021 during the ZF Climate Ambition Initiative with external consultant. Based on the calculation model and analysis of reduction levers the target setting process to all categories for internal and external stakeholders has been set up. This calculation model has been designed to calculate the potential of CO2e reduction levers. Cat 3.5 emission calculation is derived from waste amounts reported by ZF sites in a standardized process. Generic emission factors are determined and applied for the calculation.

Business travel

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

49000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Distance-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

The ZF Corporate Carbon Footprint CCF Calculation Model has been reviewed in early 2021 during the ZF Climate Ambition Initiative with external consultant. Based on the calculation model and analysis of reduction levers the target setting process to all categories for internal and external stakeholders has been set up. This calculation model has been designed to calculate the potential of CO2e reduction levers. Category 6 Business travel carbon footprint calculation is based on data on travel distances per transportation mode, subdivided by different means of transport (car, air).

Employee commuting

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

151000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

☑ Distance-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

The ZF Corporate Carbon Footprint CCF Calculation Model has been reviewed in early 2021 during the ZF Climate Ambition Initiative with external consultant. Based on the calculation model and analysis of reduction levers the target setting process to all categories for internal and external stakeholders has been set up. This calculation model has been designed to calculate the potential of CO2e reduction levers.Category 7 Employee commuting carbon footprint calculation is based on data on employees, subdivided by different countries and regions and different means of transport (private, public).

Upstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Emissions from leased assets are reported together with owned properties in the according sections of scope 1, 2 and 3. Therefore, this category has been defined as not relevant. For the reporting year 2022, ZF improved the established process for the definition of reporting boundaries for environmental KPIs. With this new approach also small locations/sites/units are considered for emission reporting with limited efforts. Additional rules have been defined to align reporting boundaries with financial KPIs. For small locations/sites/units, generic emission factors are applied related to the number of employees assigned.

Downstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

363000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

The ZF Corporate Carbon Footprint CCF Calculation Model has been reviewed in early 2021 during the ZF Climate Ambition Initiative with external consultant. Based on the calculation model and analysis of reduction levers the target setting process to all categories for internal and external stakeholders has been set up. This calculation model has been designed to calculate the potential of CO2e reduction levers. Category 9 Downstream transportation and distribution carbon footprint is derived from category 4 Upstream transportation and distribution emissions by applying a fixed percentage which has been defined together with ZF's external consultant in 2021. No reliable primary data available at this time. Program for development of data quality is in place. Processing of sold products

Processing of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

60000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

The ZF Corporate Carbon Footprint CCF Calculation Model has been reviewed in early 2021 during the ZF Climate Ambition Initiative with external consultant. Based on the calculation model and analysis of reduction levers the target setting process to all categories for internal and external stakeholders has been set up. This calculation model has been designed to calculate the potential of CO2e reduction levers. Category 10 Processing of sold products carbon footprint calculation is based on Scope 1&2 emissions of OEMs and other manufacturers and ZF's market share/sales figures. No reliable primary data available at this time. Due to low share of total emissions, it was categorized as less relevant.

Use of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

51363000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

☑ Average data method

☑ Average product method

☑ Fuel-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

representative products of ZF. To address the CO2e emissions of the top sales products, the following was taken into account: the fraction of the vehicle weight; the fleet mix (ICE, Hybrid, or electric); the application (passenger cars, utility vehicles, or non-automotive); and the vehicle CO2e emissions per kilometre or CO2e emissions per hour for non-automotive applications. After the calculation of the top sales representative products, the emissions of the whole range of ZF products have been calculated extrapolating by the sales volume.No reliable primary data available at this time. Program for development of data quality is in place. ZF continuously develops the calculation of use phase emissions of their products: More simulations will be carried out to determine the fuel consumption of their automotive parts. This will enhance the overall result, when the extrapolation to the whole product range will have a broader basis. Reported figure in metric tons CO2e (51363000) is the sum of direct (5190000) and indirect (46173000) use phase emissions (see Annual Report 2024, page 68).

End of life treatment of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

113000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

☑ Average data method

☑ Spend-based method

☑ Average product method

☑ Waste-type-specific method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

The ZF Corporate Carbon Footprint CCF Calculation Model has been reviewed in early 2021 during the ZF Climate Ambition Initiative with external consultant. Based on the calculation model and analysis of reduction levers the target setting process to all categories for internal and external stakeholders has been set up. This calculation model has been designed to calculate the potential of CO2e reduction levers. Category 12 End of life treatment of sold products carbon footprint calculation is based on the top sales representative products of each ZF division. ZF produces mainly automotive parts made of metal or other recyclable materials. The share of recyclable content per top sales product was estimated, revealing that most parts will undergo a considerable recycling process. Electronics scrap is the exemption, whose CO2e emissions were calculated based on a final incineration process. No reliable primary data available at this time. Program for development of data quality is in place.

Downstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Emissions from leased assets are reported together with owned properties in the according sections of scope 1, 2 and 3. Therefore, this category has been defined as not relevant. For the reporting year 2022, ZF improved the established process for the definition of reporting boundaries for environmental KPIs. With this new approach also small locations/sites/units are considered for emission reporting with limited efforts. Additional rules have been defined to align reporting boundaries with financial KPIs. For small locations/sites/units, generic emission factors are applied related to the number of employees assigned.

Franchises

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

ZF Group has no significant franchises and therefore this category can be neglected.

Investments

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

4000

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Investment-specific method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

The ZF Corporate Carbon Footprint CCF Calculation Model has been reviewed in early 2021 during the ZF Climate Ambition Initiative with external consultant. Based on the calculation model and analysis of reduction levers the target setting process to all categories for internal and external stakeholders has been set up. This calculation model has been designed to calculate the potential of CO2e reduction levers. Category 15 Investments carbon footprint calculation is based on the assumption of an average footprint according to ZF Group and the investment spent based data. No reliable primary data available at this time.

Other (upstream)

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

No other emissions identified.

Other (downstream)

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

No other emissions identified.
[Fixed row]

(7.8.1) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

(7.8.1.1) End date

12/30/2023

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

15169000

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

1528000

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

263000

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

1082000

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

132000

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

41000

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

158000

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)

398000

(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)

60000

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

63487000

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

135000

(7.8.1.14) Scope 3: Downstream leased assets (metric tons CO2e)

0

(7.8.1.15) Scope 3: Franchises (metric tons CO2e)

0

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

3000

(7.8.1.17) Scope 3: Other (upstream) (metric tons CO2e)

0

(7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

(7.8.1.19) Comment

Scope 3 figures for past year 1 (2023). Scope 3: Use of sold products (total 63487000 metric tons CO2e) are divided into direct use of sold products (7633000 metric tons CO2e) and indirect use of sold products (55854000 metric tons CO2e). Categories 3.8, 3.13, 3.14 and other excluded/not relevant.

Past year 2

(7.8.1.1) End date

12/30/2022

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

16557

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

934000

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

273000

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

810000

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

135000

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

39000

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

152000

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)

298000

(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)

60000

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

63372000

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

110000

(7.8.1.14) Scope 3: Downstream leased assets (metric tons CO2e)

0

(7.8.1.15) Scope 3: Franchises (metric tons CO2e)

0

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

4000

(7.8.1.17) Scope 3: Other (upstream) (metric tons CO2e)

0

(7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

(7.8.1.19) Comment

Scope 3 figures for past year 2 (2022). Scope 3: Use of sold products (total 63372000 metric tons CO2e) are divided into direct use of sold products (4563000 metric tons CO2e) and indirect use of sold products (58809000 metric tons CO2e). Categories 3.8, 3.13, 3.14 and other excluded/not relevant.
[Fixed row]

(7.9) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	*Select from:* ☑ Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	*Select from:* ☑ Third-party verification or assurance process in place
Scope 3	*Select from:* ☑ Third-party verification or assurance process in place

[Fixed row]

(7.9.1) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Row 1

(7.9.1.1) Verification or assurance cycle in place

Select from:
☑ Annual process

(7.9.1.2) Status in the current reporting year

Select from:
☑ Complete

(7.9.1.3) Type of verification or assurance

Select from:
☑ Limited assurance

(7.9.1.4) Attach the statement

ZF Friedrichshafen AG_CDP-verification_eSign.pdf

(7.9.1.5) Page/section reference

CDP Verification Template, see page 1-3 1. Boundaries: Consolidated group figures for ZF Friedrichshafen AG 2. Emissions data verified Gross GHG emissions in million metric tons of CO_2e Scope 1: 0.229 Scope 2 location-based: 1.144; market-based: 0.649 Scope 3: 3.1: 12.345 3.2: 1.418 3.3: 0.230 3.4: 0.986 3.5: 0.123 3.6: 0.049 3.7: 0.151 Scope 3 upstream:Emission Intensity (in tCO2e per € million of sales): 369.820 Annex: Independent auditor's report page 182

(7.9.1.6) Relevant standard

Select from:

☑ ISAE3000

(7.9.1.7) Proportion of reported emissions verified (%)

100
[Add row]

(7.9.2) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Row 1

(7.9.2.1) Scope 2 approach

Select from:

☑ Scope 2 market-based

(7.9.2.2) Verification or assurance cycle in place

Select from:

☑ Annual process

(7.9.2.3) Status in the current reporting year

Select from:

☑ Complete

(7.9.2.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.2.5) Attach the statement

ZF Friedrichshafen AG_CDP-verification_eSign.pdf

(7.9.2.6) Page/ section reference

CDP Verification Template Page 2, section 2. Emissions data verified - broken down by Scope 1, Scope 2 and Scope 3 categories with figures given; option to include other relevant data that has been verified with figures. Gross GHG emissions in million metric tons of CO_2 equivalent Scope 2 market-based: 0.649

(7.9.2.7) Relevant standard

Select from:

☑ ISAE3000

(7.9.2.8) Proportion of reported emissions verified (%)

100
[Add row]

(7.9.3) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Row 1

(7.9.3.1) Scope 3 category

Select all that apply

☑ Scope 3: Capital goods
☑ Scope 3: Business travel
☑ Scope 3: Employee commuting
☑ Scope 3: Purchased goods and services
☑ Scope 3: Waste generated in operations
☑ Scope 3: Upstream transportation and distribution
☑ Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

(7.9.3.2) Verification or assurance cycle in place

Select from:

☑ Annual process

(7.9.3.3) Status in the current reporting year

Select from:

☑ Complete

(7.9.3.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.3.5) Attach the statement

ZF Friedrichshafen AG_CDP-verification_eSign.pdf

(7.9.3.6) Page/section reference

CDP Verification Template Page 2, section 2. Emissions data verified Gross GHG emissions in million metric tons of CO_2 equivalent Scope 3: 3.1 Puchased goods and services: 12.345 3.2 Capital goods: 1.418 3.3 Fuel- and energy-related emissions (not included in Scope 1 or 2): 0.230 3.4 Upstream transportation and distribution: 0.986 3.5 Waste: 0.123 3.6 Business travel: 0.049 3.7 Employee commuting: 0.151 Scope 3 upstream: Emission Intensity (in tCO2e per € million of sales): 369.820

(7.9.3.7) Relevant standard

Select from:

☑ ISAE3000

(7.9.3.8) Proportion of reported emissions verified (%)

100
[Add row]

(7.10) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Select from:

☑ Decreased

(7.10.1) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

Change in renewable energy consumption

(7.10.1.1) Change in emissions (metric tons CO2e)

97000

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

9.2

(7.10.1.4) Please explain calculation

Renewables accounted 43% of the total purchased electricity and self-generated electricity (2023: 28%) in 2024 – under guaranteed certified green power contracts. This improvement is a result of the initiatives and contract amendments within the ZF Green Power Roadmap. By 2025, the purchased electricity shall be procured from purely renewable sources. The Green Power Roadmap was brought forward from 2030 to 2025 to generate earlier an effect.

Other emissions reduction activities

(7.10.1.1) Change in emissions (metric tons CO2e)

36900

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

3.5

(7.10.1.4) Please explain calculation

Energy efficiency Program: Overall, more than 980 projects (2023: 1000) were implemented or initiated, which led to approximately 144 GWh in energy savings (2023: 166 GWh). This corresponds to the electricity consumption of 36000 average households and the avoidance of 36.900 tons of CO2 emissions.

Divestment

(7.10.1.1) Change in emissions (metric tons CO2e)

7000

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

0.7

(7.10.1.4) Please explain calculation

In 2024 we initated the carve out of ZF Foxconn Chassis Modules GmbH. The sites contributet until April 2024 to our CO2 emissions (with 3400 t CO2e). We calculate a monthly decresase of appr. 850 tons, which sums up from May to December 2024 to appr. 7000 t CO2e.

Acquisitions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No relevant acquisitions in 2024

Mergers

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No relevant mergers in 2024

Change in output

(7.10.1.1) Change in emissions (metric tons CO2e)

9800

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0.9

(7.10.1.4) Please explain calculation

The total sales reduction in 2024, did not led to linear reduction in global energy consumption. Compared to 2023, we achieved a total reduction of energy consumption by 5% (absolute reduction from 4.048 GWh (2023) to 3.861 GWh (2024) = 187 GWh reduction; thereof energy efficiency: 144 GWh. Reduction of 43 GWh (=appr. 9.800 tons CO2e, calculated with average emission factor) not due to energy efficiency, but are assumed to be due to change in output

Change in methodology

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No relevant change in methodology in 2024.

Change in boundary

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No relevant change in methodology in 2024.

Change in physical operating conditions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No relevant change in methodology in 2024.

Unidentified

(7.10.1.1) Change in emissions (metric tons CO2e)

23300

(7.10.1.2) Direction of change in emissions

Select from:
☑ Decreased

(7.10.1.3) Emissions value (percentage)

2.2

(7.10.1.4) Please explain calculation

Other effects around the world may have contributed, such as weather conditions, but cannot be defined.

Other

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

no other effects
[Fixed row]

(7.10.2) Are your emissions performance calculations in 7.10 and 7.10.1 based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Select from:
☑ Market-based

(7.12) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Select from:
☑ Yes

(7.12.1) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

(7.12.1.1) CO2 emissions from biogenic carbon (metric tons CO2)

600

(7.12.1.2) Comment

Figure in column 1 represents Scope 1. The amount of Scope 2 (according to location-based approach) was 179.200 metric tons CO2 in 2024. In the emission calculation process, the biologically sequestered carbon is calculated separately (using VDA emission factors from German trade association VDA - Association of German automotive industry). Scope 3 category 3: fuel-and energy- related activities are not included here.
[Fixed row]

(7.15) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Select from:
☑ Yes

(7.15.1) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used global warming potential (GWP).

Row 1

(7.15.1.1) Greenhouse gas

Select from:
☑ CO2

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

227600

(7.15.1.3) GWP Reference

Select from:
☑ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 2

(7.15.1.1) Greenhouse gas

Select from:
☑ CH4

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

260

(7.15.1.3) GWP Reference

Select from:
☑ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 3

(7.15.1.1) Greenhouse gas

Select from:
☑ N2O

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

960

(7.15.1.3) GWP Reference

Select from:
☑ IPCC Fifth Assessment Report (AR5 – 100 year)
[Add row]

(7.16) Break down your total gross global Scope 1 and 2 emissions by country/area.

