MTU Aero Engines AG

2024 CDP Corporate Questionnaire 2024

Word version

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.
Terms of disclosure for corporate questionnaire 2024 - CDP

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10/09/2024, 04:19 pm

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:

☑ Publicly traded organization

(1.3.3) Description of organization

MTU Aero Engines is a leading engine manufacturer and an established global player in the industry. The company engages in the design, development, manufacture, marketing and support of commercial and military aircraft engines in all thrust and power categories and stationary gas turbines. Operating affiliates all over the world, MTU has a local presence in major regions and markets. In the commercial engine business, MTU has content in all thrust and power categories, from propulsion systems for business jets and engines for narrow body aircraft with geared turbofan technology to the world's most powerful engines. The company is a valued and trusted partner to all of the big players in the industry: General Electric, Pratt & Whitney and Rolls-Royce. In the maintenance business, MTU Maintenance is the world's largest independent provider of commercial engine MRO (maintenance, repair and overhaul) services in terms of sales. The primary focus is on providing support for engines in which MTU is a risk- and revenue-sharing partner. MTU Maintenance offers repair solutions for a wide variety of different engine types. In the military arena, MTU Aero Engines is Germany's industrial lead company for practically all engines flown by the country's armed forces. The company delivers the enabling technologies, develops and manufactures engines and engine components, and provides logistics support. See also: https://www.mtu.de/about-us/

[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.

	End date of reporting year	Alignment of this reporting period with your financial reporting period	Indicate if you are providing emissions data for past reporting years
	11/29/2023	*Select from:* ☑ No	*Select from:* ☑ No

[Fixed row]

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

5363000000

(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:

☑ No

ISIN code - equity

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

DE000A0D9PT0

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:

☑ No

D-U-N-S number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

Other unique identifier

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

[Add row]

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

Select all that apply

☑ Canada

☑ Germany

☑ Poland

☑ Serbia

(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

(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 3 suppliers

(1.24.7) Description of mapping process and coverage

Transparency of supply chain depends on purchased goods as well as on regulatory requirements (e.g. critical raw material act). We plan to expand mapping to other tiers within the next years.
[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?

	Plastics mapping	Primary reason for not mapping plastics in your value chain	Explain why your organization has not mapped plastics in your value chain
	Select from: ☑ No, and we do not plan to within the next two years	*Select from:* ☑ Judged to be unimportant or not relevant	*There are no plastic components within our products.*

[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)

0

(2.1.3) To (years)

1

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

According to MTU's Forecast period

Medium-term

(2.1.1) From (years)

2

(2.1.3) To (years)

3

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

According to MTU's operative planning period

Long-term

(2.1.1) From (years)

4

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

Select from:

☑ No

(2.1.3) To (years)

15

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

According to MTU's strategic planning period
[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

☑ Impacts

☑ Risks

☑ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(2.2.2.4) Coverage

Select from:

☑ Partial

(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:

☑ More than once a year

(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

☑ Not location specific

(2.2.2.12) Tools and methods used

Enterprise Risk Management

☑ Internal company methods

Other

☑ External consultants

☑ Materiality assessment

☑ Scenario analysis

(2.2.2.13) Risk types and criteria considered

Chronic physical

☑ Heat stress

☑ Increased severity of extreme weather events

☑ Water stress

Policy

☑ Carbon pricing mechanisms

Market

☑ Changing customer behavior

Technology

☑ Transition to lower emissions technology and products

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Customers

☑ Investors

☑ Regulators

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

Select from:

☑ No

(2.2.2.16) Further details of process

MTU's risk management process for climate risks is directly influenced by the strategic decision making of our corporate development department. We place a high emphasis on a horizontal approach of dealing with climate risks. The respective processes are thus naturally integrated into our company-wide risk management process. For the risk management process, the requirements of all of our stakeholders must be taken into account. To this end, a standardized process has been defined that is to be strictly adhered to by the responsible functions and persons in the centers and at the locations quarterly. The process comprises the following steps: 1) Risk identification 2) Risk assessment 3) Risk controlling 4) Risk and action monitoring 5) Risk and action reporting. Climate related risks to third parties are also monitored in MTUs NFS Risk Management and have to be considered as a part of the corporate risk management if the gross impact on EBIT adj. / Liquidity is higher than 5 m. PROCESS FOR IDENTIFYING RISKS An essential prerequisite and the starting point for an efficient risk management process is a risk identification that is as complete as possible. In compliance to our Corporate Risk Management standard all possible climate related risks are documented in the risk inventory and periodically reviewed by the risk management board. To obtain an overview of the potential risk groups to which the MTU Group may be exposed, these risks are documented in a structured risk inventory, regardless of their probability of occurrence. This inventory includes all risk areas as per the COSO ERM framework. It includes also environmental risks, Compliance and Governance. Risk identification at center level is performed yearly as a part of operational planning and during the year at least at the time the quarterly statements are prepared on the basis of the risk checklist derived from the risk inventory The risk inventory is reviewed by the risk management board every two years within the framework of self-assessment and supplemented if new risk groups or sub-groups are identified. This review serves to make sure that the risk inventory and the quarterly risk identification are complete and up-to-date. PROCESS FOR ASSESSING RISKS Under the corporate risk management, the impact (in terms of financial loss) is first determined at center level for each risk. Impacts of risks that only affect liquidity (cash flow) and not EBIT adj. are likewise shown as yearly loss for the 3-year period. What is decisive here is the deviation from the planned liquidity. The valuation methods for determining the impact on EBIT and liquidity is derived decentrally in the respective centers/at the respective locations. Substantial risks involving an unweighted loss of 5 million euros (threshold) and more over a 3-year period under review are reported by the centers or locations according to the schedule using the standardized center risk maps. PROCESS FOR MANAGING RISKS Risk controlling plays a key role in the entire risk management process of MTU. Basically, there are four action strategies: Risk avoidance: omission of an action to prevent a risk from occurring Risk mitigation: reduction of the probability of occurrence and/or the impact by taking suitable actions Risk transfer: transfer of a risk, e.g., to an insurance company Risk acceptance.
[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

Interconnections are assessed during our double materiality process where we assess our impact on environment and the dependencies this could cause for financial materiality (risk or opportunity). The assessment is done by an interdisciplinary team of specialist from topic owners and risk experts and will be valuated and assigned by the CS board comitee.
[Fixed row]

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

(2.3.1) Identification of priority locations

Select from:

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

(2.3.7) Primary reason for not identifying priority locations

Select from:

☑ Not an immediate strategic priority

(2.3.8) Explain why you do not identify priority locations

The evaluation of suppliers and their locations with regard to nature-related issues and environmental-related stability is so far given secondary priority compared to other strategic parameters but is planned to have in the next years. First evaluation has already been made.
[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 and Cashflow

(2.4.3) Change to indicator

Select from:

☑ Absolute decrease

(2.4.5) Absolute increase/ decrease figure

20000000

(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

According to our risk management process decrease of more than 20.000000 Euro have to be reported to our executive board.