Argentina

(7.16.1) Scope 1 emissions (metric tons CO2e)

1032

(7.16.2) Scope 2, location-based (metric tons CO2e)

1281

(7.16.3) Scope 2, market-based (metric tons CO2e)

1354

Australia

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

221

(7.16.3) Scope 2, market-based (metric tons CO2e)

0

Austria

(7.16.1) Scope 1 emissions (metric tons CO2e)

788

(7.16.2) Scope 2, location-based (metric tons CO2e)

5852

(7.16.3) Scope 2, market-based (metric tons CO2e)

1017

Belgium

(7.16.1) Scope 1 emissions (metric tons CO2e)

5902

(7.16.2) Scope 2, location-based (metric tons CO2e)

4319

(7.16.3) Scope 2, market-based (metric tons CO2e)

19

Brazil

(7.16.1) Scope 1 emissions (metric tons CO2e)

6789

(7.16.2) Scope 2, location-based (metric tons CO2e)

34288

(7.16.3) Scope 2, market-based (metric tons CO2e)

6397

Canada

(7.16.1) Scope 1 emissions (metric tons CO2e)

6119

(7.16.2) Scope 2, location-based (metric tons CO2e)

2541

(7.16.3) Scope 2, market-based (metric tons CO2e)

640

China

(7.16.1) Scope 1 emissions (metric tons CO2e)

11226

(7.16.2) Scope 2, location-based (metric tons CO2e)

222946

(7.16.3) Scope 2, market-based (metric tons CO2e)

105614

Czechia

(7.16.1) Scope 1 emissions (metric tons CO2e)

1330

(7.16.2) Scope 2, location-based (metric tons CO2e)

24292

(7.16.3) Scope 2, market-based (metric tons CO2e)

1260

Denmark

(7.16.1) Scope 1 emissions (metric tons CO2e)

43

(7.16.2) Scope 2, location-based (metric tons CO2e)

175

(7.16.3) Scope 2, market-based (metric tons CO2e)

175

France

(7.16.1) Scope 1 emissions (metric tons CO2e)

1029

(7.16.2) Scope 2, location-based (metric tons CO2e)

1447

(7.16.3) Scope 2, market-based (metric tons CO2e)

9

Germany

(7.16.1) Scope 1 emissions (metric tons CO2e)

119976

(7.16.2) Scope 2, location-based (metric tons CO2e)

375146

(7.16.3) Scope 2, market-based (metric tons CO2e)

242187

Hungary

(7.16.1) Scope 1 emissions (metric tons CO2e)

4532

(7.16.2) Scope 2, location-based (metric tons CO2e)

6081

(7.16.3) Scope 2, market-based (metric tons CO2e)

0

India

(7.16.1) Scope 1 emissions (metric tons CO2e)

3329

(7.16.2) Scope 2, location-based (metric tons CO2e)

95884

(7.16.3) Scope 2, market-based (metric tons CO2e)

86208

Italy

(7.16.1) Scope 1 emissions (metric tons CO2e)

3879

(7.16.2) Scope 2, location-based (metric tons CO2e)

7436

(7.16.3) Scope 2, market-based (metric tons CO2e)

2

Japan

(7.16.1) Scope 1 emissions (metric tons CO2e)

7

(7.16.2) Scope 2, location-based (metric tons CO2e)

1538

(7.16.3) Scope 2, market-based (metric tons CO2e)

186

Malaysia

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

1280

(7.16.3) Scope 2, market-based (metric tons CO2e)

652

Mexico

(7.16.1) Scope 1 emissions (metric tons CO2e)

8221

(7.16.2) Scope 2, location-based (metric tons CO2e)

100290

(7.16.3) Scope 2, market-based (metric tons CO2e)

80195

Netherlands

(7.16.1) Scope 1 emissions (metric tons CO2e)

156

(7.16.2) Scope 2, location-based (metric tons CO2e)

162

(7.16.3) Scope 2, market-based (metric tons CO2e)

162

Poland

(7.16.1) Scope 1 emissions (metric tons CO2e)

7305

(7.16.2) Scope 2, location-based (metric tons CO2e)

51423

(7.16.3) Scope 2, market-based (metric tons CO2e)

5946

Portugal

(7.16.1) Scope 1 emissions (metric tons CO2e)

1022

(7.16.2) Scope 2, location-based (metric tons CO2e)

2505

(7.16.3) Scope 2, market-based (metric tons CO2e)

0

Republic of Korea

(7.16.1) Scope 1 emissions (metric tons CO2e)

1411

(7.16.2) Scope 2, location-based (metric tons CO2e)

10471

(7.16.3) Scope 2, market-based (metric tons CO2e)

9694

Romania

(7.16.1) Scope 1 emissions (metric tons CO2e)

2386

(7.16.2) Scope 2, location-based (metric tons CO2e)

9780

(7.16.3) Scope 2, market-based (metric tons CO2e)

453

Serbia

(7.16.1) Scope 1 emissions (metric tons CO2e)

623

(7.16.2) Scope 2, location-based (metric tons CO2e)

7400

(7.16.3) Scope 2, market-based (metric tons CO2e)

2

Singapore

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

89

(7.16.3) Scope 2, market-based (metric tons CO2e)

89

Slovakia

(7.16.1) Scope 1 emissions (metric tons CO2e)

7236

(7.16.2) Scope 2, location-based (metric tons CO2e)

24199

(7.16.3) Scope 2, market-based (metric tons CO2e)

310

South Africa

(7.16.1) Scope 1 emissions (metric tons CO2e)

190

(7.16.2) Scope 2, location-based (metric tons CO2e)

2073

(7.16.3) Scope 2, market-based (metric tons CO2e)

1693

Spain

(7.16.1) Scope 1 emissions (metric tons CO2e)

6059

(7.16.2) Scope 2, location-based (metric tons CO2e)

13509

(7.16.3) Scope 2, market-based (metric tons CO2e)

3

Switzerland

(7.16.1) Scope 1 emissions (metric tons CO2e)

70

(7.16.2) Scope 2, location-based (metric tons CO2e)

15

(7.16.3) Scope 2, market-based (metric tons CO2e)

15

Taiwan, China

(7.16.1) Scope 1 emissions (metric tons CO2e)

179

(7.16.2) Scope 2, location-based (metric tons CO2e)

381

(7.16.3) Scope 2, market-based (metric tons CO2e)

381

Thailand

(7.16.1) Scope 1 emissions (metric tons CO2e)

8

(7.16.2) Scope 2, location-based (metric tons CO2e)

1433

(7.16.3) Scope 2, market-based (metric tons CO2e)

1329

Turkey

(7.16.1) Scope 1 emissions (metric tons CO2e)

3219

(7.16.2) Scope 2, location-based (metric tons CO2e)

12590

(7.16.3) Scope 2, market-based (metric tons CO2e)

12475

United Arab Emirates

(7.16.1) Scope 1 emissions (metric tons CO2e)

131

(7.16.2) Scope 2, location-based (metric tons CO2e)

86

(7.16.3) Scope 2, market-based (metric tons CO2e)

86

United Kingdom of Great Britain and Northern Ireland

(7.16.1) Scope 1 emissions (metric tons CO2e)

1481

(7.16.2) Scope 2, location-based (metric tons CO2e)

7750

(7.16.3) Scope 2, market-based (metric tons CO2e)

0

United States of America

(7.16.1) Scope 1 emissions (metric tons CO2e)

23141

(7.16.2) Scope 2, location-based (metric tons CO2e)

114007

(7.16.3) Scope 2, market-based (metric tons CO2e)

90290

Viet Nam

(7.16.1) Scope 1 emissions (metric tons CO2e)

6

(7.16.2) Scope 2, location-based (metric tons CO2e)

115

(7.16.3) Scope 2, market-based (metric tons CO2e)

0
[Fixed row]

(7.17) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

Select all that apply
☑ By business division

(7.17.1) Break down your total gross global Scope 1 emissions by business division.

Row 1

(7.17.1.1) Business division

Car Chassis Technology / Chassis Solutions

(7.17.1.2) Scope 1 emissions (metric ton CO2e)

33592

Row 3

(7.17.1.1) Business division

Electrified Powertrain Technology

(7.17.1.2) Scope 1 emissions (metric ton CO2e)

66695

Row 4

(7.17.1.1) Business division

Electronics and ADAS

(7.17.1.2) Scope 1 emissions (metric ton CO2e)

4519

Row 5

(7.17.1.1) Business division

Passive Safety Systems / ZF Lifetec

(7.17.1.2) Scope 1 emissions (metric ton CO2e)

18224

Row 6

(7.17.1.1) Business division

Commerical Vehicle Solutions

(7.17.1.2) Scope 1 emissions (metric ton CO2e)

60559

Row 7

(7.17.1.1) Business division

Industrial Technology

(7.17.1.2) Scope 1 emissions (metric ton CO2e)

34908

Row 8

(7.17.1.1) Business division

Aftermarket

(7.17.1.2) Scope 1 emissions (metric ton CO2e)

9586

Row 9

(7.17.1.1) Business division

Central Administration/Corporate Functions & Others

(7.17.1.2) Scope 1 emissions (metric ton CO2e)

714
[Add row]

(7.20) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

Select all that apply
☑ By business division

(7.20.1) Break down your total gross global Scope 2 emissions by business division.

Row 1

(7.20.1.1) Business division

Car Chassis Technology / Chassis Solutions

(7.20.1.2) Scope 2, location-based (metric tons CO2e)

301815

(7.20.1.3) Scope 2, market-based (metric tons CO2e)

145306

Row 3

(7.20.1.1) Business division

Electrified Powertrain Technology

(7.20.1.2) Scope 2, location-based (metric tons CO2e)

341156

(7.20.1.3) Scope 2, market-based (metric tons CO2e)

196403

Row 4

(7.20.1.1) Business division

Electronics and ADAS

(7.20.1.2) Scope 2, location-based (metric tons CO2e)

43970

(7.20.1.3) Scope 2, market-based (metric tons CO2e)

4260

Row 5

(7.20.1.1) Business division

Passive Safety Systems / ZF Lifetec

(7.20.1.2) Scope 2, location-based (metric tons CO2e)

129337

(7.20.1.3) Scope 2, market-based (metric tons CO2e)

85405

Row 6

(7.20.1.1) Business division

Commercial Vehicle Solutions

(7.20.1.2) Scope 2, location-based (metric tons CO2e)

162661

(7.20.1.3) Scope 2, market-based (metric tons CO2e)

100198

Row 7

(7.20.1.1) Business division

Industrial Technology

(7.20.1.2) Scope 2, location-based (metric tons CO2e)

123124

(7.20.1.3) Scope 2, market-based (metric tons CO2e)

100624

Row 8

(7.20.1.1) Business division

Aftermarket

(7.20.1.2) Scope 2, location-based (metric tons CO2e)

24713

(7.20.1.3) Scope 2, market-based (metric tons CO2e)

1859

Row 9

(7.20.1.1) Business division

Central Administration/Corporate Functions & Others

(7.20.1.2) Scope 2, location-based (metric tons CO2e)

16228

(7.20.1.3) Scope 2, market-based (metric tons CO2e)

14787
[Add row]

(7.22) Break down your gross Scope 1 and Scope 2 emissions between your consolidated accounting group and other entities included in your response.

Consolidated accounting group

(7.22.1) Scope 1 emissions (metric tons CO2e)

229000

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

1144000

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

649000

(7.22.4) Please explain

The “Consolidated accounting group” refers to the group of entities for which information is included within ZFs annual financial statements, comprising the parent organization and the consolidated subsidiaries.

All other entities

(7.22.1) Scope 1 emissions (metric tons CO2e)

0

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

0

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

0

(7.22.4) Please explain

the response does not include any other entity
[Fixed row]

(7.23) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Select from:
☑ No

(7.27) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Row 1

(7.27.1) Allocation challenges

Select from:

☑ Diversity of product lines makes accurately accounting for each product/product line cost ineffective

(7.27.2) Please explain what would help you overcome these challenges

ZF is a diversified company with highly diverse product portfolio. Proximity to international customers is of great significance to the ZF Group. ZF will therefore continue to consistently expand its global market presence. Worldwide, the ZF Group has 161 production locations in 30 countries and 20 main development locations in 10 countries. In addition to that, ZF has a global network with more than 20,000 workshop partners. The allocation of CO2 emissions to ZF customers would need extreme effort and the results would still be not accurate. Currently, ZF considers the effort/ effectiveness relationship of such an effort as not positive.

Row 2

(7.27.1) Allocation challenges

Select from:

☑ Doing so would require we disclose business sensitive/proprietary information

(7.27.2) Please explain what would help you overcome these challenges

ZF is a diversified company with highly diverse product portfolio. Proximity to international customers is of great significance to the ZF Group. ZF will therefore continue to consistently expand its global market presence. Worldwide, the ZF Group has 161 production locations in 30 countries and 20 main development locations in 10 countries. In addition to that, ZF has a global network with more than 20,000 workshop partners. The allocation of CO2 emissions to ZF customers would need extreme effort and the results would still be not accurate. Currently, ZF considers the effort/ effectiveness relationship of such an effort as not positive.

Row 3

(7.27.1) Allocation challenges

Select from:

☑ Customer base is too large and diverse to accurately track emissions to the customer level

(7.27.2) Please explain what would help you overcome these challenges

ZF is a diversified company with highly diverse product portfolio. Proximity to international customers is of great significance to the ZF Group. ZF will therefore continue to consistently expand its global market presence. Worldwide, the ZF Group has 161 production locations in 30 countries and 20 main development

locations in 10 countries. In addition to that, ZF has a global network with more than 20,000 workshop partners. The allocation of CO2 emissions to ZF customers would need extreme effort and the results would still be not accurate. Currently, ZF considers the effort/ effectiveness relationship of such an effort as not positive.
[Add row]

(7.28) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

(7.28.1) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Select from:

☑ Yes

(7.28.2) Describe how you plan to develop your capabilities

ZF is a diversified company with highly diverse product portfolio. Proximity to international customers is of great significance to the ZF Group. ZF will therefore continue to consistently expand its global market presence. Worldwide, the ZF Group has at about 230 locations in some 40 countries and 20 main development locations. In addition to that, ZF has 120 service companies as well as 650 service points. CCF and PCF calculation methods and allocations of emissions to products and customers are continuously improved and developed. Currently ZF allocates emissions to customers depending on share of sales volume (further concepts under investigation).
[Fixed row]

(7.29) What percentage of your total operational spend in the reporting year was on energy?

Select from:

☑ More than 5% but less than or equal to 10%

(7.30) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	*Select from:* ☑ Yes
Consumption of purchased or acquired electricity	*Select from:* ☑ Yes
Consumption of purchased or acquired heat	*Select from:* ☑ Yes
Consumption of purchased or acquired steam	*Select from:* ☑ No
Consumption of purchased or acquired cooling	*Select from:* ☑ No
Generation of electricity, heat, steam, or cooling	*Select from:* ☑ Yes

[Fixed row]

(7.30.1) Report your organization’s energy consumption totals (excluding feedstocks) in MWh.

Consumption of fuel (excluding feedstock)

(7.30.1.1) Heating value

Select from:

☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

3998

(7.30.1.3) MWh from non-renewable sources

1081706

(7.30.1.4) Total (renewable + non-renewable) MWh

1085704.00

Consumption of purchased or acquired electricity

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

1111867

(7.30.1.3) MWh from non-renewable sources

1501507

(7.30.1.4) Total (renewable + non-renewable) MWh

2613374.00

Consumption of purchased or acquired heat

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

2952

(7.30.1.3) MWh from non-renewable sources

136201

(7.30.1.4) Total (renewable + non-renewable) MWh

139153.00

Consumption of self-generated non-fuel renewable energy

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

23254

(7.30.1.4) Total (renewable + non-renewable) MWh

23254.00

Total energy consumption

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

1142071

(7.30.1.3) MWh from non-renewable sources

2719414

(7.30.1.4) Total (renewable + non-renewable) MWh

3861485.00
[Fixed row]

(7.30.6) Select the applications of your organization’s consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	*Select from:* ☑ Yes
Consumption of fuel for the generation of heat	*Select from:* ☑ Yes
Consumption of fuel for the generation of steam	*Select from:* ☑ No
Consumption of fuel for the generation of cooling	*Select from:* ☑ No
Consumption of fuel for co-generation or tri-generation	*Select from:* ☑ Yes

[Fixed row]

(7.30.7) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

1826

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Wood/wood pellets and chips

Other biomass

(7.30.7.1) Heating value

Select from:
☑ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

n/a, not consumed at ZF sites

Other renewable fuels (e.g. renewable hydrogen)

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

2171

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Bioethanol and Biodiesel used for mobile combustion (company fleet)

Coal

(7.30.7.1) Heating value

Select from:
☑ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

n/a, not consumed at ZF sites

Oil

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

3503

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

3503

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Heating oil used for heat generation

Gas

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

977815

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

895281

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

82533

(7.30.7.8) Comment

Including natural gas, liquid petroleum gas (LPG) and compressed natural gas (CNG) consumed for mobile combustion (company fleet), self-cogeneration or trigeneration and consumed for self-generation of heat (including building heat and heat for production processes)

Other non-renewable fuels (e.g. non-renewable hydrogen)

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

100445

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Including diesel and gasoline/ petrol for mobile combustion (company fleet) and testing processes. Including methanol (CH4O) and acetylene/ ethin (C2H2) for production processes

Total fuel

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

1085761

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

898784

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

82533

(7.30.7.8) Comment

Including all types of fuels for mobile and stationary applications
[Fixed row]

(7.30.9) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

Electricity

(7.30.9.1) Total Gross generation (MWh)

73015

(7.30.9.2) Generation that is consumed by the organization (MWh)

72821

(7.30.9.3) Gross generation from renewable sources (MWh)

23392

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

23254

Heat

(7.30.9.1) Total Gross generation (MWh)

30718

(7.30.9.2) Generation that is consumed by the organization (MWh)

30718

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

Steam

(7.30.9.1) Total Gross generation (MWh)

0

(7.30.9.2) Generation that is consumed by the organization (MWh)

0

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

Cooling

(7.30.9.1) Total Gross generation (MWh)

0

(7.30.9.2) Generation that is consumed by the organization (MWh)

0

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0
[Fixed row]

(7.30.14) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in 7.7.

Row 1

(7.30.14.1) Country/area

Select from:
☑ Germany

(7.30.14.2) Sourcing method

Select from:
☑ Financial (virtual) power purchase agreement (VPPA)

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

343131

(7.30.14.6) Tracking instrument used

Select from:
☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:
☑ Spain

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:
☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2023

(7.30.14.10) Comment

Renewable power for ZF locations of the country.

Row 2

(7.30.14.1) Country/area

Select from:
☑ China

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Eligible Technologies acc. ZF Green Power Standard: 1. Wind, solar power, hydro, geothermal 2. Solid, liquid and gaseous forms of biomass from fuels 3. Ocean-based energy resources captured through tidal and wave technologies.

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

181120

(7.30.14.6) Tracking instrument used

Select from:

☑ GEC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ China

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

Due to the mix of assets and technologies, the detailed commissioning date is not tracked and reported here. Moreover, the country of generation could be any other country within the same market boundary, e.g., AIB origin Europe.

Row 3

(7.30.14.1) Country/area

Select from:

☑ United States of America

(7.30.14.2) Sourcing method

Select from:

☑ Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Eligible Technologies acc. ZF Green Power Standard: 1. Wind, solar power, hydro, geothermal 2. Solid, liquid and gaseous forms of biomass from fuels 3. Ocean-based energy resources captured through tidal and wave technologies.

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

95056

(7.30.14.6) Tracking instrument used

Select from:

☑ US-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ United States of America

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2021

(7.30.14.10) Comment

Renewable power for ZF locations of the country.

Row 4

(7.30.14.1) Country/area

Select from:

☑ Slovakia

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Eligible Technologies acc. ZF Green Power Standard: 1. Wind, solar power, hydro, geothermal 2. Solid, liquid and gaseous forms of biomass from fuels 3. Ocean-based energy resources captured through tidal and wave technologies.

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

75994

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Slovakia

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

Due to the mix of assets and technologies, the detailed commissioning date is not tracked and reported here. Moreover, the country of generation could be any other country within the same market boundary, e.g., AIB origin Europe.

Row 5

(7.30.14.1) Country/area

Select from:

☑ Spain

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

66114

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Spain

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2023

(7.30.14.10) Comment

Renewable power for ZF locations of the country.

Row 6

(7.30.14.1) Country/area

Select from:
☑ Poland

(7.30.14.2) Sourcing method

Select from:
☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Renewable energy mix, please specify :Eligible Technologies acc. ZF Green Power Standard: 1. Wind, solar power, hydro, geothermal 2. Solid, liquid and gaseous forms of biomass from fuels 3. Ocean-based energy resources captured through tidal and wave technologies.

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

61085

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Poland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

Due to the mix of assets and technologies, the detailed commissioning date is not tracked and reported here. Moreover, the country of generation could be any other country within the same market boundary, e.g., AIB origin Europe.

Row 7

(7.30.14.1) Country/area

Select from:

☑ Czechia

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Hydropower (capacity unknown)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

47092

(7.30.14.6) Tracking instrument used

Select from:
☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:
☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:
☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2006

(7.30.14.10) Comment

Renewable power for ZF locations of the country.

Row 8

(7.30.14.1) Country/area

Select from:

☑ United Kingdom of Great Britain and Northern Ireland

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

37419

(7.30.14.6) Tracking instrument used

Select from:

☑ REGO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ United Kingdom of Great Britain and Northern Ireland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

Due to the mix of assets and technologies, the detailed commissioning date is not tracked and reported here. Moreover, the country of generation could be any other country within the same market boundary, e.g., AIB origin Europe.

Row 9

(7.30.14.1) Country/area

Select from:

☑ Belgium

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Eligible Technologies acc. ZF Green Power Standard: 1. Wind, solar power, hydro, geothermal 2. Solid, liquid and gaseous forms of biomass from fuels 3. Ocean-based energy resources captured through tidal and wave technologies.

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

28419

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Belgium

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

Due to the mix of assets and technologies, the detailed commissioning date is not tracked and reported here. Moreover, the country of generation could be any other country within the same market boundary, e.g., AIB origin Europe.

Row 10

(7.30.14.1) Country/area

Select from:

☑ Austria

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Eligible Technologies acc. ZF Green Power Standard: 1. Wind, solar power, hydro, geothermal 2. Solid, liquid and gaseous forms of biomass from fuels 3. Ocean-based energy resources captured through tidal and wave technologies.

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

25811

(7.30.14.6) Tracking instrument used

Select from:

☑ Contract

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Austria

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

Due to the mix of assets and technologies, the detailed commissioning date is not tracked and reported here. Moreover, the country of generation could be any other country within the same market boundary, e.g., AIB origin Europe.

Row 11

(7.30.14.1) Country/area

Select from:

☑ Italy

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Hydropower (capacity unknown)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

25513

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Iceland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1999

(7.30.14.10) Comment

Renewable power for ZF locations of the country.

Row 12

(7.30.14.1) Country/area

Select from:
☑ France

(7.30.14.2) Sourcing method

Select from:
☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Renewable energy mix, please specify :Wind, Hydro

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

25141

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2015

(7.30.14.10) Comment

Renewable power for ZF locations of the country.

Row 13

(7.30.14.1) Country/area

Select from:

☑ Romania

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Eligible Technologies acc. ZF Green Power Standard: 1. Wind, solar power, hydro, geothermal 2. Solid, liquid and gaseous forms of biomass from fuels 3. Ocean-based energy resources captured through tidal and wave technologies.

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

24772

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Romania

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

Due to the mix of assets and technologies, the detailed commissioning date is not tracked and reported here. Moreover, the country of generation could be any other country within the same market boundary, e.g., AIB origin Europe.

Row 14

(7.30.14.1) Country/area

Select from:

☑ Mexico

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

22755

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Mexico

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2013

(7.30.14.10) Comment

Renewable power for ZF locations of the country.

Row 15

(7.30.14.1) Country/area

Select from:

☑ Hungary

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Hydropower (capacity unknown)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

20906

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Norway

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2023

(7.30.14.10) Comment

Renewable power for ZF locations of the country.

Row 16

(7.30.14.1) Country/area

Select from:

☑ Serbia

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Hydropower (capacity unknown)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

19691

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Serbia

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1970

(7.30.14.10) Comment

Renewable power for ZF locations of the country.

Row 17

(7.30.14.1) Country/area

Select from:
☑ India

(7.30.14.2) Sourcing method

Select from:
☑ Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Renewable energy mix, please specify :Eligible Technologies acc. ZF Green Power Standard: 1. Wind, solar power, hydro, geothermal 2. Solid, liquid and gaseous forms of biomass from fuels 3. Ocean-based energy resources captured through tidal and wave technologies.

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

12126

(7.30.14.6) Tracking instrument used

Select from:
☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ India

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

Due to the mix of assets and technologies, the detailed commissioning date is not tracked and reported here. Moreover, the country of generation could be any other country within the same market boundary, e.g., AIB origin Europe.

Row 18

(7.30.14.1) Country/area

Select from:

☑ Portugal

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Eligible Technologies acc. ZF Green Power Standard: 1. Wind, solar power, hydro, geothermal 2. Solid, liquid and gaseous forms of biomass from fuels 3. Ocean-based energy resources captured through tidal and wave technologies.

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

10009

(7.30.14.6) Tracking instrument used

Select from:
☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:
☑ Portugal

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:
☑ No

(7.30.14.10) Comment

Due to the mix of assets and technologies, the detailed commissioning date is not tracked and reported here. Moreover, the country of generation could be any other country within the same market boundary, e.g., AIB origin Europe.

Row 19

(7.30.14.1) Country/area

Select from:
☑ Japan

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Eligible Technologies acc. ZF Green Power Standard: 1. Wind, solar power, hydro, geothermal 2. Solid, liquid and gaseous forms of biomass from fuels 3. Ocean-based energy resources captured through tidal and wave technologies.

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

2430

(7.30.14.6) Tracking instrument used

Select from:

☑ Contract

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Japan

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

Due to the mix of assets and technologies, the detailed commissioning date is not tracked and reported here. Moreover, the country of generation could be any other country within the same market boundary, e.g., AIB origin Europe.

Row 20

(7.30.14.1) Country/area

Select from:

☑ South Africa

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1029

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ South Africa

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2014

(7.30.14.10) Comment

Renewable power for ZF locations of the country.

Row 21

(7.30.14.1) Country/area

Select from:

☑ Malaysia

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Hydropower (capacity unknown)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

921

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Malaysia

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2020

(7.30.14.10) Comment

Renewable power for ZF locations of the country.

Row 22

(7.30.14.1) Country/area

Select from:

☑ Thailand

(7.30.14.2) Sourcing method

Select from:
☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

910

(7.30.14.6) Tracking instrument used

Select from:
☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:
☑ Thailand

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:
☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2021

(7.30.14.10) Comment

Renewable power for ZF locations of the country.

Row 23

(7.30.14.1) Country/area

Select from:
☑ Viet Nam

(7.30.14.2) Sourcing method

Select from:
☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Hydropower (capacity unknown)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

794

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Viet Nam

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2013

(7.30.14.10) Comment

Renewable power for ZF locations of the country.

Row 24

(7.30.14.1) Country/area

Select from:

☑ Australia

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Eligible Technologies acc. ZF Green Power Standard: 1. Wind, solar power, hydro, geothermal 2. Solid, liquid and gaseous forms of biomass from fuels 3. Ocean-based energy resources captured through tidal and wave technologies.

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

303

(7.30.14.6) Tracking instrument used

Select from:

☑ Australian LGC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Australia

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

Due to the mix of assets and technologies, the detailed commissioning date is not tracked and reported here. Moreover, the country of generation could be any other country within the same market boundary, e.g., AIB origin Europe.

Row 25

(7.30.14.1) Country/area

Select from:

☑ Turkey

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

257

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Turkey

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2017

(7.30.14.10) Comment

Renewable power for ZF locations of the country.

Row 26

(7.30.14.1) Country/area

Select from:

☑ Republic of Korea

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

251

(7.30.14.6) Tracking instrument used

Select from:
☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:
☑ China

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:
☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2013

(7.30.14.10) Comment

Renewable power for ZF locations of the country.
[Add row]

(7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.

Argentina

(7.30.16.1) Consumption of purchased electricity (MWh)

4560

(7.30.16.2) Consumption of self-generated electricity (MWh)

16

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

4576.00

Australia

(7.30.16.1) Consumption of purchased electricity (MWh)

303

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

303.00

Austria

(7.30.16.1) Consumption of purchased electricity (MWh)

22437

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

5652

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

28089.00

Belgium

(7.30.16.1) Consumption of purchased electricity (MWh)

28501

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

28501.00

Brazil

(7.30.16.1) Consumption of purchased electricity (MWh)

162934

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

162934.00

Canada

(7.30.16.1) Consumption of purchased electricity (MWh)

16835

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

16835.00

China

(7.30.16.1) Consumption of purchased electricity (MWh)

328617

(7.30.16.2) Consumption of self-generated electricity (MWh)

3095

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

7624

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

339336.00

Czechia

(7.30.16.1) Consumption of purchased electricity (MWh)

46683

(7.30.16.2) Consumption of self-generated electricity (MWh)

1299

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

5684

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

53666.00

Denmark

(7.30.16.1) Consumption of purchased electricity (MWh)

120

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

350

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

470.00

France

(7.30.16.1) Consumption of purchased electricity (MWh)

25283

(7.30.16.2) Consumption of self-generated electricity (MWh)

204

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

259

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

25746.00

Germany

(7.30.16.1) Consumption of purchased electricity (MWh)

919851

(7.30.16.2) Consumption of self-generated electricity (MWh)

47360

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

114451

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

23227

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

1104889.00

Hungary

(7.30.16.1) Consumption of purchased electricity (MWh)

20873

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

20873.00

India

(7.30.16.1) Consumption of purchased electricity (MWh)

120190

(7.30.16.2) Consumption of self-generated electricity (MWh)

11175

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

131365.00

Italy

(7.30.16.1) Consumption of purchased electricity (MWh)

25420

(7.30.16.2) Consumption of self-generated electricity (MWh)

65

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

25485.00

Japan

(7.30.16.1) Consumption of purchased electricity (MWh)

3155

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

3155.00

Malaysia

(7.30.16.1) Consumption of purchased electricity (MWh)

1878

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

1878.00

Mexico

(7.30.16.1) Consumption of purchased electricity (MWh)

223292

(7.30.16.2) Consumption of self-generated electricity (MWh)

816

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

224108.00

Netherlands

(7.30.16.1) Consumption of purchased electricity (MWh)

442

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

442.00

Poland

(7.30.16.1) Consumption of purchased electricity (MWh)

68112

(7.30.16.2) Consumption of self-generated electricity (MWh)

7796

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

3881

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

7231

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

87020.00

Portugal

(7.30.16.1) Consumption of purchased electricity (MWh)

9722

(7.30.16.2) Consumption of self-generated electricity (MWh)

371

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

10093.00

Republic of Korea

(7.30.16.1) Consumption of purchased electricity (MWh)

20634

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

20634.00

Romania

(7.30.16.1) Consumption of purchased electricity (MWh)

26023

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

26023.00

Serbia

(7.30.16.1) Consumption of purchased electricity (MWh)

19689

(7.30.16.2) Consumption of self-generated electricity (MWh)

101

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

19790.00

Singapore

(7.30.16.1) Consumption of purchased electricity (MWh)

227

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

227.00

Slovakia

(7.30.16.1) Consumption of purchased electricity (MWh)

76048

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

1510

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

77558.00

South Africa

(7.30.16.1) Consumption of purchased electricity (MWh)

2162

(7.30.16.2) Consumption of self-generated electricity (MWh)

255

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

2417.00

Spain

(7.30.16.1) Consumption of purchased electricity (MWh)

61874

(7.30.16.2) Consumption of self-generated electricity (MWh)

121

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

61995.00

Switzerland

(7.30.16.1) Consumption of purchased electricity (MWh)

144

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

144.00

Taiwan, China

(7.30.16.1) Consumption of purchased electricity (MWh)

642

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

642.00

Thailand

(7.30.16.1) Consumption of purchased electricity (MWh)

2900

(7.30.16.2) Consumption of self-generated electricity (MWh)

134

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

3034.00

Turkey

(7.30.16.1) Consumption of purchased electricity (MWh)

27967

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

27967.00

United Arab Emirates

(7.30.16.1) Consumption of purchased electricity (MWh)

141

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

141.00

United Kingdom of Great Britain and Northern Ireland

(7.30.16.1) Consumption of purchased electricity (MWh)

37419

(7.30.16.2) Consumption of self-generated electricity (MWh)

15

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

37434.00

United States of America

(7.30.16.1) Consumption of purchased electricity (MWh)

308060

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

308060.00

Viet Nam

(7.30.16.1) Consumption of purchased electricity (MWh)

234

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

234.00
[Fixed row]

(7.45) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Row 1

(7.45.1) Intensity figure

0.00002122

(7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

878000

(7.45.3) Metric denominator

Select from:
☑ unit total revenue

(7.45.4) Metric denominator: Unit total

41377000000

(7.45.5) Scope 2 figure used

Select from:

☑ Market-based

(7.45.6) % change from previous year

6

(7.45.7) Direction of change

Select from:

☑ Decreased

(7.45.8) Reasons for change

Select all that apply

☑ Change in renewable energy consumption

☑ Other emissions reduction activities

☑ Change in revenue

(7.45.9) Please explain

The intensity of GHG emissions results directly from the energy intensity and footprint of each country in which energy is purchased and used. In addition, the production footprint is strongly influenced by customer needs, national production and purchasing requirements (market-based). Decrease of 6% results out of energy efficiency initiatives as well as decreasing sales figure which is also influenced by inflation impacts. XXXXXXXXXXXXXXXXX
[Add row]

(7.52) Provide any additional climate-related metrics relevant to your business.