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 and Cashflow

(2.4.3) Change to indicator

Select from:

☑ Absolute increase

(2.4.5) Absolute increase/ decrease figure

20000000

(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

According to our risk management process increase of more than 20.000000 Euro have to be reported to our executive board.
[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

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:

☑ Not an immediate strategic priority

(3.1.3) Please explain

Our key products are low-pressure turbines and high-pressure compressors. Due to the thermal requirements, almost exclusively metallic components are used. [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

Policy

☑ Carbon pricing mechanisms

(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

☑ Germany

(3.1.1.9) Organization-specific description of risk

Even though MTU has already started using green energy sources more intensively, MTU is still using fossil-based energy for its operations, esp. electrical energy for machinery, natural gas for heating/processes and kerosene for its test beds at OEM and MRO sites. Its German production sites account for around 90% of the total MTU Scope 1 and 2 CO2 emissions or energy consumption. 1. The emissions from the heating plant in Munich and from the test beds of all German sites are regulated by the European Emissions Trading System (EU-ETS). Those plants participate since the beginning of the legal regulations (for the first time in 2004): The requirement results from the technical capacities of the facilities, which is why only the German facilities are affected from this regulation. The price for the compliance certificates in that scheme are already rising constantly within the last years. They have already reached a much higher price level than in any year since start of the EU-ETS in 2005. 2. In end 2019 Germany has introduced a Fuel Emission Trading Act (BEHG) which will lead to higher cost for using fossil-based energy directly or indirectly. Both pricing schemes will lead to increasing costs for energy use in our operational processes and therefore to increasing costs. The current worldwide political and economic situation has already result in rising energy prices.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased indirect [operating] costs

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

Select all that apply

☑ Short-term

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

Select from:

☑ Virtually certain

(3.1.1.14) Magnitude

Select from:

☑ 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

The next columns quantify the effects of the risk and explain the financial figures.

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

Select from:

☑ Yes

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

21000000

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

21000000

(3.1.1.25) Explanation of financial effect figure

The potential financial impact figure derives from a calculation based on expectation on development of prices and our demand of TEHG certificates, rising costs from the Fuel Emission Trading Act and expectations on increasing energy costs as a global development. We have made a prognosis on our future energy consumption and the resulting emissions, the implemented need of emission certificates, the number of allocated cost-free certificates and rising certificate prices based on current legislation. - the positive contribution of our energy efficiency measures implanted in the course of the climate strategy. Cost components in the impact calculation include a) growing costs from the purchase of EUAs for compliance in the EU ETS and b) rising costs for energy due to pricing effects from the national fuel emissions trading scheme in Germany. For this calculation we assumed an EUA price of 65 /tCO2 (and rising) and we calculated the amounts of EUAs required on historical data, business development and energy need for site operations. The impact number is given as a combined assumption for a ten years period, beginning in 2021. c) the number given in 2023 has been recalculated for the scope of the MTU group with respect to rising prices and reduced energy consumption expectations.

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☑ Establish site-specific targets

(3.1.1.27) Cost of response to risk

11360000

(3.1.1.28) Explanation of cost calculation

The number given for the response to the risk represents only the cost for 2023, this was spent on environmental and climate protection measures at all our production sites including expenditures to ensure legally compliant plant operation and fulfilling all necessary restriction from the authorities. We did not calculate the cost for all measures to reach our climate strategy target, which is a reduction of 60% of our CO2-emissions. Scope 1 and 2 till 2030.

(3.1.1.29) Description of response

To counter this price risk and to give a response to the climate crisis challenge, MTU has implemented a roadmap for all major production and maintenance sites to decrease its CO2 emissions remarkably within the next decade, following the goals of the Paris Climate Agreement. This program started at the Munich site in 2021, was enlarged to the other sites in Germany and Poland with an dedicated emission reduction plan in 2022, followed by Canada and Serbia in 2023. The overall costs for the implementation of these plans depend on organizational and other aspects as well as for technical opportunities and special conditions which differ in each site.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk2

(3.1.1.3) Risk types and primary environmental risk driver

Policy

☑ Changes to regulation of existing products and services

(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

☑ Germany

☑ Poland

(3.1.1.9) Organization-specific description of risk

Mandates on and regulation of existing products and services can limit engine sales and revenues from flight hour agreements. Potential airplane bans (e.g. 4 engine airplanes banned in Israel, Business jets not allowed to land at certain airports), as well as route bans (e.g. short distance flights in France) lead to lower demand in certain segments.

(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:

☑ Likely

(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

Bans on airplanes currently mostly local and focused on noise reduction rather than climate impact, potential to forced earlier retirements only seen on singular occasion and still under debate. Regions outside of EU still focus on promotion of SAF and CO2 emission trading, no prominent example of a route ban to be found. Bans with-in EU of something between 200 and 500 km can be credible, with several excep-tions accounting for geography, infrastructure & transit hubs. A flight ban (distance

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

Select from:

☑ No

(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

306000000

(3.1.1.28) Explanation of cost calculation

In 2023, MTU increased its spending on research and development by 15% and invested 306.000.000 Euro in a green future. R&D activities focused on improving the performance of the geared turbofan programmes, technology studies for future drive generations - focussing on the next generation geared turbofan, water-enhanced turbofan and flying fuel cell - as well as expanding the capabilities for a virtual engine.