Row 1

(7.52.1) Description

Select from:

☑ Waste

(7.52.2) Metric value

46865

(7.52.3) Metric numerator

Total amount of waste to disposal in tons

(7.52.4) Metric denominator (intensity metric only)

not applicable, absolute number

(7.52.5) % change from previous year

16

(7.52.6) Direction of change

Select from:
☑ Decreased

(7.52.7) Please explain

ZF's environmental management system is aimed at continuously reducing the amount of waste generated. In 2024, ZF reduced the waste (directed to disposal) volume by 16% compared to previous year.
[Add row]

(7.53) Did you have an emissions target that was active in the reporting year?

Select all that apply
☑ Absolute target
☑ Intensity target

(7.53.1) Provide details of your absolute emissions targets and progress made against those targets.

Row 1

(7.53.1.1) Target reference number

Select from:

☑ Abs 1

(7.53.1.2) Is this a science-based target?

Select from:

☑ Yes, and this target has been approved by the Science Based Targets initiative

(7.53.1.3) Science Based Targets initiative official validation letter

ZFFR-GER-001-OFF__Validation Certificate_SBTI.pdf

(7.53.1.4) Target ambition

Select from:

☑ 1.5°C aligned

(7.53.1.5) Date target was set

12/30/2021

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

☑ Sulphur hexafluoride (SF6)

☑ Nitrogen trifluoride (NF3)

☑ Carbon dioxide (CO2)
☑ Perfluorocarbons (PFCs)
☑ Hydrofluorocarbons (HFCs)

(7.53.1.8) Scopes

Select all that apply
☑ Scope 1
☑ Scope 2

(7.53.1.9) Scope 2 accounting method

Select from:
☑ Market-based

(7.53.1.11) End date of base year

12/30/2019

(7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

406000

(7.53.1.13) Base year Scope 2 emissions covered by target (metric tons CO2e)

1371000

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

0.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

1777000.000

(7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

(7.53.1.34) Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

(7.53.1.54) End date of target

12/30/2030

(7.53.1.55) Targeted reduction from base year (%)

80

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

355400.000

(7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)

229000

(7.53.1.58) Scope 2 emissions in reporting year covered by target (metric tons CO2e)

649000

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

878000.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.1.79) % of target achieved relative to base year

63.24

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

Climate neutrality by 2040 is part of ZF Strategy "Next Generation Mobility" and therefore relevant for the whole ZF Group worldwide. As for Scope 1 and Scope 2 emissions, the target covers ZF Group own business worldwide, where ZF has operational control.

(7.53.1.83) Target objective

The objective of the target is to support overall decarbonisation target and contribute to emission reduction. ZF commits to reduce absolute Scope 1 & 2 GHG emissions 80% by 2030 from a 2019 base year. This absolute reduction target, which was approved by SBTi in Q1 / 2022, is an element of ZF Climate Neutrality Strategy. The Greenhouse Gas Protocol (GHG) sets an international standard to categorize direct and indirect sources of emissions. Climate neutral means that all processes, products and services will not increase the CO_2e load in the atmosphere. Scopes 1 and 2 can be directly influenced by ZF, as Scope 1 includes direct emissions resulting from the combustion of fossil fuel in ZF's own production and Scope 2 involves emissions from purchased energy, e.g., electricity. ZF conducts its ZF Climate Ambition Initiative for implementation of climate protection strategy in all company processes considering ESG requirements. In this context scope and recalculation processes were reviewed to meet future criteria on auditability.

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

The climate strategy focuses on reduction and substitution. Energy efficiency and avoidance of energy consumption are the given priorities. A secondary focus is the transformation of energy consumption from fossil fuels to renewable sources, or a corresponding technology switch. Energy Efficiency Program The Group includes all production, administrative and research locations in its efficiency programs. A cross-functional team, under the leadership of the domain function Operations and with the participation of real estate management and EHS, works on increasing energy efficiency. The task force manages a corresponding program and reports to divisional Production Management and the Group. Target achievement and individual projects are monitored and controlled through KPIs within the environmental and energy management system in conformity with ISO 14001 and ISO 50001. Overall, around 980 projects (2023: 1000; 2022: 800) were implemented or initiated in

2023, which led to more than 144 GWh in energy savings (2023: 166; 2022: 121 GWh). This corresponds to the electricity consumption of 36000 average households and an avoidance of 36900 tons of CO2e emissions. ZF Green Power Roadmap In early 2021, the Green Power target was set and adjusted in 2023: By 2025 (5 years earlier than originally planned),100% of the required electricity is to be procured from renewable sources. Together with the energy purchasing department, the ZF Green Power Guidance Document has been developed that defines what ZF accepts as "green power". ZF focuses on technical green energy solutions that ensure real additionality. Particular attention is paid to the generation of electricity by wind turbines using ZF technologies. Activities according to this Green Power Roadmap started and led to increase the share of green power up to 43% in 2024, which contributed to emission reduction in 2024.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No

Row 2

(7.53.1.1) Target reference number

Select from:

☑ Abs 2

(7.53.1.2) Is this a science-based target?

Select from:

☑ Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

(7.53.1.4) Target ambition

Select from:

☑ 1.5°C aligned

(7.53.1.5) Date target was set

12/30/2021

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

☑ Carbon dioxide (CO2)

☑ Perfluorocarbons (PFCs)

☑ Hydrofluorocarbons (HFCs)

☑ Sulphur hexafluoride (SF6)

☑ Nitrogen trifluoride (NF3)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.53.1.9) Scope 2 accounting method

Select from:

☑ Market-based

(7.53.1.11) End date of base year

12/30/2019

(7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

406000.0

(7.53.1.13) Base year Scope 2 emissions covered by target (metric tons CO2e)

1371000.0

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

0.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

1777000.000

(7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100.0

(7.53.1.34) Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100.0

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100.0

(7.53.1.54) End date of target

12/30/2040

(7.53.1.55) Targeted reduction from base year (%)

95

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

88850.000

(7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)

229000

(7.53.1.58) Scope 2 emissions in reporting year covered by target (metric tons CO2e)

649000

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

878000.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.1.79) % of target achieved relative to base year

53.25

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

Climate neutrality by 2040 is part of ZF Strategy "Next Generation Mobility" and therefore relevant for the whole ZF Group worldwide. As for Scope 1 and Scope 2 emissions, the target covers ZF Group own business worldwide, where ZF has operational control.

(7.53.1.83) Target objective

The objective of the target is to support overall decarbonisation target and contribute to emission reduction. ZF committed to reduce absolute Scope 1 & 2 GHG emissions to net-zero by 2040. The Greenhouse Gas Protocol (GHG) sets an international standard to categorize direct and indirect sources of emissions. Climate neutral means that all processes, products and services will not increase the CO_2e load in the atmosphere. Scopes 1 and 2 can be directly influenced by ZF, as Scope 1 includes direct emissions resulting from the combustion of fossil fuel in ZF's own production and Scope 2 involves emissions from purchased energy, e.g., electricity. ZF conducts its ZF Climate Ambition Initiative for implementation of climate protection strategy in all company processes considering ESG requirements. In this context scope and recalculation processes were reviewed to meet future criteria on auditability.

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

The climate strategy focuses on reduction and substitution. Energy efficiency and avoidance of energy consumption are the given priorities. A secondary focus is the transformation of energy consumption from fossil fuels to renewable sources, or a corresponding technology switch. Energy Efficiency Program The Group includes all production, administrative and research locations in its efficiency programs. A cross-functional team, under the leadership of the domain function Operations and with the participation of real estate management and EHS, works on increasing energy efficiency. The task force manages a corresponding program and reports to divisional Production Management and the Group. Target achievement and individual projects are monitored and controlled through KPIs within the environmental and energy management system in conformity with ISO 14001 and ISO 50001. Overall, around 980 projects (2023: 1000; 2022: 800) were implemented or initiated in 2023, which led to more than 144 GWh in energy savings (2023: 166; 2022: 121 GWh). This corresponds to the electricity consumption of 36000 average households and an avoidance of 36900 tons of CO2e emissions. ZF Green Power Roadmap In early 2021, the Green Power target was set and adjusted in 2023: By 2025 (5 years earlier than originally planned),100% of the required electricity is to be procured from renewable sources. Together with the energy purchasing department, the ZF Green Power Guidance Document has been developed that defines what ZF accepts as “green power”. ZF focuses on technical green energy solutions that ensure real additionality. Particular attention is paid to the generation of electricity by wind turbines using ZF technologies. Activities according to this Green Power Roadmap started and led to increase the share of green power up to 43% in 2024, which contributed to emission reduction in 2024.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No

[Add row]

(7.53.2) Provide details of your emissions intensity targets and progress made against those targets.

Row 1

(7.53.2.1) Target reference number

Select from:

☑ Int 1

(7.53.2.2) Is this a science-based target?

Select from:

☑ Yes, and this target has been approved by the Science Based Targets initiative

(7.53.2.3) Science Based Targets initiative official validation letter

ZFFR-GER-001-OFF__Validation Certificate_SBTI.pdf

(7.53.2.4) Target ambition

Select from:

☑ 2°C aligned

(7.53.2.5) Date target was set

12/30/2021

(7.53.2.6) Target coverage

Select from:

☑ Organization-wide

(7.53.2.7) Greenhouse gases covered by target

Select all that apply

☑ Carbon dioxide (CO2)

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

(7.53.2.8) Scopes

Select all that apply

☑ Scope 3

(7.53.2.10) Scope 3 categories

Select all that apply

☑ Category 15: Investments

☑ Category 2: Capital goods

☑ Category 10: Processing of sold products

☑ Category 5: Waste generated in operations

☑ Category 6: Business travel
☑ Category 7: Employee commuting
☑ Category 1: Purchased goods and services
☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
☑ Category 12: End-of-life treatment of sold products
☑ Category 4: Upstream transportation and distribution
☑ Category 9: Downstream transportation and distribution

(7.53.2.11) Intensity metric

Select from:
☑ Metric tons CO2e per unit revenue

(7.53.2.12) End date of base year

12/30/2019

(7.53.2.15) Intensity figure in base year for Scope 3, Category 1: Purchased goods and services

0.000594

(7.53.2.16) Intensity figure in base year for Scope 3, Category 2: Capital goods

0.000041

(7.53.2.17) Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

0.000006

(7.53.2.18) Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution

0.000031

(7.53.2.19) Intensity figure in base year for Scope 3, Category 5: Waste generated in operations

0.000004

(7.53.2.20) Intensity figure in base year for Scope 3, Category 6: Business travel

0.000003

(7.53.2.21) Intensity figure in base year for Scope 3, Category 7: Employee commuting

0.000004

(7.53.2.23) Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution

0.000011

(7.53.2.24) Intensity figure in base year for Scope 3, Category 10: Processing of sold products

0.000002

(7.53.2.26) Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products

0.000002

(7.53.2.29) Intensity figure in base year for Scope 3, Category 15: Investments

0.000001

(7.53.2.32) Intensity figure in base year for total Scope 3

0.0006990000

(7.53.2.33) Intensity figure in base year for all selected Scopes

0.0006990000

(7.53.2.36) % of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

100

(7.53.2.37) % of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

100

(7.53.2.38) % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

100

(7.53.2.39) % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

100

(7.53.2.40) % of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

100

(7.53.2.41) % of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure

100

(7.53.2.42) % of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure

100

(7.53.2.44) % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

100

(7.53.2.45) % of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure

100

(7.53.2.47) % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

100

(7.53.2.50) % of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure

100

(7.53.2.53) % of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

100

(7.53.2.54) % of total base year emissions in all selected Scopes covered by this intensity figure

100

(7.53.2.55) End date of target

12/30/2030

(7.53.2.56) Targeted reduction from base year (%)

40

(7.53.2.57) Intensity figure at end date of target for all selected Scopes

0.0004194000

(7.53.2.59) % change anticipated in absolute Scope 3 emissions

-13.5

(7.53.2.62) Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services

0.000298

(7.53.2.63) Intensity figure in reporting year for Scope 3, Category 2: Capital goods

0.000034

(7.53.2.64) Intensity figure in reporting year for Scope 3, Category 3: Fuel- and energy-related activities

0.000006

(7.53.2.65) Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution

0.000024

(7.53.2.66) Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations

0.000003

(7.53.2.67) Intensity figure in reporting year for Scope 3, Category 6: Business travel

0.000001

(7.53.2.68) Intensity figure in reporting year for Scope 3, Category 7: Employee commuting

0.000004

(7.53.2.70) Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution

0.000009

(7.53.2.71) Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products

0.000001

(7.53.2.73) Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products

0.000003

(7.53.2.76) Intensity figure in reporting year for Scope 3, Category 15: Investments

1e-7

(7.53.2.79) Intensity figure in reporting year for total Scope 3

0.0003831000

(7.53.2.80) Intensity figure in reporting year for all selected Scopes

0.0003831000

(7.53.2.81) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.2.82) % of target achieved relative to base year

112.98

(7.53.2.83) Target status in reporting year

Select from:

☑ Achieved

(7.53.2.85) Explain target coverage and identify any exclusions

ZF commits to reduce Scope 3 (upstream & downstream) GHG emissions 40% per Million Euro sales by 2030 from a 2019 base year. This target includes Scope 3 "upstream" and "downstream" categories. This intensity reduction target, which was announced 2021 and validated by SBTi in Q1 / 2022, is an element of ZF Climate Neutrality Strategy. The Greenhouse Gas Protocol (GHG) sets an international standard to categorize direct and indirect sources of emissions. Climate neutral means that all processes, products and services will not increase the CO_2e load in the atmosphere. Scope 3 accounts for indirect emissions generated by purchased goods (Scope 3 "upstream") and emissions generated by ZF products in the utilization phase (Scope 3 "downstream") and can therefore not be directly influenced by the Group. The categories with high materiality are Category 1: Purchased goods and services. Category 11: Use of sold products is excluded from the SBTI validated target, because of limited influence of ZF Group. Further three categories are excluded, because there are not relevant for ZF: Category 8: Upstream Leased Assets, Category 13: Downstream Leased Assets and Category 14: Franchises. Other categories (Category 2, 3, 4, 5, 6, 7, 9, 10, 12) are of low share (<4%) but considered as relevant. Climate neutrality by 2040 is part of ZF Strategy "Next Generation Mobility". ZF conducts its ZF Climate Ambition Initiative for implementation of climate protection strategy in all company processes considering ESG requirements. In this context scope and recalculation processes were reviewed to meet future criteria on auditability. This led to change in carbon accounting of one power plant and inclusion of sites from former WABCO into scope. Therefore, reporting year 2024 numbers stated here are including former WABCO site. Base year 2019 numbers are not including WABCO revenue due to lack of comparable data for metric dominator (revenue).