(3.1.1.29) Description of response

We conduct intensive research and development work with numerous specialists: inside the company and in cooperation with universities and research institutions. An innovation board regularly discusses all technology and innovation topics and initiates technology projects and studies. The Technology Steering Committee approves the entire MTU technology roadmap and is regularly informed about progress and the progress of the project. MTU controls its product development in a multi-stage technology and innovation process. The short-term product development is based on specific customer requirements (specifications) based on existing technologies. In the medium term (up to 15 years), we create advanced product designs and derive technology requirements from them. In the long term (until 2050), our engineers develop guiding concepts with the help of a technology radar and initiate the development of basic technologies. The technology process is based on a culture of innovation that we promote with various initiatives. These include, for example, group-wide innovation management, an InnoLab or Ideation Challenges, with which we take up and evaluate employees' ideas in a specific field of innovation.A valid estimation of the costs of the Technology Roadmap and the implementation of necessary measures, also taking into account funding measures and national, European and international initiatives, will not be given.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk3

(3.1.1.3) Risk types and primary environmental risk driver

Reputation

☑ Increased partner and stakeholder concern or negative partner and stakeholder feedback

(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

☑ Canada

☑ Germany

☑ Poland

☑ Serbia

(3.1.1.9) Organization-specific description of risk

We do not reach our climate targets set. This leads to a negative reputation and rating by our customers, investors and other stakeholders and following by that to a negative image.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Brand damage

(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-high

(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 effect has not been quantified financially.

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

Select from:

☑ No

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☑ Other compliance, monitoring or target, please specify **:**a suitable internal organization and ongoing monitoring of goal achievement

(3.1.1.27) Cost of response to risk

0

(3.1.1.28) Explanation of cost calculation

The expenses to achieve the climate goals are planned as part of the OP process. This makes new requirements and measures that are not yet foreseeable possible. Current costs are mentioned under Risk#1.

(3.1.1.29) Description of response

The progress in achieving the goals is continuously monitored by the internal specialist departments and regularly reported to the responsible committees. There is long- and medium-term action planning. This makes it possible to react early and ensure that long-term goals are achieved.
[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:

☑ Other, please specify **:**EBIT and Cashflow

(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)

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

is currently not being determined at this level, see point 3.1.1 for details
[Add 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

☑ EU ETS

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

EU ETS

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

71.26

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

0

(3.5.2.3) Period start date

11/30/2022

(3.5.2.4) Period end date

11/29/2023

(3.5.2.5) Allowances allocated

5484

(3.5.2.6) Allowances purchased

23953

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

41311

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

0

(3.5.2.9) Details of ownership

Select from:

☑ Facilities we own and operate

(3.5.2.10) Comment

The scope comprises heating and test bed facilities of the sites located in Germany: Munich, Hanover, Berlin
[Fixed row]

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

STRATEGY Due the inclusion of its German test stands and one heat plant at Munich site in the EU ETS, MTU is subject to emissions trading and respective carbon pricing effects. Responsibility for compliance and fulfilling legal requirements is to the managers of the plants locally, although reporting to the authorities and handling the management of those certificates is managed centralized. To manage our compliance, we closely monitor and plan our relevant fuel consumption and respective emissions. Moreover, based on this data we also calculate our demand for EUAs on the base of numbers from operational planning and site development (influencing future energy demand) and apply a respective purchase strategy for certificates. This ongoing carbon management assures timely compliance through handing in respective certificates to the regulator according to the verified MTU emissions under the scheme. CASE STUDY Situation and task: MTU's emissions under the EU ETS vary much as they directly follow the use rate of its engine test stands at various sites in Germany and (to a much lower degree) the heat production at Munich heat plant. Moreover, in light of changes in our free allocation (that is contingent again on the use rate/emissions in previous years) our emissions position is changing year on year. Thus, what is required at MTU to maintain its carbon management is a special ability to organize compliance in light of a high volatility in demand (emissions)/supply (certificates on our books) ratio. Action: Thus our carbon management follows an agile strategy with the combination of a mid- and a strong short-term focus. It is based on continuous monitoring and projections of use rates especially of our test stands. Moreover, we also monitor the carbon price trends and hedge against rising prices through an adjusted purchase strategy. Result: Based on our tailor-made strategy, our carbon desk can assure that the required certificates are on our books when we need them for compliance and also price risks are as much mitigated as possible - without compromising much on our liquidity. At the same time our free allocation was by and large the same, although this will be reduced within the next years to zero in 2030. Though we were able to fulfil our compliance by a CER transformation, which was managed efficiently and therefore sufficient certificates has been handed in to the regulator right on time.

(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:*

	Environmental opportunities identified
	☑ 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

☑ Development of new products or services through R&D and innovation

(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

☑ Germany

☑ Poland

(3.6.1.8) Organization specific description

Transportation including aviation accounts for a significant share in global CO2 emissions. In a decarbonizing world, emissions from air traffic are to be controlled and eventually reduced as far as possible. MTU is a global leader in the development, testing, manufacturing and maintenance of advanced components for the production of highly efficient aircraft engines. Around one-third of all aircraft in service worldwide today have MTU components on board. The efficiency of our products has a significant impact on the overall efficiency of the engine. Our components make it possible to significantly reduce kerosene consumption and thus make an important contribution to a low-carbon aviation. For example, with the Geared Turbo Fan GTF, MTU has a fuel-saving modern drive on offer and already successfully implemented it on the market e.g., in the PW1100 application, powering the Airbus A320neo. The principle of the GTF will be further optimized over the next few years as part of further improvement programs. With the introduction and implementation of the GTF as the engine for the A320neo, MTU has reached a technological milestone which, as a result of the possible reduction in fuel consumption, ensures very good market opportunities and thus sales. Our newest product is the PW1100G engine powering the Airbus A320neo. With a reduction of 16% in CO2 emissions compared to its predecessor this engine significantly reduces the climate impact of aviation.

(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:

☑ Very likely (90–100%)

(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

The effect has not been quantified financially.

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

Select from:

☑ No

(3.6.1.24) Cost to realize opportunity

306000000

(3.6.1.25) Explanation of cost calculation

In 2023, MTU increased its spending on research and development by 15% and in-vested 306.000.000 Euro in a green future. R&D activities focused on improving the performance of the geared turbofan programmes, technology studies for future drive generations - focussing on the next generation geared turbofan, water-enhanced turbofan and flying fuel cell - as well as expanding the capabilities for a virtual engine. A valid estimation of the costs of the Technology Roadmap and the implementation of necessary measures, also taking into account funding measures and national, European and international initiatives, will not be given.

(3.6.1.26) Strategy to realize opportunity

We conduct intensive research and development work with numerous specialists: inside the company and in cooperation with universities and research institutions. An innovation board regularly discusses all technology and innovation topics and initiates technology projects and studies. The Technology Steering Committee approves the entire MTU teWe conduct intensive research and development work with numerous specialists: inside the company and in cooperation with universities and research institutions. An innovation board regularly discusses all technology and innovation topics and initiates technology projects and studies. The Technology Steering Committee approves the entire MTU technology roadmap and is regularly informed about progress and the progress of the project. MTU controls its product development in a multi-stage technology and innovation process. The short-term product development is based on specific customer requirements (specifications) based on existing technologies. In the medium term (up to 15 years), we create advanced product designs and derive technology requirements from them. In the long term (until 2050), our engineers develop guiding concepts with the help of a technology radar and initiate the development of basic technologies. The technology process is based on a culture of innovation that we promote with various initiatives. These include, for example, group-wide innovation management, an InnoLab or Ideation Challenges, with which we take up and evaluate employees' ideas in a specific field of innovation.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp2

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Energy source

☑ Use of low-carbon energy sources

(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

☑ Germany

(3.6.1.8) Organization specific description

MTU Munich plans to cover around 80 per-cent of the entire heat requirement at the site with zero CO2 emissions using deep geothermal energy. The core element will be two boreholes. Drilling work began in December 2023 and a discovery was found in accordance with the forecasts in terms of temperature and thickness. Both drillings were successfully completed by early summer 2024. Next, the technical preparations for the connection will be carried out on the build-ing side, so that from 2025 onwards the commissioning and thus the replacement of the fossil heat supply can take place gradually. The efficiency is very high due to the direct use of the thermal water. Electrical energy is only required for the thermal water pump and the circulation pumps. In addition, compared to conventional energy supply, transport routes and warehousing are eliminated because the energy source is located directly below the MTU plant.

(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

☑ 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

The effect has not been quantified financially.

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

Select from:

☑ No

(3.6.1.24) Cost to realize opportunity

40000000

(3.6.1.25) Explanation of cost calculation

An economic feasibility study was carried out as a basis for deciding on the geothermal system. The figures given result from the assumptions regarding the development of energy costs, the expected price development for emissions trading certificates as well as taxes and levies.

(3.6.1.26) Strategy to realize opportunity

Based on a technical and geological feasibility study and the profitability calculation, the necessary mining permit was applied for and granted in 2020. The potential of deep geothermal energy has been confirmed. The construction of the drilling site and the construction/drilling works itself has been performed following the schedule and was finalized successfully in summer 2024.

[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 **:**EBIT and Cashflow

(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:

☑ Less than 1%

(3.6.2.4) Explanation of financial figures

is currently not being determined at this level, see point 3.6.1 for details
[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:

☑ Yes, and it is publicly available

(4.1.5) Briefly describe what the policy covers

The policy describes the composition of the supervisory board, the diversity and internationality and the rules of procedure. page 130: https://www.mtu.de/fileadmin/EN/5_Investor_Relations/7_Financial_Reports/PDFs/MTU_GB2023_en_locked.pdf

(4.1.6) Attach the policy (optional)

Competence_Profile_for_MTU_Aero_Engines__Supervisory_Board.pdf
[Fixed row]

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

	Board-level oversight of this environmental issue	Primary reason for no board-level oversight of this environmental issue	Explain why your organization does not have board-level oversight of this environmental issue
Climate change	*Select from:* ☑ Yes	*Select from:*	*Rich text input [must be under 2500 characters]*
Biodiversity	*Select from:* ☑ No, and we do not plan to within the next two years	*Select from:* ☑ Judged to be unimportant or not relevant	*According to our DMA process Biodiversity is not material for MTU*

[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)

(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:

☑ 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 the setting of corporate targets

☑ Monitoring progress towards corporate targets

☑ 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

☑ Monitoring the implementation of a climate transition plan

☑ Overseeing and guiding the development of a business strategy

☑ 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

The Group Executive Board is the highest internal decision-making level for environmental and climate protection in the Group. Group-wide management and implementation of environmental and climate protection is the responsibility of top management in the Technology department for product responsibility as well as steering committees (e.g., Technology Board, Corporate Sustainability Board), which report directly to the CEO. Environmental and climate protection indicators are reported to the Executive Board on a quarterly basis via an internal reporting system, and the Sustainability Strategy 2025 is reviewed once a year by the full Executive Board. Environmental protection officers and further experts from across the Group meet regularly at group-wide EHS Days to further optimize environmental and climate protection. In addition, environmental specialists are involved in numerous networks outside the company. MTU' s focus on environmental and climate protection is underlined by the fact that the variable portion of the Group Executive Board's compensation is partly linked to CO2 reductions. The Board of Management regularly evaluates the success of the implementation. Due to the importance of the topic from 2022 onwards also the compensation of the upper and middle management of all departments is partly linked to CO2 reduction goals.
[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

☑ 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?

	Management-level responsibility for this environmental issue	Primary reason for no management-level responsibility for environmental issues	Explain why your organization does not have management-level responsibility for environmental issues
Climate change	*Select from:* ☑ Yes	*Select from:*	*Rich text input [must be under 2500 characters]*
Biodiversity	*Select from:* ☑ No, and we do not plan to within the next two years	*Select from:* ☑ Judged to be unimportant or not relevant	*According to our DMA process biodiversity is not material for MTU*

[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

☑ Chief Sustainability Officer (CSO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing engagement in landscapes and/or jurisdictions

☑ Managing public policy engagement related to environmental issues

Policies, commitments, and targets

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a business strategy which considers environmental issues

☑ Implementing a climate transition plan

☑ Implementing the business strategy related to environmental issues

☑ Managing annual budgets related to environmental issues

☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(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:

☑ Quarterly

(4.3.1.6) Please explain

The CSO works closely with the Supervisory Board and the other members of the Board of Management in order to drive MTU forward with a view to achieving its sustainable business goals. Sustainability does not end at the factory gate. That's why MTU has also included the Value chain in its sustainability activities.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Committee

☑ Other committee, please specify **:**Corporate Responsibility Board

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

Policies, commitments, and targets

☑ Measuring progress towards environmental corporate targets

Strategy and financial planning

☑ Developing a climate transition plan

☑ Implementing the business strategy related to environmental issues

(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 Corporate Sustainability Board (CS-Board) meets at least six times a year and is established at Group level to ensure consistent environmental governance across the company, review, monitor and report environmental risks and opportunities (including climate-related risks and opportunities), and harmonize mitigation, risk management and environmental performance improvement measures. The CS-Board consists of managers of senior executive level and includes the Heads of quality, engineering, purchasing, human resources, communications, legal and accounting. Decisions of the CS Board are executed by representatives of key management disciplines to ensure comprehensive penetration of environmental and climate protection within the company. Monitoring of environmental issues (including climate) takes place at two levels on at least a quarterly basis: Site managers monitor the environmental strategy, while the CR Board at Group level ensures a harmonized approach of risk mitigation measures and risk management. Managers at business unit level (through roadmaps) ensure the implementation of these risk mitigation measures and risk management processes. In a quarterly review of risks and opportunities, environmental and climate issues and related measures are monitored by the CR Board. The CR Board reports regularly to the CSO, who deals with the topic on a regular basis and the Board of Management quarterly.
[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