(7.53.2.86) Target objective

The objective of the target is to support overall decarbonisation target and contribute to emission reduction. ZF committed to reduce absolute Scope 1 & 2 GHG emissions to net-zero by 2040. The Greenhouse Gas Protocol (GHG) sets an international standard to categorize direct and indirect sources of emissions. Climate neutral means that all processes, products and services will not increase the CO_2e load in the atmosphere. Scopes 1 and 2 can be directly influenced by ZF, as Scope 1 includes direct emissions resulting from the combustion of fossil fuel in ZF's own production and Scope 2 involves emissions from purchased energy, e.g., electricity. Climate neutrality by 2040 is part of ZF Strategy "Next Generation Mobility". ZF conducts its ZF Climate Ambition Initiative for implementation of climate protection strategy in all company processes considering ESG requirements. In this context scope and recalculation processes were reviewed to meet future criteria on auditability. This led to change in carbon accounting of one power plant and inclusion of sites from former WABCO into scope. Therefore, reporting year 2024 numbers stated here are including former WABCO site. Base year 2019 numbers are not including WABCO revenue due to lack of comparable data for metric dominator (revenue).

(7.53.2.88) Target derived using a sectoral decarbonization approach

Select from:

☑ No

(7.53.2.89) List the emissions reduction initiatives which contributed most to achieving this target

• *Green electricity in supply chain: In 2024, ZF further carried out projects for the decarbonization of purchased parts across the Group. The aim is to gain practical experience in implementing the decarbonization levers defined by ZF and to compare the theoretically calculated potentials with the actual impacts and costs. A successful example is the conversion of a forged part produced in India to EAF steel produced with green electricity, which reduces the product carbon*

footprint (PCF) of the delivered part by 37%. An important lever is increasing the use of green electricity in the supply chain. ZF therefore expanded the existing decarbonization campaign in the year under review. The target of achieving 100% renewable energies by 2025 was included in the bid conditions for production material suppliers. So far, suppliers have pledged to achieve the same renewable energies target for more than 64% of the purchasing volume. • Change in portfolio: increasing business with low-carbon and cirular products and solutions for zero-emission vehicles (use-phase)
[Add row]

(7.54) Did you have any other climate-related targets that were active in the reporting year?

Select all that apply
☑ Targets to increase or maintain low-carbon energy consumption or production
☑ Net-zero targets
☑ Other climate-related targets

(7.54.1) Provide details of your targets to increase or maintain low-carbon energy consumption or production.

Row 1

(7.54.1.1) Target reference number

Select from:
☑ Low 1

(7.54.1.2) Date target was set

12/30/2021

(7.54.1.3) Target coverage

Select from:
☑ Organization-wide

(7.54.1.4) Target type: energy carrier

Select from:

☑ Electricity

(7.54.1.5) Target type: activity

Select from:
☑ Consumption

(7.54.1.6) Target type: energy source

Select from:
☑ Renewable energy source(s) only

(7.54.1.7) End date of base year

12/30/2019

(7.54.1.8) Consumption or production of selected energy carrier in base year (MWh)

2559000

(7.54.1.9) % share of low-carbon or renewable energy in base year

10

(7.54.1.10) End date of target

12/30/2025

(7.54.1.11) % share of low-carbon or renewable energy at end date of target

100

(7.54.1.12) % share of low-carbon or renewable energy in reporting year

43

(7.54.1.13) % of target achieved relative to base year

36.67

(7.54.1.14) Target status in reporting year

Select from:

☑ Underway

(7.54.1.16) Is this target part of an emissions target?

Yes, the transformation to renewable energy sources is part of overarching ZF Climate Neutrality Strategy. To achieve decarbonization in operations (Scope 1+2), ZF focuses on two main levers: energy efficiency and the transformation towards green electricity. The overall emission reduction target has been set as follows: by 2030, Scope 1 and Scope 2 emissions to have reduced by 80 percent, as compared to 2019. This target was approved by the Science Based Target initiative (SBTi) in 2022. The target will be achieved with contributions from the energy efficiency projects and an increased share of renewable power of 100 percent by 2025.

(7.54.1.17) Is this target part of an overarching initiative?

Select all that apply

☑ Science Based Targets initiative

(7.54.1.18) Science Based Targets initiative official validation letter

ZFFR-GER-001-OFF__Validation Certificate_SBTI.pdf

(7.54.1.19) Explain target coverage and identify any exclusions

This is a ZF Group target, including all production, administrative and research facilities. Target coverage according SBTi validation process (operational control)

(7.54.1.20) Target objective

The objective of the target is to support ZF's overall decarbonisation target and contribute to emission reduction

(7.54.1.21) Plan for achieving target, and progress made to the end of the reporting year

ZF Green Power Roadmap: In early 2021, the Green Power target was set and adjusted in 2023: By 2025 (5 years earlier than originally planned), 100% of the required electricity is to be procured from renewable sources. Together with the energy purchasing department, the ZF Green Power Guidance Document has been developed that defines what ZF accepts as "green power". ZF focuses on technical green energy solutions that ensure real additionality. Particular attention is paid to the generation of electricity by wind turbines using ZF technologies. In 2024 renewables accounted for 43% of the total electricity (2023: 28% 2022: 23%; 2021: 16%) – under guaranteed certified green power contracts. This improvement is a result of the initiatives and contract amendments within the ZF Green Power Roadmap. The amount of self-generated electricity from renewable sources almost doubled a third year in a row to 23,254 MWh (2023: 12,500; 2022: 5,729 MWh).
[Add row]

(7.54.2) Provide details of any other climate-related targets, including methane reduction targets.

Row 1

(7.54.2.1) Target reference number

Select from:
☑ Oth 1

(7.54.2.2) Date target was set

12/30/2023

(7.54.2.3) Target coverage

Select from:
☑ Organization-wide

(7.54.2.4) Target type: absolute or intensity

Select from:
☑ Intensity

(7.54.2.5) Target type: category & metric (target numerator if reporting an intensity target)

Energy consumption or efficiency
☑ MWh

(7.54.2.6) Target denominator (intensity targets only)

Select from:

☑ unit revenue

(7.54.2.7) End date of base year

12/30/2023

(7.54.2.8) Figure or percentage in base year

95

(7.54.2.9) End date of target

12/30/2024

(7.54.2.10) Figure or percentage at end of date of target

84

(7.54.2.11) Figure or percentage in reporting year

93

(7.54.2.12) % of target achieved relative to base year

18.1818181818

(7.54.2.13) Target status in reporting year

Select from:

☑ Underway

(7.54.2.15) Is this target part of an emissions target?

Yes, the Energy Efficiency target is part of overarching ZF Climate Neutrality Strategy. To achieve decarbonization in operations (Scope 1+2), ZF focuses on two main levers: energy efficiency and the transformation towards green energy. The Group includes all production, administrative and research facilities in its efficiency programs. The overall emission reduction target has been set as follows: by 2030 Scope 1 and Scope 2 emissions to have reduced by 80 percent, as compared to 2019. The target was approved by the Science Based Target initiative (SBTi) in 2022. The target will be achieved with contributions from the energy efficiency projects and an increased share of renewable power.

(7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ Science Based targets initiative - approved other

(7.54.2.17) Science Based Targets initiative official validation letter

ZFFR-GER-001-OFF__Validation Certificate_SBTI.pdf

(7.54.2.18) Please explain target coverage and identify any exclusions

Target coverage according SBTi Validation process (operational control). The Group includes all production, administrative and research locations in its efficiency programs.

(7.54.2.19) Target objective

The objective of the target is to support overall decarbonisation target and contribute to emission reduction. In the course of ZF's Sustainability Ambition Project and the further development of its climate strategy, all subgoals contributing to the reduction of CO2e emissions were adjusted and updated. To achieve decarbonization of its locations, ZF focuses on two main levers: energy efficiency and the switch to green energy. ZF includes all production, administrative and research locations in its efficiency programs. For the year under review ZF increased the energy efficiency target on group level to 3%. ZF Group target YoY of -3% (YoY 2023-2024) not fulfilled in 2024. Target deviation mainly driven by lower sales, energy consumption couldn´t be adapted accordingly.

(7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

ZF Group's intensity target YoY of -3% (YoY 2023-2024) was not fulfilled in 2024. Target deviation mainly driven by lower sales, energy consumption couldn´t be adapted accordingly. Nevertheless, absolute energy reduction achieved by energy efficiency measures. Energy Efficiency Program - A cross-functional team, under the leadership of the domain function Operations and with the participation of real estate management and EHS, works on increasing energy efficiency. The team manages a corresponding program and reports to divisional Production Management and the Group. Target achievement and individual projects are monitored and controlled through KPIs within the environmental and energy management system in conformity with ISO 14001 and ISO 50001. Overall, a total of approx. 980

projects (2023:1000; 2022: 800; 2021: 555) has been implemented or initiated, which led to more than 144 GWh in energy savings (2023: 166 GWh; 2022: 121 GWh; 2021: 86.4 GWh). This corresponds to the electricity consumption of average households and the avoidance of CO2e emissions. As part of the ZF Energy Basics Program, each location is expected to establish and maintain standards to improve employee awareness and to promote behavioral changes as well as standards for demand or peak-load management. For each aspect, a guidance document has been added to the ZF EHS management system. In the field of compressed air, a joint campaign implemented by Spare Parts Procurement, Machine Inventory and EHS to standardize technology resulted in an energy-optimized compressed air management scheme. To further reduce energy consumption for heat generation, ZF continues to recover heat from industrial and washing processes.

Row 2

(7.54.2.1) Target reference number

Select from:

☑ Oth 2

(7.54.2.2) Date target was set

12/30/2021

(7.54.2.3) Target coverage

Select from:

☑ Organization-wide

(7.54.2.4) Target type: absolute or intensity

Select from:

☑ Absolute

(7.54.2.5) Target type: category & metric (target numerator if reporting an intensity target)

Energy productivity

☑ Other, energy productivity, please specify :Increase Green Electricity Spend Coverage with ZF's direct suppliers for Production Material to 100% by 2025

(7.54.2.7) End date of base year

12/30/2021

(7.54.2.8) Figure or percentage in base year

28.0

(7.54.2.9) End date of target

12/30/2025

(7.54.2.10) Figure or percentage at end of date of target

100

(7.54.2.11) Figure or percentage in reporting year

71.6

(7.54.2.12) % of target achieved relative to base year

60.5555555556

(7.54.2.13) Target status in reporting year

Select from:

☑ Underway

(7.54.2.15) Is this target part of an emissions target?

Yes, this target is part of the overarching ZF Climate Neutrality Strategy and a main lever to achieve ZF Scope 3 target, validated by SBTi. Supply chain sustainability program for development to enable suppliers is in place. To drive forward the topic of climate neutrality in the supply chain, ZF communicated quantified expectations for essential carbon reduction levers. These include, among other things, the use of renewable energies and secondary raw materials. In addition, so-called decarbonization dialogues were initiated with important suppliers of production and non-production materials. A significant outcome of this dialogue has been the identification of measures that will be implemented through joint projects and materialize over the coming years. At the ZF supplier summit in November 2022, we communicated decarbonization expectations, which are part of ZF's new bid conditions. They are followed by specific measures to be achieved by the supplier base in 2023. A fundamental expectation is the goal of "100% Green Electricity for all new sourcing decisions by 2025". Therefore, we focused on receiving green electricity roadmaps from suppliers and introduced supplier product carbon footprints (PCF) in sourcing decisions. Other bid conditions comprise goals for recycled

content, energy efficiency and further material-specific requirements. To drive further the target achievement special green electricity days for North America, India and China have been conducted. In addition, also for the wind turbine gearbox Product line and it´s specific Iron Casting suppliers with a high share of Inductive Oven, a specific webinar has been performed in June 2025. Starting 2026 the commitment achievement will be audited by a representative number of suppliers.

(7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ Science Based targets initiative - approved other

(7.54.2.17) Science Based Targets initiative official validation letter

ZFFR-GER-001-OFF__Validation Certificate_SBTI.pdf

(7.54.2.18) Please explain target coverage and identify any exclusions

The target considers production materials (PM) only. By focusing on production material suppliers, ZF can address a substantial portion of its indirect emissions and work towards reducing its overall carbon footprint. Non-production materials (NPM) are often one-time-buys and the overall impact and levers are low. Therefore, NPM are not prioritized yet (Share NPM < 10%). We focus on PM, where we identified high levers (Share PM >90%).

(7.54.2.19) Target objective

Sustainability management in the supply chain plays a decisive role for ZF. This applies both to environmental issues such as reducing greenhouse gas emissions and to social issues such as respect for human rights. For this reason, ZF pursues ambitious targets for the company itself and for suppliers and implemented numerous sustainability measures in the year under review. To be able to evaluate the sustainability performance of suppliers, the company has replaced the ZF Sustainability Criterion with the ZF Sustainability Score. This fully digital solution requires compliance with minimum requirements and measures sustainability performance using three key values: the green electricity share in 2025, the result of the NQC sustainability questionnaire and the acceptance of the ZF Business Partner Principles.

(7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

As green electricity is the most relevant lever to achieving decarbonization of the supply chain, we developed the “ZF Supplier Guide and FAQ on Green Electricity”. It contains definitions and ZF’s expectations as well as different procurement options to obtain green electricity (GE). The guide is available for all suppliers in ZF’s Supplier Business Portal. It has also been attached to the digital GE roadmap survey that ZF conducted during 2022, collecting feedback of more than 1.200 suppliers, which will be asked to update their GE roadmaps on a yearly basis. Furthermore, ZF intensified supplier training on green electricity.
[Add row]

(7.54.3) Provide details of your net-zero target(s).

Row 1

(7.54.3.1) Target reference number

Select from:

☑ NZ1

(7.54.3.2) Date target was set

12/31/2021

(7.54.3.3) Target Coverage

Select from:

☑ Organization-wide

(7.54.3.4) Targets linked to this net zero target

Select all that apply

☑ Abs1

☑ Abs2

☑ Int1

☑ Low1

(7.54.3.5) End date of target for achieving net zero

12/30/2040

(7.54.3.6) Is this a science-based target?

Select from:

☑ Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

(7.54.3.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

☑ Scope 3

(7.54.3.9) Greenhouse gases covered by target

Select all that apply

☑ Carbon dioxide (CO2)

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

(7.54.3.10) Explain target coverage and identify any exclusions

This target includes Scope 3 "upstream" and “downstream” categories. Three categories are excluded, because there are not relevant for ZF: Category 8: Upstream Leased Assets, Category 13: Downstream Leased Assets and Category 14: Franchises.