MTU's focus on environmental and climate protection is underlined by the fact that the variable portion of the Group Executive Board's compensation and of the higher and middle management is partly linked to CO2 emission-reduction targets in the reporting year. This can be even more than 10 percent.
[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 – set figure

(4.5.1.3) Performance metrics

Emission reduction

☑ Reduction in absolute emissions

Resource use and efficiency

☑ Energy efficiency improvement

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Short-Term Incentive Plan, or equivalent, only (e.g. contractual annual bonus)

(4.5.1.5) Further details of incentives

Parts of the Board's compensations are directly linked to our CO2 emissions reduction targets.

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

The performance indicator is in line with the corporate climate action strategy and supports with the implementation of the climate targets.

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 – set figure

(4.5.1.3) Performance metrics

Emission reduction

☑ Reduction in absolute emissions

Resource use and efficiency

☑ Energy efficiency improvement

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Short-Term Incentive Plan, or equivalent, only (e.g. contractual annual bonus)

(4.5.1.5) Further details of incentives

In 2023 more than 10 percent of the compensation of the higher and middle management of all the departments are directly linked to our CO2 emissions reduction targets. Also senior management project leaders have a monetary reward linked to personal goals of their topic (e.g. environmental or sustainability managers).

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

The performance indicator is in line with the corporate climate action strategy and supports with the implementation of the climate targets.
[Add row]

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

	Does your organization have any environmental policies?
	Select from: ☑ 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

(4.6.1.4) Explain the coverage

The company's climate strategy guidelines are applicable for all of the group's production and maintenance locations, which make a significant contribution to Scope 1 & 2.

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to comply with regulations and mandatory standards

Climate-specific commitments

☑ Other climate-related commitment, please specify **:**The goals formulated in the climate strategy are aligned with the objectives formulated in the Paris Climate Protection Agreement; a 1.5° target is supported.

(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:

☑ Not publicly available

Row 2

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Climate change

(4.6.1.2) Level of coverage

Select from:

☑ Selected facilities, businesses or geographies only

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Upstream value chain

(4.6.1.4) Explain the coverage

The Code of Conduct for MTU Suppliers defines MTU's requirements and principles for MTU suppliers of goods and services, contractors and consultants regarding human rights, labor standards, climate and environmental protection and anti-corruption

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to comply with regulations and mandatory standards

Climate-specific commitments

☑ Other climate-related commitment, please specify **:**MTU expects Suppliers to pursue sustainable and active climate protection. In doing so, transparency about their CO2 emissions is to be established and CO2 reduction targets set, preferably in line with the 1.5 degree scenario of the Paris Climate Ag

Social commitments

☑ Adoption of the UN International Labour Organization principles

☑ Commitment to respect internationally recognized human rights

Additional references/Descriptions

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

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

Select all that apply

☑ No, but we plan to align in the next two years

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

06_Code_of_Conduct_Lieferanten_EN[1].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

☑ UN Global Compact

☑ Other, please specify **:**BEEN-i Bavarian Energy Efficiency Network Initiative; Unternehmensnetzwerk Klimaschutz corporate climate action network; Munich Business Climate Pact; Bavarian Environmental and Climate Pact

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

We also pursue environmental protection and climate action through joint initiatives. Besides its commitment to the UN Global Compact, whose ten principles include environmental sustainability, MTU is also involved in several local initiatives. This includes the Unternehmensnetzwerk Klimaschutz corporate climate action network, the Munich Business Climate Pact and the Bavarian Environmental and Climate Pact.
[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

(4.11.4) Attach commitment or position statement

Lobbyregister-Detailansicht-R002076-2024-07-22_14-39-15.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

https://www.lobbyregister.bundestag.de/suche/R002076 R002076

(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

Our political engagement activities are aligned with our overall climate strategy through various steps. We are in constant exchange with the responsible colleagues (meetings, jour-fixes, events, trade fairs) in order to align our political messaging with our climate strategy. Further, our political messaging and activities always derive from the needs of MTU, which in turn derive from its overall climate strategy.
[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

ReFuelEU Aviation

(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

Energy and renewables

☑ Alternative fuels

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

Select from:

☑ National

(4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

☑ Germany

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

Select from:

☑ Support with no exceptions

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

Select all that apply

☑ Ad-hoc meetings

(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

ReFuelEU Aviation as a policy is crucial to build up production and use of SAFs. The use of SAFs is crucial to reduce the climate footprint of aviation. Thus, the implementation of this policy is central to MTUs climate transition plan. Currently, a monitoring process on the role on non-CO2 effects is taking place. Further, in 2026 a review process of ReFuelEU Aviation will take place. A potential adaptation of the policy regarding the potential role of non-CO2 effects as well as the scope of use of SAFs is crucial to MTU.

(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

☑ Other trade association in Europe, please specify **:**Bundesverband der Deutschen Luft- und Raumfahrtindustrie e. V.

(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

BDLI and its members try to support Climate change legislation and therefore climate protection foremost through technological development. Fostering such leads to climate change mitigation as technology enables aviation to be more efficient, less polluting and quieter. BDLI and its members aim for climate neutral flying in 2050. Further, the members of BDLI develop and will produce aircraft or propulsion technologies, that are climate neutral and economically efficient in operations in order to meet climate change legislation. We are in constant exchange with the BDLI through the executive Board, working groups and various stakeholder events on how to support climate protection as well as national/European policymaking. We provide the association with necessary expertise such as development results of current and future propulsion concepts.

(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

[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

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

(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
☑ Content of environmental policies

(4.12.1.6) Page/section reference

99ff

(4.12.1.7) Attach the relevant publication

MTU_GB2023_en_locked.pdf

(4.12.1.8) Comment

Non financial Statement

Row 2

(4.12.1.1) Publication

Select from:

☑ In voluntary sustainability reports

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

(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

☑ Content of environmental policies

(4.12.1.6) Page/section reference

45ff and 64ff

(4.12.1.7) Attach the relevant publication

MTU-SustainabilityReport-2023-k-en.pdf

(4.12.1.8) Comment

Voluntary sustainability report
[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:

☑ Annually

[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

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

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 4.0ºC and above

(5.1.1.7) Reference year

2011

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

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

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Scenario Analysis has been performed by a specialist consultant. The data used for the climate model are the same basis as for the IPCC reports through the Coupled Model Intercomparison Projects (CMIPs). Both chronical climate-related risks, i.e., risks that are present over a long period of time, and acute climate-related risks, i.e., risks that are short-term but severe, were considered. The uncertainty of a climate dimension was evaluated through its data type, whether there are direct variables to quantify it or e.g., it was assessed by means of a proxy, combined with its climate prediction reliability.

(5.1.1.11) Rationale for choice of scenario

The selected scenarios follow the recommendation and selection based on the consultant's technical expertise and correspond to the generally accepted status and approach in science.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 2.6

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ SSP1

(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

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.6ºC - 1.9ºC

(5.1.1.7) Reference year

2011

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

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

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Scenario Analysis has been performed by a specialist consultant. The data used for the climate model are the same basis as for the IPCC reports through the Coupled Model Intercomparison Projects (CMIPs). Both chronical climate-related risks, i.e., risks that are present over a long period of time, and acute climate-related risks, i.e., risks that are short-term but severe, were considered. The uncertainty of a climate dimension was evaluated through its data type, whether there are direct variables to quantify it or e.g., it was assessed by means of a proxy, combined with its climate prediction reliability.

(5.1.1.11) Rationale for choice of scenario

The selected scenarios follow the recommendation and selection based on the consultant's technical expertise and correspond to the generally accepted status and approach in science.
[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

☑ Target setting and transition planning

☑ Other, please specify **:**technical planning of the locations and infrastructure/buildings

(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

MTU performed a scenario analysis for 8 sites together with the meteoblue AG. The analysis revealed that 2 sites have a higher vulnerability to the effects of climate change than the rest. One site is located in the United States of America and the other one is located in Canada. Both sites are classified with the highest heat stress risk category („red flag“). The site in the United States furthermore has a high wildfire risk and a low flood risk whereas the site in Canada has a medium wildfire risk and a low flood risk. Even though both sites are endangered in more than one risk category, the most problematic category is heat stress. Both are the only two assessed sites that are classified with the highest heat stress category possible. To assess the heat stress risk, five parameters were used (number of heat days (Max. 30C), number of summer days (Max. 25C), number of tropical nights (Min. 20C), maximum temperature and average temperature). Being classified with a red flag for the heat stress category means that the probability that values in the future climate exceed the mean value of the current climate is higher than 95 %. For the locations in Canada and the US the red flag heat risk results from the forecasted development of the average temperature which is forecasted to rise about 1C until 2040 under the RCP 8.5 scenario. The other parameters for heat stress are classified with the medium risk category. Nevertheless, having one parameter with the classification „red flag“ leads to the whole category being classified with a red flag. Heat stress in terms of a rising average temperature will change the natural environment dramatically e.g., water availability, composition of flora and fauna, differences in the growing season. Furthermore, it will have a strong impact on the physical state and the health of humans. To avoid lower productivity and heat stress it might be necessary to ventilate or cool certain areas at the production site. Furthermore, you should provide recreational breaks and adequate beverages or shorten the shifts To be able to mitigate these consequences and to drive further development at its sites, MTU uses the results of this scenario analysis. The focus is on the most vulnerable locations (U.S. and Canada). Nevertheless, MTU is

working on the implementation of appropriate measures for all locations to mitigate the effects of climate change. The results of the climate risk analysis are taken into account in the further organizational and technical planning of the locations and infrastructure/buildings in future. A consideration in risk management is under investigation
[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

MTU has been active in the development, construction and maintenance of aviation engines for more than 90 years. This is our core competency. With our technology roadmap we want to help shape the path to sustainable and emission-free aviation. This change takes time to develop and implement and requires significant financial resources. Therefore, the current business model must continue to be operated in parallel with a focus on improving the energy efficiency of the engines.

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

Select from:

☑ We have a different feedback mechanism in place

(5.2.8) Description of feedback mechanism

Content, measures, progress and the achievement of the goals set in the technology roadmap and the implementation of the climate strategy are regularly reported to the corresponding control and steering committees. In addition, this is reported on as part of regular sustainability reporting. Deviations from the plan and the set goals are recognized, measures for improvement are defined and implemented. The necessary integration of further elements such as supply chain and scope emissions has been identified.

(5.2.9) Frequency of feedback collection

Select from:

☑ More frequently than annually

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

The technology roadmap and climate strategy are aligned with the 1.5 goals of the Paris Climate Protection Agreement.

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

The progress in the implementation of the technology roadmap or the climate strategy and the status compared to the set deadlines in the planning is regularly reported to the relevant committees, including the Executive Board and Supervisory Board.

(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

☑ 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

1) How has the strategy in this area been influenced by climate-related risks and opportunities? Climate related risks and opportunities have a major impact on our products and all of our value-add activities (technologies, development, production and maintenance of our products). The main influencing factors are long-term targets with regard to climate impact, the demand of airframers, Engine OEMs and Airlines. We see SAF (Sustainable Air Fuels) as the technology with the highest potential to reduce climate impact on short term. We therefore advocate the use of sustainable aviation fuels (SAF). We believe SAF is indispensable in paving the way to climate-neutral aviation. The idea is to shift away from consuming fossil fuels and toward sustainable, renewable fuels. We are doing our part to ensure that this potential is harnessed for aviation. 2) Time horizon covered by strategy: With the recent update of our Technology Agenda Claire MTU covers a time horizon of approx. 30 years. In Claire we define not only quantitative climate targets but also concepts to achieve these. The development of the concepts is performed in

dedicated specialist teams. A potential entry into service date highly depends on the feasibility of new technologies and the overall acceptance and demand of new propulsion technologies by customers (air- lines and lessors). 3) Case study of the most substantial strategic decision(s) made in this area: As a result of the translation of the Paris goals on the aviation sector and MTU's Technology Roadmap MTU set-up a specialist team and project budgets for the development of a fuel-cell based propulsion system as one option for emission free flying. The development of a fuel-cell based propulsion system requires nearly completely different expertise in engineering, new light-weight fuel cell stacks and subsystems as well as a higher grade of integration in airframe and a new infrastructure for H2.