(7.54.3.11) Target objective

The ZF Group’s Next Generation Mobility strategy aims at ensuring clean, safe, comfortable and affordable mobility. Our climate ambition is to achieve net-zero emissions in all three emission scopes by 2040. As interim ambition, ZF set science-based targets (2022-2030) approved by the Science Based Targets initiative (SBTi) in 2022.

(7.54.3.12) Do you intend to neutralize any residual emissions with permanent carbon removals at the end of the target?

Select from:

☑ Yes

(7.54.3.13) Do you plan to mitigate emissions beyond your value chain?

Select from:

☑ No, we do not plan to mitigate emissions beyond our value chain

(7.54.3.14) Do you intend to purchase and cancel carbon credits for neutralization and/or beyond value chain mitigation?

Select all that apply

☑ No, we do not plan to purchase and cancel carbon credits for neutralization and/or beyond value chain mitigation

(7.54.3.15) Planned milestones and/or near-term investments for neutralization at the end of the target

The Science Based Target initiative (SBTi) approved ZF's science-based targets in January 2022. According to SBTi-policy, science-based targets need to be re-validated within five years after validation (2022–2027). The required revalidation will be on the basis of SBTi's latest Corporate Net-Zero Standard which requests companies to neutralize residual emissions. As such, ZF intends to neutralize emissions at the end of the net-zero target timeframe of 2040. Since ZF focusses to decarbonize in a first step, the topic of purchasing/canceling carbon credits for neutralization will be evaluated at a later stage. Therefore, the respective question is answered as "No, we do not plan to purchase and cancel carbon credits for neutralization and/or beyond value chain mitigation".

(7.54.3.17) Target status in reporting year

Select from:

☑ Underway

(7.54.3.19) Process for reviewing target

The Science Based Target initiative (SBTi) approved ZF's science-based targets in January 2022. According to SBTi-policy, science-based targets need to be re-validated within five years after validation (2022–2027). The required revalidation will be on the basis of SBTi's latest Corporate Net-Zero Standard. ZF will engage with the SBTi in order to review, renew, and revalidate its climate target setting.
[Add row]

(7.55) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Select from:

☑ Yes

(7.55.1) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e
Under investigation	*84*	*`Numeric input*
To be implemented	*32*	*1900*
Implementation commenced	*40*	*1800*
Implemented	*980*	*36900*
Not to be implemented	*53*	*`Numeric input*

[Fixed row]

(7.55.2) Provide details on the initiatives implemented in the reporting year in the table below.

Row 1

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

☑ Other, please specify :mix of several/ main levers: Building envelope, heat recovery, HVAC, hydraulic balance, lighting, metering, motors & pumps

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

8200

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 1
☑ Scope 2 (location-based)
☑ Scope 2 (market-based)

(7.55.2.4) Voluntary/Mandatory

Select from:
☑ Mandatory

(7.55.2.5) Annual monetary savings (unit currency – as specified in 1.2)

497200

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

8364000

(7.55.2.7) Payback period

Select from:
☑ 1-3 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:
☑ 6-10 years

(7.55.2.9) Comment

Data are a summarization of 375 projects which are classified as “building”-related efficiency measures

Row 2

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

☑ Other, please specify :mix of several/ main levers: compressed air, exchange of electrical cabinets

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

5300

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 1

☑ Scope 2 (location-based)

☑ Scope 2 (market-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Mandatory

(7.55.2.5) Annual monetary savings (unit currency – as specified in 1.2)

2365000

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

2659000

(7.55.2.7) Payback period

Select from:

☑ 1-3 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 6-10 years

(7.55.2.9) Comment

Data are a summarization of 197 projects which are classified as "process"-related efficiency measures.

Row 3

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

☑ Other, please specify :Energy efficiency (others)

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

23400

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 1

☑ Scope 2 (location-based)

☑ Scope 2 (market-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Mandatory

(7.55.2.5) Annual monetary savings (unit currency – as specified in 1.2)

7879000

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

10077000

(7.55.2.7) Payback period

Select from:

☑ 1-3 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 6-10 years

(7.55.2.9) Comment

Data are a summarization of 408 projects which are not only classified as "building or production"-related efficiency measures, because they have effects on both and/ or further categories.
[Add row]

(7.55.3) What methods do you use to drive investment in emissions reduction activities?

Row 1

(7.55.3.1) Method

Select from:

☑ Other :The ZF WAY

(7.55.3.2) Comment

The ZF WAY: In more than one hundred years of company history, ZF has developed a unique corporate culture. It is based on the entrepreneurial spirit of its founders and has always been highly innovation oriented. We refer to this culture as the ZF Way. It shows both the origin of the company and the direction of its continuous development. The ZF Way offers orientation and a clear direction in the midst of an industry transformation that is more dynamic and, in certain areas, more fundamental than ever before. The ZF Way is based on three pillars: 1. ZF strategy "Next Generation Mobility": ZF's mission is to enable clean, safe,

comfortable and affordable mobility for everyone, everywhere.The resulting Next Generation Mobility strategy is a guideline for how the company intends to master future challenges, respond to industry developments and face a constantly changing environment. In this connection, targets and KPIs are continuously updated to meet changing requirements. 2. ZF Way principles: The ZF Way principles illustrate how ZF shapes cooperation and leadership. Every employee should be able to identify with these principles and put them to use in their everyday work. These principles also provide the framework for a successful implementation of the corporate strategy. The equally ranked five principles are:• Passion• Anticipation• Diversity• Empowerment• Accountability 3. Operating model: The operating model is based on three pillars: the divisions, functions and regions. It defines how ZF serves its customers. For this purpose, it summarizes processes, structures and directives. At the same time, the operating model serves as a framework for global cooperation characterized by the ZF Way principles. More information on the ZF Way is available at www.zf.com

Row 2

(7.55.3.1) Method

Select from:

☑ Dedicated budget for low-carbon product R&D

(7.55.3.2) Comment

ZF's strategy aims at ensuring a clean, safe, comfortable, and affordable mobility. Developing green and sustainable products is an integral part of this strategy. Sustainability in product development is a key objective of Research and Development (R&D) at ZF. One of ZF's strategic goals is to significantly lower mobility-related carbon emissions by offering new products to the market and reduce our own specific product-related emissions. To address our current products, calculated product carbon footprint (PCF) serves as a basis for identifying CO2e emitters and prioritizing CO2e reduction measures. PCF helps to determine appropriate levers for product development and to offer sustainable products to our customers. ZF has integrated PCF to its global development process. R&D investments are vital for advancing ZF's sustainable and green product portfolio. In 2024, ZF's R&D expenditure accounted for 3.557 billion compared to 3.543 billion in 2023.

Row 3

(7.55.3.1) Method

Select from:

☑ Compliance with regulatory requirements/standards

(7.55.3.2) Comment

An indispensable component of ZF's success is correct, responsible, and sustainable business management as well as the adherence to all statutory requirements in the countries in which ZF operates.

Row 4

(7.55.3.1) Method

Select from:

☑ Employee engagement

(7.55.3.2) Comment

Communications Campaign "Acting now." with clear tone from the top to increase the awareness for climate protection and sustainable development in all areas of the company. Examples of further awareness and engagement initiatives and programs: •GreenBox@ZF - New products and services for a sustainable future: Support and empower employees to develop innovative ideas in a structured way• ZF Excellence Award Category "Sustainability"•Trainings •Dedicated Sustainability Leads in all divisions and the most material corporate domain functions.•ZF idea management enables every employee to indicate ideas of improvement regarding climate change as improvement in energy efficiency and CO2 emission reduction. When the idea is implemented, it will be awarded.

Row 5

(7.55.3.1) Method

Select from:

☑ Lower return on investment (ROI) specification

(7.55.3.2) Comment

Extended return periods for all efficiency measures to achieve energy efficiency targets.
[Add row]

(7.73) Are you providing product level data for your organization’s goods or services?

Select from:

☑ No, I am not providing data

(7.74) Do you classify any of your existing goods and/or services as low-carbon products?

Select from:

☑ Yes

(7.74.1) Provide details of your products and/or services that you classify as low-carbon products.

Row 1

(7.74.1.1) Level of aggregation

Select from:
☑ Group of products or services

(7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:
☑ Green Bond Principles (ICMA)

(7.74.1.3) Type of product(s) or service(s)

Power
☑ Other, please specify :Renewable energy & clean transportation

(7.74.1.4) Description of product(s) or service(s)

Renewable Energy and clean transportation: ZF technology in wind turbine gear units (renewable energy) and pure battery-electric vehicles (clean transportation)

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:
☑ Yes

(7.74.1.6) Methodology used to calculate avoided emissions

Select from:
☑ The Avoided Emissions Framework (AEF)

(7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Select from:

☑ Use stage

(7.74.1.8) Functional unit used

Renewable Energy and clean transportation: ZF technology in wind turbine gear units (renewable energy) and pure battery-electric vehicles (clean transportation) See ZF Green Finance Report 2025: https://www.zf.com/mobile/de/company/investor_relations/sustainable_finance/sustainable_finance.html#sfreports_acc_493021_0

(7.74.1.9) Reference product/service or baseline scenario used

Renewable Energy: Wind turbine with world emission factor of 354.4 gCO2/kWh according to the International Energy Agency's (IEA) Policy and Sustainable Development Scenario. Clean Transportation: WLTP used for consumption data (well-to-wheel). Fuel emission factor (diesel) assumed for internal combustion engine (ICE) with 2.5 kg CO2 per liter. Electricity factor for battery electric vehicles (BEV) used with 354.4 g CO2 per kWh derived from IEA. See ZF Green Finance Report 2025 (for RY 2024).

(7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario

Select from:

☑ Use stage

(7.74.1.11) Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

15900841

(7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

Renewable Energy: With respect to the development, manufacturing and distribution of wind turbine gear units, ZF reports two impact indicators: annual renewable energy generated and estimate of annual GHG emissions avoided/reduced during use. In 2024, ZF contributed to an installed capacity of 13,831 MW, considering the wind turbine gear units' respective power classes. As the actual capacity of a wind turbine depends on the location and weather conditions, the installed capacity was adjusted by a technical efficiency factor of 35%, leading to an annual renewable energy generated of 42,405,846 MWh. Using a world emission factor of 354.4 gCO_2/kWh, derived from the IEA's Policy and Sustainable Development Scenario, ZF estimates to have avoided 15,028,632 tCO_2 of annual GHG emissions during use in 2024. Clean Transportation: With respect to the development, manufacture and distribution of products for pure battery-electric vehicles, ZF reports on the

estimate of annual GHG emissions avoided/reduced during use as impact indicator for its Green Project Portfolio. ZF's EV business mainly delivers to passenger cars but also to commercial vehicles and material handling systems, on which the calculation of the estimate of annual GHG emissions avoided/reduced during the use phase of the battery-electric vehicle is based. ZF refers to the VDA lifetime distance in the WLTP driving cycle for passenger cars/VECTO driving cycle for commercial vehicles and to customer product specifications for material handling systems, and assumes that the ZF-equipped vehicles (BEV, no hybrids) in 2024 replace internal combustion engine (ICE) vehicles (e.g., gasoline and diesel). Both vehicle types generate well-to-wheel emissions, stemming from the use phase of the vehicles over their lifetime. For ICE vehicles they originate from fuel combustion while the vehicle is driven, but for BEVs from charging the battery. Following the guidelines of the GHG Protocol, the emissions were calculated using a weight-based approach referring to lead products and upscaled by their respective sales volume. In this context, the calculations in the report represent a maximum impact assessment limited to these circumstances. In 2024, ZF estimates to have avoided 872,209 tCO_2 of annual GHG emissions during use.15,028,632 + 872,209 = 15,900,841 t CO2 "Revenue generated from low-carbon product(s) as % of total revenue" according to the Taxonomy-aligned ZF Green Finance Framework; figure rounded.

(7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

5
[Add row]

(7.79) Has your organization retired any project-based carbon credits within the reporting year?

Select from:
☑ No

C9. Environmental performance - Water security

(9.1) Are there any exclusions from your disclosure of water-related data?

Select from:

☑ No

(9.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

Water withdrawals – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

water meter, Invoice

(9.2.4) Please explain

Most location get their water figures by either measuring with a water meter or getting a measured figure from their invoices. But there is a share (sometimes office-only) of locations that are (sometimes partly) situated in leased buildings, sometimes shared with other companies. In that case there is no water-meter for this specific section which is rented by ZF available. The water figures are then calculated by the landlord (e.g., share of leased m²). ZF production locations are obliged to have plant entrance water meter.

Water withdrawals – volumes by source

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

water meter, Invoice

(9.2.4) Please explain

Most location get their water figures by either measuring with a water meter or getting a measured figure from their invoices. But there is a share (sometimes office-only) of locations that are (sometimes partly) situated in leased buildings, sometimes shared with other companies. In that case there is no water-meter for this specific section which is rented by ZF available. The water figures are then calculated by the landlord (e.g., share of leased m²). ZF production locations are obliged to have plant entrance water meter.

Water withdrawals quality

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

standardized measurement methodologies/analytics

(9.2.4) Please explain

If the water quality is of importance for a process it is measured on a regular basis by the location. The frequency depends on the process and water-using installation and the requirements arising from said circumstances. The water for human use is under surveillance of either the municipal/3rd party water supplier or ZF if it withdraws water from its own well.

Water discharges – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

water meter, invoice, water balance

(9.2.4) Please explain

Most location get their water figures by either measuring with a water meter or getting a measured figure from their invoices. But there is a share (sometimes office-only) of locations that are (sometimes partly) situated in leased buildings, sometimes shared with other companies. In that case there is no water-meter for this specific section which is rented by ZF available. The water figures are then calculated by the landlord (e.g., share of leased m²). ZF production locations are obliged to have plant entrance water meter. Not having water meters for water discharge at locations without any water utilizing processes and where water is being used for human demand only is common. In that case reliable figures can be calculated with a water-balance as there is no installation with a possible recognizable water consumption.

Water discharges – volumes by destination

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

water meter, invoice, water balance

(9.2.4) Please explain

See explanation under "water discharge - total volumes". There is a deviation between the share of measured data depending on the discharge destiny e.g., water discharged into surface water is to 100% measured due to the necessity arising from discharge permits which demand the locations to monitor and measure the water discharge flow. Not having water meters for water discharge at locations without any water utilizing processes and where water is being used for human demand only is common. In that case reliable figures can be calculated with a water-balance as there is no installation with a possible recognizable water consumption.

Water discharges – volumes by treatment method

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

water meter, not all locations - only the ones with an on-site wastewater treatment plant WWTP. For other locations the question is not relevant.

(9.2.4) Please explain

If a location operates an on-site wastewater treatment plant the discharged volumes are measured.

Water discharge quality – by standard effluent parameters

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Quarterly

(9.2.3) Method of measurement

testing method chosen according to legal requirement. partially measured by analytics. Not all locations - only the ones with a discharge permit. For other locations the question is not relevant.

(9.2.4) Please explain

If a location has a discharge permit for a wastewater stream which regulates the quality of the respective discharged wastewater the location controls and measures the necessary effluent paramters on a regular basis. The frequency depends on the parameter, the wastewater and the requirements regulated in the discharge permit.

Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Quarterly

(9.2.3) Method of measurement

testing method chosen according to legal requirement. partially measured by analytics. Not all locations - only the ones with a discharge permit. For other locations the question is not relevant.

(9.2.4) Please explain

If a location has a discharge permit for a wastewater stream which regulates the quality of the respective discharged wastewater the location controls and measures the necessary emissions to water on a regular basis. The frequency depends on the type of pollutant, the wastewater and the requirements regulated in the discharge permit.