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

MTU has published a new Code of Conduct for its suppliers in 2023. This formulates expectations, such as environmental and climate management, the implementation of a precautionary principle in environmental protection, increasing energy efficiency, producing or purchasing sustainable energy, and transparency about emissions and CO2 reduction targets. Resources should be sourced sustainably and used.

Investment in R&D

(5.3.1.1) Effect type

Select all that apply

☑ 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

The major part of our R&D expenses contributes to more efficient propulsion systems and therefore lower emissions. Accordingly we increased our investments in future propulsion technologies towards emission-free flying. This secures our long-term market position and profitable growth path.

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

As part of the implementation of our climate strategy, extensive measures to reduce Scope 1&2 production-related emissions are being implemented at our major production and maintenance sites in Germany, Poland, Serbia and Canada. A large number of measures with a sustainable impact have been implemented at the sites, e.g. further optimization of room temperatures, replacement of lighting systems, retrofitting machines and systems, improvements to buildings and systems, identifying of energy inefficient machines/systems and optimization of processes. All these measures are having the effect of saving energy and therefore reducing costs. In Poland a second PV system went into operation in 2023; in Serbia, the PV system that was installed in 2023 went operational in 2024, two more plants are in preparation at Munich. In addition, the MTU site in Munich has fully offset the remaining emissions with high-quality compensation certificates. MTU Munich is preparing the use of deep geothermal energy. Up to 80 per cent of the heating requirements at the site will be covered by deep geothermal energy in future, getting operational in 2025.
[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

- ☑ Assets
- ☑ Revenues
- ☑ Liabilities
- ☑ Direct costs
- ☑ Indirect costs
- ☑ Access to capital
- ☑ Capital allocation
- ☑ Capital expenditures
- ☑ Acquisitions and divestments

(5.3.2.2) Effect type

Select all that apply

- ☑ 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

MTU regularly monitors potential acquisition targets and partnerships to access or accelerate sustainable key technologies to improve our products and Case study for revolutionary concept: Hydrogen-powered fuel cell as an emerging technology for sustainable aviation is among the most promising technologies for emission free flying. MTU set-up an initial investment-plan covering costs, capital expenditures like for personnel demand, hardware assets, testing etc. and capital allocation, as-sets and liabilities. Furthermore, MTU is evaluating various partnerships with indus-try and research institutes in order to access or accelerate key technologies and share costs. MTU also stays in contact with governmental institutions to acquire ap-propriate funding volumes (concerns element "access to capital"). In this early stage of development, the financial planning focuses on the element's costs, capex and access to capital. The investment plan will be updated and detailed continuously.

Row 2

(5.3.2.1) Financial planning elements that have been affected

Select all that apply

- ☑ Indirect costs
- ☑ Capital expenditures

(5.3.2.2) Effect type

Select all that apply

☑ Risks

(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

In 2023, the operation of PV systems for own electricity supply was expanded at the Rzeszów site in Poland. A PV system was installed in Serbia in 2023, which went operational in 2024. In Hannover a heat pump has been installed. MTU is also pursuing the development of deep geothermal energy for the Munich site; drilling works has been performed and were successful in 2024. Now further works for the adap-tion and optimization of the site heating systems are going on. In future, up to 80 per cent of the site's heat requirements are to be covered CO_2 -free. All measures led to corresponding investment costs, which were taken into account in the planning. In future, however, this will reduce energy costs, as less green electricity will have to be purchased at the sites in Poland and Serbia. At the Munich site, less money will have to be spent on energy supply, but also on compensation projects due to the reduced CO2 emissions.
[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	Methodology or framework used to assess alignment with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
	Select from: ☑ Yes	*Select all that apply* ☑ A sustainable finance taxonomy	*Select from:* ☑ At both the organization and activity level

[Fixed row]

(5.4.1) Quantify the amount and percentage share of your spending/revenue that is aligned with your organization's climate transition.

Row 1

(5.4.1.1) Methodology or framework used to assess alignment

Select from:

☑ A sustainable finance taxonomy

(5.4.1.2) Taxonomy under which information is being reported

Select from:

☑ EU Taxonomy for Sustainable Activities

(5.4.1.3) Objective under which alignment is being reported

Select from:

☑ Climate change mitigation

(5.4.1.4) Indicate whether you are reporting eligibility information for the selected objective

Select from:

☑ No

(5.4.1.5) Financial metric

Select from:

☑ CAPEX

(5.4.1.6) Amount of selected financial metric that is aligned in the reporting year (currency)

14000000

(5.4.1.7) Percentage share of selected financial metric aligned in the reporting year (%)

3

(5.4.1.8) Percentage share of selected financial metric planned to align in 2025 (%)

0

(5.4.1.9) Percentage share of selected financial metric planned to align in 2030 (%)

0

(5.4.1.12) Details of the methodology or framework used to assess alignment with your organization’s climate transition

Technical screening criteria for climate change mitigation (EU taxonomy)

Row 2

(5.4.1.1) Methodology or framework used to assess alignment

Select from:

☑ A sustainable finance taxonomy

(5.4.1.2) Taxonomy under which information is being reported

Select from:

☑ EU Taxonomy for Sustainable Activities

(5.4.1.3) Objective under which alignment is being reported

Select from:

☑ Climate change mitigation

(5.4.1.4) Indicate whether you are reporting eligibility information for the selected objective

Select from:

☑ No

(5.4.1.5) Financial metric

Select from:

☑ OPEX

(5.4.1.6) Amount of selected financial metric that is aligned in the reporting year (currency)

71000000

(5.4.1.7) Percentage share of selected financial metric aligned in the reporting year (%)

25

(5.4.1.8) Percentage share of selected financial metric planned to align in 2025 (%)

0

(5.4.1.9) Percentage share of selected financial metric planned to align in 2030 (%)

0

(5.4.1.12) Details of the methodology or framework used to assess alignment with your organization's climate transition

Technical screening criteria for climate change mitigation (EU taxonomy)
[Add row]

(5.4.2) Quantify the percentage share of your spending/revenue that was associated with eligible and aligned activities under the sustainable finance taxonomy in the reporting year.