Water discharge quality – temperature

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Quarterly

(9.2.3) Method of measurement

testing method chosen according to legal requirement, e.g. measuring of input and output temperature. Not all locations - only the ones with a discharge permit. For other locations the question is not relevant.

(9.2.4) Please explain

If a location has a discharge permit for a wastewater stream which regulates the temperature of the respective discharged wastewater the location controls and measures the necessary temperture on a regular basis. The frequency depends on the type of wastewater and the requirements regulated in the discharge permit. The temperature is also measured for discharged cooling water on a regular basis.

Water consumption – total volume

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

calculated (data from Invoice, water meter, waterbalance)

(9.2.4) Please explain

The water consumption is calculated with the following formula: water withdrawal - water discharge The volumes and measuring frequency is derived from these two data sources.

Water recycled/reused

(9.2.1) % of sites/facilities/operations

Select from:

☑ 76-99

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

water meter, water balance, mathematical approach

(9.2.4) Please explain

If a location recycles/reuses water it is typically measured or in some cases calculated by conducting a water balance.

The provision of fully-functioning, safely managed WASH services to all workers

(9.2.1) % of sites/facilities/operations

Select from:
☑ 100%

(9.2.2) Frequency of measurement

Select from:
☑ Continuously

(9.2.3) Method of measurement

ZF conducts internal and external audits in accordance with risk assessments and legal obligations, ensuring the continuous compliance with hygiene standards at all company sites.

(9.2.4) Please explain

All ZF locations worldwide provide WASH (Water, Sanitation, and Hygiene) services for employees, supported by mandatory and regular risk assessments. This commitment aligns with Sustainable Development Goal (SDG) 6 – Clean Water and Sanitation – and reflects our EHS Policy, which states: "Ensure the protection of health and promote the well-being of our employees worldwide." All sites are fully equipped with the necessary infrastructure to meet WASH standards and ensure a safe and hygienic working environment.
[Fixed row]

(9.2.2) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?

Total withdrawals

(9.2.2.1) Volume (megaliters/year)

9699

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.2.4) Five-year forecast

Select from:

☑ Lower

(9.2.2.5) Primary reason for forecast

Select from:

☑ Increase/decrease in business activity

(9.2.2.6) Please explain

corporate water target aims for improving water efficiency

Total discharges

(9.2.2.1) Volume (megaliters/year)

8429

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in efficiency

(9.2.2.4) Five-year forecast

Select from:

☑ Lower

(9.2.2.5) Primary reason for forecast

Select from:

☑ Increase/decrease in business activity

(9.2.2.6) Please explain

corporate water target aims for improving water efficiency

Total consumption

(9.2.2.1) Volume (megaliters/year)

1270

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in efficiency

(9.2.2.4) Five-year forecast

Select from:

☑ About the same

(9.2.2.5) Primary reason for forecast

Select from:

☑ Increase/decrease in business activity

(9.2.2.6) Please explain

corporate water target aims for improving water efficiency
[Fixed row]

(9.2.4) Indicate whether water is withdrawn from areas with water stress, provide the volume, how it compares with the previous reporting year, and how it is forecasted to change.

(9.2.4.1) Withdrawals are from areas with water stress

Select from:

☑ Yes

(9.2.4.2) Volume withdrawn from areas with water stress (megaliters)

68

(9.2.4.3) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.4.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.4.5) Five-year forecast

Select from:

☑ Higher

(9.2.4.6) Primary reason for forecast

Select from:

☑ Change in accounting methodology

(9.2.4.7) % of total withdrawals that are withdrawn from areas with water stress

0.70

(9.2.4.8) Identification tool

Select all that apply

☑ WWF Water Risk Filter

(9.2.4.9) Please explain

All locations must be re-assessed with the new ESRS-disclosure requirements taken into consideration. This will mostly lead to an increased amount of affected locations that are considered as located in areas with water stress.
[Fixed row]

(9.2.7) Provide total water withdrawal data by source.

Fresh surface water, including rainwater, water from wetlands, rivers, and lakes

(9.2.7.1) Relevance

Select from:
☑ Relevant

(9.2.7.2) Volume (megaliters/year)

5313

(9.2.7.3) Comparison with previous reporting year

Select from:
☑ Higher

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:
☑ Other, please specify :technical defect

(9.2.7.5) Please explain

Due to a technical defect at one location, the water-cooling circuit failed for several months, resulting in an increased demand for surface water.

Brackish surface water/Seawater

(9.2.7.1) Relevance

Select from:
☑ Not relevant

(9.2.7.5) Please explain

ZF doesn't withdraw water from this sources.

Groundwater – renewable

(9.2.7.1) Relevance

Select from:
☑ Relevant

(9.2.7.2) Volume (megaliters/year)

917

(9.2.7.3) Comparison with previous reporting year

Select from:
☑ Lower

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:
☑ Increase/decrease in business activity

(9.2.7.5) Please explain

Business activity decreased in 2024 and thus less water had been used.

Groundwater – non-renewable

(9.2.7.1) Relevance

Select from:
☑ Not relevant

(9.2.7.5) Please explain

ZF doesn't withdraw water from this sources.

Produced/Entrained water

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

ZF does not rely on produced/entrained water for water withdrawal.

Third party sources

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

3469

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.7.5) Please explain

Business activity decreased in 2024 and thus less water had been used.

[Fixed row]

(9.2.8) Provide total water discharge data by destination.

Fresh surface water

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

5003.7

(9.2.8.3) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☑ Other, please specify :technical defect

(9.2.8.5) Please explain

Due to a technical defect at one location, the water-cooling circuit failed for several months, resulting in an increased demand for surface water which naturally results in a higher volume of discharged water to surface water.

Brackish surface water/seawater

(9.2.8.1) Relevance

Select from:

☑ Not relevant

(9.2.8.5) Please explain

Brackish surface water/seawater does not represent a water discharge destination for ZF.

Groundwater

(9.2.8.1) Relevance

Select from:

☑ Not relevant

(9.2.8.5) Please explain

Groundwater does not represent a water discharge destination for ZF.

Third-party destinations

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

3425.7

(9.2.8.3) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.8.5) Please explain

Decrease in business activity.
[Fixed row]

(9.2.9) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

Tertiary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

872

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ This is our first year of measurement

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Other, please specify :first year of collecting data in our global reporting system.

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 11-20

(9.2.9.6) Please explain

Water is primarily used for sanitary & kitchen and for cooling purposes. Process water which demands a tertiary treatment as highest level of water treatment is not very common at ZF. Some locations have on-site WWTP to treat their process wastewater coming from e.g., surface treatment etc.

Secondary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

61

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ This is our first year of measurement

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Other, please specify :first year of collecting data in our global reporting system.

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 1-10

(9.2.9.6) Please explain

Water is primarily used for sanitary and kitchen and for cooling purposes. Process water which demands a secondary treatment as highest level of water treatment is not very common at ZF.

Primary treatment only

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

79

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ This is our first year of measurement

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Other, please specify :first year of collecting data in our global reporting system.

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 1-10

(9.2.9.6) Please explain

Water is primarily used for sanitary and kitchen and for cooling purposes. Process water which demands a primary treatment as highest level of water treatment is not very common at ZF.

Discharge to the natural environment without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

4836

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ This is our first year of measurement

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Other, please specify :first year of collecting data about in our global reporting system.

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ Less than 1%

(9.2.9.6) Please explain

Surface water is mainly used for cooling purposes and can sometimes be directly discharged back into the river without any prior treatment necessary because it is practically not polluted which is the case for the reported volumes here. But the respective discharged cooling water is still monitored nevertheless (by the respective authority and ZF), especially the temperature.

Discharge to a third party without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

2582

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ This is our first year of measurement

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Other, please specify :first year of collecting data about volumes per treatment technology in our global reporting system.

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 81-90

(9.2.9.6) Please explain

Practically every location discharges its domestic wastewater to a 3rd party without any prior treatment. Exceptions are e.g. some zero-discharge locations in India (due to legal requirements). To use water for domestic purposes is one major type of water utilization at ZF.

Other

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

All relevant water discharge metrics have been reported above.
[Fixed row]

(9.2.10) Provide details of your organization’s emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.

(9.2.10.1) Emissions to water in the reporting year (metric tons)

0.1

(9.2.10.2) Categories of substances included

Select all that apply

☑ Priority substances listed under the EU Water Framework Directive

(9.2.10.3) List the specific substances included

Nickel and compounds

(9.2.10.4) Please explain

ZF expanded its global reporting system and included information about water pollutants for the first time. Nickel and compounds is one of the substances the location have to report about besides a couple of other pollutants, which are not listed as priority substances in the EU Water Framework but in the Annex II of the E-PRTR regulation which is the leading standard for ESRS E3 "pollution".
[Fixed row]

(9.3) In your direct operations and upstream value chain, what is the number of facilities where you have identified substantive water-related dependencies, impacts, risks, and opportunities?

Direct operations

(9.3.1) Identification of facilities in the value chain stage

Select from:

☑ No, we have assessed this value chain stage but did not identify any facilities with water-related dependencies, impacts, risks, and opportunities

(9.3.4) Please explain

For ZF, water withdrawal for production at all ZF locations is an environmental issue since the use of freshwater is increasingly restricted due to climate change, for instance. This is another reason why the company is committed to installing water-saving equipment that exceeds statutory requirements. The revised ZF Circularity Framework focuses on closing water circuits, for example in cooling systems. Some of ZF's production locations, e.g., in Mexico, India and China, are in areas with significant water scarcity or with significant water shortage. Permits for water withdrawal for production purposes are occasionally restricted. This may result in a need for increased investment or expenses to cover the technical modernization of production equipment. In 2020, ZF assessed all locations for their water risk. An updated assessment of all locations was conducted in 2024 in order to take into account definitions and specifications of CSRD reporting. For production sites in areas of water-stress, the goal is to reduce water withdrawal by 2% annually relative to sales. For all other locations, a 1% reduction is being targeted on an annual basis. The base year for both targets is 2019. All water sources will be considered when assessing target achievement. Progress is monitored and managed in line with ZF's environmental management system at individual locations and at Group level. "Water scarcity" was one of the risks assessed in the climate risk scenario analysis. The result was that water scarcity isn't now and will not pose a substantial risk in the future for ZF (for further information check the chapters about risk management).

Upstream value chain

(9.3.1) Identification of facilities in the value chain stage

Select from:

☑ No, we have not assessed this value chain stage for facilities with water-related dependencies, impacts, risks, and opportunities, but we are planning to do so in the next 2 years

(9.3.4) Please explain

In 2024 ZF conducted on a Climate Risk Analysis in line with CSRD and related ESRS E1 Climate change to analyse physical risks and transitional risks and opportunities across 3 different (short, medium and long-term) time horizons. By conducting this qualitative and quantitative scenario analysis, we improve our understanding of climate-related risks & opportunities impact on the entire value chain. Initial results: Physical: - Supply chain: Increasing climate hazards can lead to asset damages (AD) and business interruptions (BI) at our suppliers (for production materials) and can negatively affect transport routes (e.g. floodings of streets). Yet, we see that those interruptions often occur very regionally and temporarily, so that alternative suppliers or routes can be found in our global network.
[Fixed row]

(9.4) Could any of your facilities reported in 9.3.1 have an impact on a requesting CDP supply chain member?

Select from:

☑ No facilities were reported in 9.3.1

(9.5) Provide a figure for your organization’s total water withdrawal efficiency.

(9.5.1) Revenue (currency)

41377000000

(9.5.2) Total water withdrawal efficiency

4266109.91

(9.5.3) Anticipated forward trend

ZF has the target to reduce water withdrawal by 1% annually relative to sales for all locations. For production sites in areas of water-stress, the goal is to reduce water withdrawal by 2% annually relative to sales. Given that ZF aims to constantly improve water efficiency, we expect a positive trend. Comment: previous year, we provided revenue in million EUR, but we changed this according to CDP guidance to revenue in EUR
[Fixed row]

(9.12) Provide any available water intensity values for your organization’s products or services.

Row 1

(9.12.1) Product name

Electric Axle Drive (sample calculation performed)

(9.12.2) Water intensity value

91.3

(9.12.3) Numerator: Water aspect

Select from:

☑ Water consumed

(9.12.4) Denominator

Denominator: part (electric drive) Numerator: m³ world equiv. (water) Intensity KPI: m³ world equiv

(9.12.5) Comment

Calculation of the sample product: The total sum of water consumed in m³ world equiv. (91.3) is the sum of the water consumed within the three stages: production (66.5) + Use phase (23.9) + End of Life EoL (0.881) Calculation method: AWARE (https://wulca-waterlca.org/aware/what-is-aware/)
[Add row]

(9.13) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances
	Select from: ☑ Yes

[Fixed row]

(9.13.1) What percentage of your company's revenue is associated with products containing substances classified as hazardous by a regulatory authority?

Row 1

(9.13.1.1) Regulatory classification of hazardous substances

Select from:

☑ Candidate List of Substances of Very High Concern for Authorisation above 0.1% by weight (EU Regulation)

(9.13.1.2) % of revenue associated with products containing substances in this list

Select from:

☑ Less than 10%

(9.13.1.3) Please explain

This is a rough estimation based on ongoing evaluation. In general, ZF aims to reduce and minimize hazardous substances in operations and products. Preventive technical measures in place at the locations ensure that hazardous substances cannot seep into the ground and endanger groundwater, even in the event of a release, for example resulting from an incident. There is a Group-wide reporting obligation in the eventuality of a release. Furthermore, ZF adopted the substance declarations and prohibitions of the Global Automotive Declarable Substance List (GADSL) which defines requirements for prohibited and/or declarable substances.
[Add row]

(9.14) Do you classify any of your current products and/or services as low water impact?

(9.14.1) Products and/or services classified as low water impact

Select from:

☑ No, and we do not plan to address this within the next two years

(9.14.3) Primary reason for not classifying any of your current products and/or services as low water impact

Select from:

☑ Judged to be unimportant, explanation provided

(9.14.4) Please explain

Within the ZF materiality analysis water use in production was identified as a field of action with relevance for ZF business, but with no severity with need for product classification.
[Fixed row]

(9.15) Do you have any water-related targets?

Select from:
☑ Yes

(9.15.1) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

Water pollution

(9.15.1.1) Target set in this category

Select from:
☑ No, and we do not plan to within the next two years

(9.15.1.2) Please explain

The pollution of the discharged wastewater is regulated via wastewater discharge permits and controlled by our on-site experts and by local authorities. Regularly conducted internal and external audits check if the location is compliant in that regard. ZF plants have wastewater treatment facilities installed, if necessary.

Water withdrawals

(9.15.1.1) Target set in this category

Select from:
☑ Yes

Water, Sanitation, and Hygiene (WASH) services

(9.15.1.1) Target set in this category

Select from:

☑ Yes

Other

(9.15.1.1) Target set in this category

Select from:

☑ No, and we do not plan to within the next two years

(9.15.1.2) Please explain

No other water-related impacts have been identified for ZF which require target setting for mitigation and/or control. The main lever for ZF water withdrawal. [Fixed row]

(9.15.2) Provide details of your water-related targets and the progress made.

Row 1

(9.15.2.1) Target reference number

Select from:

☑ Target 1

(9.15.2.2) Target coverage

Select from:

☑ Country/area/region

(9.15.2.3) Category of target & Quantitative metric

Water withdrawals

☑ Reduction in withdrawals per revenue

(9.15.2.4) Date target was set

12/30/2022

(9.15.2.5) End date of base year

12/30/2019

(9.15.2.6) Base year figure

113

(9.15.2.7) End date of target year

12/30/2025

(9.15.2.8) Target year figure

104

(9.15.2.9) Reporting year figure

94

(9.15.2.10) Target status in reporting year

Select from:

☑ Achieved

(9.15.2.11) % of target achieved relative to base year

211

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

☑ Sustainable Development Goal 6

(9.15.2.13) Explain target coverage and identify any exclusions

Target covers ZF locations which had been identified as located in water-stress areas according to the assessment conducted in 2020 by using the WWF water risk filter.

(9.15.2.15) Actions which contributed most to achieving or maintaining this target

ZF uses semi-open cooling circuits. The systems need continued cleaning (esalination) to avoid contamination and encrustations. This process needs water. Targeted measures should therefore desalinate the supplied cooling water before it enters the cooling towers. One location located in an area of high water stress installed a reverse osmosis-system for this purpose. Even though the osmosis-system needs water as well it was possible to reduce the overall water demand in general due to the possible deeper concentration cycles.

(9.15.2.16) Further details of target

-2% water withdrawal p.a. from 2021-2025, base-year is 2019. Target is for locations located in areas of high water stress (identified in 2020).

Row 2

(9.15.2.1) Target reference number

Select from:

☑ Target 2

(9.15.2.2) Target coverage

Select from:

☑ Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Water, Sanitation, and Hygiene (WASH) services

☑ Other WASH, please specify :Continously ensure availability of WASH services for all ZF employees (100%) at direct operations

(9.15.2.4) Date target was set

12/30/2023

(9.15.2.5) End date of base year

12/30/2023

(9.15.2.6) Base year figure

100

(9.15.2.7) End date of target year

12/30/2024

(9.15.2.8) Target year figure

100

(9.15.2.9) Reporting year figure

100

(9.15.2.10) Target status in reporting year

Select from:

☑ Achieved and maintained

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

☑ Sustainable Development Goal 6

(9.15.2.13) Explain target coverage and identify any exclusions

Coverage: ZF direct operations globally; no exclusions

(9.15.2.15) Actions which contributed most to achieving or maintaining this target

ZF has embedded the protection of employee health and the promotion of well-being into its EHS Policy, which was endorsed by the Board of Management on March 26, 2018. This commitment also supports Sustainable Development Goal (SDG) 6: "Ensure availability and sustainable management of water and sanitation for all." Within ZF Policy Statement on Respect for Human Rights, ZF includes the Right to health and occupational safety: In this context, ZF follows recognized certification processes to systematically enhance occupational safety and health. The status of WASH-related measures is regularly monitored and managed through local risk assessments as well as internal and external audits. In cases where deviations are identified, corrective actions are promptly implemented. Through this approach, ZF ensures that hygiene standards are consistently met across all locations.

(9.15.2.16) Further details of target

All ZF-operated plants provide WASH services to employees in accordance with our EHS policy. Every global location is fully equipped with the necessary infrastructure to meet WASH standards. Our ongoing commitment is to maintain and ensure the availability of WASH services for all employees worldwide.
[Add row]

C13. Further information & sign off

(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by a third party?

	Other environmental information included in your CDP response is verified and/or assured by a third party
	Select from: ☑ Yes

[Fixed row]

(13.1.1) Which data points within your CDP response are verified and/or assured by a third party, and which standards were used?

Row 1

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

☑ Climate change

☑ Water

(13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Climate change

☑ Product footprint

(13.1.1.3) Verification/assurance standard

General standards

☑ Other general verification standard, please specify :Cradle to Cradle Certified™ Product: Gold

(13.1.1.4) Further details of the third-party verification/assurance process

ZF has successfully achieved Cradle to Cradle Certified Gold for the product(s) under the name: Clutch Cover M, MZ, MFZ, MFZ2, G, GM, GMF, GMFZ, GMFZ2, HVB, HBX, XN, MF362, MF395, MF430. ZF received the German Sustainability Award 2023 and 2024 in the automotive industry category. ZF was awarded for its commitment to sustainable recycling management, notably for the the remanufacturing site in Bielefeld, which specializes in the remanufacturing of powertrain modules for vehicle manufacturers and the global aftermarket. ZF has been using remanufacturing procedures for decades and for this purpose has established a global return system. Various parts such as clutch covers, clutch discs, torque converters, ConAct are remanufactured for industrial use. Remanufacturing reduces ZF's demand for raw materials by up to 90% while saving about 90% in energy compared to manufacturing a new product. Industrial remanufacturing is currently implemented at 15 ZF locations. The Bielefeld (Germany) location alone sorts and remanufactures around 50 tons of cores per day. In total, several thousand products of all kinds – from automatic transmissions to various types of mechatronics and hydraulic control units – are remanufactured every year. This does not only prevent many components from being scrapped too early. Their remanufacturing also extends the service life of many vehicles that have long since been phased out of volume production. Within ZF's sustainability strategy, the remanufactured ZF product portfolio shall be expanded in order to achieve a further reduction of product-related emissions. ZF's service strategy and the ZF Aftermarket portfolio consider various dimensions of the circular economy, such as product recycling, remanufacturing and CO2 equivalents when evaluating total cost of ownership and serviceability.

(13.1.1.5) Attach verification/assurance evidence/report (optional)

ZF_Fr_Clutc_Gold_CERT6318_2023-07-18_135558.pdf

Row 2

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

☑ Climate change

☑ Water

(13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Climate change

☑ Product footprint

(13.1.1.3) Verification/assurance standard

General standards

☑ Other general verification standard, please specify :Cradle to Cradle Certified™ Product: Gold

(13.1.1.4) Further details of the third-party verification/assurance process

ZF Friedrichshafen AG has successfully achieved Cradle to Cradle Certified Gold for the product(s) under the name: Clutch disks with diameter 350 – 430 mm with and without predamper The following products or variations are excluded from the certification: products with glued parts. Cradle to Cradle Certified Products Regarding its products, the ZF Group has been using remanufacturing procedures for decades and for this purpose has established a global return system. Various parts such as clutch covers, clutch discs, torque converters, ConAct are remanufactured for industrial use. Remanufacturing reduces ZF's demand for raw materials by up to 90% while saving about 90% in energy compared to manufacturing a new product. Industrial remanufacturing is currently implemented at 15 ZF locations. The Bielefeld (Germany) location alone sorts and remanufactures around 50 tons of cores per day. In total, several thousand products of all kinds – from automatic transmissions to various types of mechatronics and hydraulic control units – are remanufactured every year. This does not only prevent many components from being scrapped too early. Their remanufacturing also extends the service life of many vehicles that have long since been phased out of volume production. Within the new ESG strategy, the remanufactured ZF product portfolio shall be expanded in order to achieve a further reduction of product-related emissions. ZF's service strategy and the ZF Aftermarket portfolio consider various dimensions of the circular economy, such as product recycling, remanufacturing and CO2 equivalents when evaluating total cost of ownership and serviceability.

(13.1.1.5) Attach verification/assurance evidence/report (optional)

ZF_Fr_Clutc_Gold_CERT7720_2024-07-30_22328.pdf

Row 3

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

☑ Climate change

☑ Water

(13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Climate change

☑ Product footprint

(13.1.1.3) Verification/assurance standard

General standards

☑ Other general verification standard, please specify :Cradle to Cradle Certified™ Product: Silver

(13.1.1.4) Further details of the third-party verification/assurance process

ZF Friedrichshafen AG has successfully achieved Cradle to Cradle Certified Silver for the product(s) under the name: Clutch Cover MF430E Cradle to Cradle Certified Products Regarding its products, the ZF Group has been using remanufacturing procedures for decades and for this purpose has established a global return system. Various parts such as clutch covers, clutch discs, torque converters, ConAct are remanufactured for industrial use. Remanufacturing reduces ZF's demand for raw materials by up to 90% while saving about 90% in energy compared to manufacturing a new product. Industrial remanufacturing is currently implemented at 15 ZF locations. The Bielefeld (Germany) location alone sorts and remanufactures around 50 tons of cores per day. In total, several thousand products of all kinds – from automatic transmissions to various types of mechatronics and hydraulic control units – are remanufactured every year. This does not only prevent many components from being scrapped too early. Their remanufacturing also extends the service life of many vehicles that have long since been phased out of volume production. Within the new ESG strategy, the remanufactured ZF product portfolio shall be expanded in order to achieve a further reduction of product-related emissions. ZF's service strategy and the ZF Aftermarket portfolio consider various dimensions of the circular economy, such as product recycling, remanufacturing and CO2 equivalents when evaluating total cost of ownership and serviceability.

(13.1.1.5) Attach verification/assurance evidence/report (optional)

ZF_Fr_Clutc_Silve_CERT6419_2023-09-29_16110.pdf

Row 4

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

☑ Climate change

☑ Water

(13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Climate change

☑ Product footprint

(13.1.1.3) Verification/assurance standard

General standards

☑ Other general verification standard, please specify :Cradle to Cradle Certified™ Product: Silver

(13.1.1.4) Further details of the third-party verification/assurance process

ZF Friedrichshafen AG has successfully achieved Cradle to Cradle Certified Silver for the product(s) under the name: Dual Mass Flywheel for Commercial Vehicles Cradle to Cradle Certified Products Regarding its products, the ZF Group has been using remanufacturing procedures for decades and for this purpose has established a global return system. Various parts such as clutch covers, clutch discs, torque converters, ConAct are remanufactured for industrial use. Remanufacturing reduces ZF's demand for raw materials by up to 90% while saving about 90% in energy compared to manufacturing a new product. Industrial remanufacturing is currently implemented at 15 ZF locations. The Bielefeld (Germany) location alone sorts and remanufactures around 50 tons of cores per day. In total, several thousand products of all kinds – from automatic transmissions to various types of mechatronics and hydraulic control units – are remanufactured every year. This does not only prevent many components from being scrapped too early. Their remanufacturing also extends the service life of many vehicles that have long since been phased out of volume production. Within the new ESG strategy, the remanufactured ZF product portfolio shall be expanded in order to achieve a further reduction of product-related emissions. ZF's service strategy and the ZF Aftermarket portfolio consider various dimensions of the circular economy, such as product recycling, remanufacturing and CO2 equivalents when evaluating total cost of ownership and serviceability.

(13.1.1.5) Attach verification/assurance evidence/report (optional)

ZF_Fr_Dual_Silve_CERT6539_2024-02-29_19258.pdf

Row 5

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

☑ Climate change

☑ Water

(13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Climate change

☑ Product footprint

(13.1.1.3) Verification/assurance standard

General standards

☑ Other general verification standard, please specify :Cradle to Cradle Certified™ Product: Silver

(13.1.1.4) Further details of the third-party verification/assurance process

ZF Friedrichshafen AG has successfully achieved Cradle to Cradle Certified Silver for the product(s) under the name: Torque converter 8HP / 6HP Cradle to Cradle Certified Products Regarding its products, the ZF Group has been using remanufacturing procedures for decades and for this purpose has established a global return system. Various parts such as clutch covers, clutch discs, torque converters, ConAct are remanufactured for industrial use. Remanufacturing reduces ZF's demand for raw materials by up to 90% while saving about 90% in energy compared to manufacturing a new product. Industrial remanufacturing is currently implemented at 15 ZF locations. The Bielefeld (Germany) location alone sorts and remanufactures around 50 tons of cores per day. In total, several thousand products of all kinds – from automatic transmissions to various types of mechatronics and hydraulic control units – are remanufactured every year. This does not only prevent many components from being scrapped too early. Their remanufacturing also extends the service life of many vehicles that have long since been phased out of volume production. Within the new ESG strategy, the remanufactured ZF product portfolio shall be expanded in order to achieve a further reduction of product-related emissions. ZF's service strategy and the ZF Aftermarket portfolio consider various dimensions of the circular economy, such as product recycling, remanufacturing and CO2 equivalents when evaluating total cost of ownership and serviceability.

(13.1.1.5) Attach verification/assurance evidence/report (optional)

ZF_Fr_Torqu_Silve_CERT6529_2024-01-29_153430.pdf

Row 6

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

☑ Climate change

☑ Water

(13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Climate change

☑ Product footprint

(13.1.1.3) Verification/assurance standard

General standards

☑ Other general verification standard, please specify :Cradle to Cradle Certified™ Product: Bronze

(13.1.1.4) Further details of the third-party verification/assurance process

ZF Friedrichshafen AG has successfully achieved Cradle to Cradle Certified Bronze for the product(s) under the name: ConAct Cradle to Cradle Certified Products Regarding its products, the ZF Group has been using remanufacturing procedures for decades and for this purpose has established a global return system. Various parts such as clutch covers, clutch discs, torque converters, ConAct are remanufactured for industrial use. Remanufacturing reduces ZF's demand for raw materials by up to 90% while saving about 90% in energy compared to manufacturing a new product. Industrial remanufacturing is currently implemented at 15 ZF locations. The Bielefeld (Germany) location alone sorts and remanufactures around 50 tons of cores per day. In total, several thousand products of all kinds – from automatic transmissions to various types of mechatronics and hydraulic control units – are remanufactured every year. This does not only prevent many components from being scrapped too early. Their remanufacturing also extends the service life of many vehicles that have long since been phased out of volume production. Within the new ESG strategy, the remanufactured ZF product portfolio shall be expanded in order to achieve a further reduction of product-related emissions. ZF's service strategy and the ZF Aftermarket portfolio consider various dimensions of the circular economy, such as product recycling, remanufacturing and CO2 equivalents when evaluating total cost of ownership and serviceability.

(13.1.1.5) Attach verification/assurance evidence/report (optional)

ZF_Fr_ConAc_Bronz_CERT6479_2023-11-16_145755.pdf

Row 7

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

☑ Climate change

☑ Water

(13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Climate change

☑ Product footprint

(13.1.1.3) Verification/assurance standard

General standards

☑ Other general verification standard, please specify :Cradle to Cradle Certified™ Product: Gold

(13.1.1.4) Further details of the third-party verification/assurance process

ZF Friedrichshafen AG has successfully achieved Cradle to Cradle Certified Gold for the product(s) under the name: Clutch Cover Cradle to Cradle Certified Products Regarding its products, the ZF Group has been using remanufacturing procedures for decades and for this purpose has established a global return system. Various parts such as clutch covers, clutch discs, torque converters, Clutch Covers are remanufactured for industrial use. Remanufacturing reduces ZF's demand for raw materials by up to 90% while saving about 90% in energy compared to manufacturing a new product. Industrial remanufacturing is currently implemented at 15 ZF locations. The Bielefeld (Germany) location alone sorts and remanufactures around 50 tons of cores per day. In total, several thousand products of all kinds – from automatic transmissions to various types of mechatronics and hydraulic control units – are remanufactured every year. This does not only prevent many components from being scrapped too early. Their remanufacturing also extends the service life of many vehicles that have long since been phased out of volume production. Within the new ESG strategy, the remanufactured ZF product portfolio shall be expanded in order to achieve a further reduction of product-related emissions. ZF's service strategy and the ZF Aftermarket portfolio consider various dimensions of the circular economy, such as product recycling, remanufacturing and CO2 equivalents when evaluating total cost of ownership and serviceability.

(13.1.1.5) Attach verification/assurance evidence/report (optional)

ZF_Clutch Cover Gold_CERT12049_2025-07-21.pdf
[Add row]

(13.2) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

	Additional information	Attachment (optional)
	Further climate- and environment-related information can be found in ZF's Annual Report 2024.	*ZF_AnnualReport24.pdf*

[Fixed row]

(13.3) Provide the following information for the person that has signed off (approved) your CDP response.

(13.3.1) Job title

Senior Vice President Sustainability & EHS

(13.3.2) Corresponding job category

Select from:

☑ Chief Sustainability Officer (CSO)

[Fixed row]

(13.4) Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

Select from:

☑ No