Row 1

(5.4.2.1) Economic activity

Select from:

☑ Manufacturing of aircraft

(5.4.2.2) Taxonomy under which information is being reported

Select from:

☑ EU Taxonomy for Sustainable Activities

(5.4.2.3) Taxonomy alignment

Select from:

☑ Taxonomy-eligible, alignment not assessed

(5.4.2.4) Financial metrics

Select all that apply

☑ Turnover

☑ CAPEX

☑ OPEX

(5.4.2.12) Taxonomy-eligible, alignment not assessed turnover from this activity as % of total turnover in reporting year

91

(5.4.2.19) Taxonomy-eligible, alignment not assessed CAPEX associated with this activity as % of total CAPEX in the reporting year

49

(5.4.2.26) Taxonomy-eligible, alignment not assessed OPEX with this activity as % of total OPEX in the reporting year

54

(5.4.2.27) Calculation methodology and supporting information

According to EU-Taxonomy

(5.4.2.33) Attach any supporting evidence

[Add row]

(5.4.3) Provide any additional contextual and/or verification/assurance information relevant to your organization's taxonomy alignment.

	Indicate whether you will be providing verification/assurance information relevant to your taxonomy alignment in question 13.1
	Select from: ☑ Yes

[Fixed row]

(5.5) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
	Select from: ☑ Yes	

[Fixed row]

(5.5.8) Provide details of your organization's investments in low-carbon R&D for transport-related activities over the last three years.

Row 1

(5.5.8.1) Activity

Select all that apply

☑ Aviation

(5.5.8.2) Technology area

Select from:

☑ Geared Turbo Fan – Ultra-High Bypass Ratio engine

(5.5.8.3) Stage of development in the reporting year

Select from:

☑ Applied research and development

(5.5.8.4) Average % of total R&D investment over the last 3 years

47.7

(5.5.8.7) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Goals and opportunities geared to sustainable commercial Propulsion concepts as part of the transition to emission-free flying are defined in MTU's Clean Air Engine Technology Agenda Claim. This is being implemented as part of MTU's Leading Technology Roadmap, which focuses on two areas: First, the evolutionary develop-ment of gas turbines based on the GTF, combined with revolutionary propulsion con-cepts that greatly improve the thermodynamic cycle by using waste heat recovery and significantly reduce all emissions. Second, complete electrification of the power-train to maximize emission-free flying. Out of all the concepts considered, from MTU's standpoint the conversion of hydrogen into power with the aid of a fuel cell is becoming most relevant. MTU refers to this as the "flying fuel cell." Alongside these topics, MTU is actively supporting developments to increase the use of sustainable aviation fuel (SAF). The 1100G-JM member of the Pratt & Whitney GTF engine fami-ly reduces fuel consumption and C02 emissions by 16% (according to data and cal-culations provided by the OEM Pratt & Whitney), thus exceeding the target set for the first Claire level of a 15% reduction by 2015 (reference base 2000). MTU devel-oped the Geared Turbofan in cooperation with Pratt & Whitney and is responsible for some of the series production. The Geared Turbofan is currently in use in four air-craft platforms, which are continuously improved over time. For example, the PW1100G-Advantage program has been developed in the past years and will entry into service in 2025 with further performance improvements and lower emissions. Drop-in SAF, which can already be used in blend ratios of up to 50%, will reduce the climate impact of aviation by 35% according to the results of an internal study. Mile-stones in the implementation of Claire Level 1 in 2021: 31 million flight hours with the GTF engine family, avoidance of 17 million metric tons of CO2 (based on 2024 data from Pratt & Whitney).
[Add row]

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

(5.10.1) Use of internal pricing of environmental externalities

Select from:

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

(5.10.3) Primary reason for not pricing environmental externalities

Select from:

☑ Not an immediate strategic priority

(5.10.4) Explain why your organization does not price environmental externalities

Purchasing higher priced green electricity and simultaneously offsetting Scope 1 and Scope 2 emissions at their sites raises the energy costs. Therefore the reduction of energy consumption and/or CO2e emissions by efficiency measures or purchas-ing energy efficient equipment results in reducing real operational costs, which has a motiving effect on operators and management.
[Fixed 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

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:

☑ Not an immediate strategic priority

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

This is not a strategic priority, as we focus on suppliers, customers and investors first.
[Fixed row]

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

	Assessment of supplier dependencies and/or impacts on the environment
Climate change	*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:

☑ No, we do not prioritize which suppliers to engage with on this environmental issue

(5.11.2.3) Primary reason for no supplier prioritization on this environmental issue

Select from:

☑ Not an immediate strategic priority

(5.11.2.4) Please explain

Other criteria e.g. quality for safety reasons has a higher impact on supplier engagement

[Fixed row]

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

	Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process	Policy in place for addressing supplier non-compliance	Comment
Climate change	*Select from:* ☑ Yes, environmental requirements related to this environmental issue are included in our supplier contracts	*Select from:* ☑ Yes, we have a policy in place for addressing non-compliance	

[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:

☑ Implementation of emissions reduction initiatives

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ No mechanism for monitoring compliance

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

Select from:

☑ 51-75%

(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:

☑ None

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

Select from:

☑ None

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

Select from:

☑ No response

(5.11.6.12) Comment

Figures cannot be given - no monitoring process in place
[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:

☑ No other supplier engagement
[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

Innovation and collaboration
☑ Run a campaign to encourage innovation to reduce environmental impacts

(5.11.9.3) % of stakeholder type engaged

Select from:
☑ 26-50%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:
☑ 26-50%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

All our commercial aircraft engines are designed to minimize climate impact. MTU has a strong and long-lasting relationship with Pratt & Whitney as key customer of our components. Together we developed the Geared Turbofan Family which has entered the market in 2016 on the Airbus A320neo. The basis of that success is a highly integrated collaboration in which we jointly develop new technologies to drive efficiencies even further while at the same time minimizing climate impact.

(5.11.9.6) Effect of engagement and measures of success

The common measure of success is the fuel burn reduction. With the first generation GTF engine family and 2,000 aircraft in service fuel savings of 1.7 B gallons (6.4 B liters) could be saved which translates into 16 M tonnes of CO2 avoided. We are developing and manufacturing the GTF engine family together with Pratt & Whitney. With these products, we have not only achieved but in fact exceeded our first specific climate target of a 15% reduction in CO2 emissions from operation of our products (16% for the PW1100G-JM that powers the A320neo, for example). Since 2016, this engine family has been successively introduced in various models for a total of five aircraft applications. It has become a major business success and measurably reduces the burden on the environment. Besides the radical reduction of CO2- emission, it also brings significant improvements in terms of airborne pollutants: the geared turbofan's NOx emissions are 50% lower than those of its predecessor model.

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

☑ Share information on environmental initiatives, progress and achievements

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 51-75%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ None

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Dialog about Climate change activities and information about MTUs climate targets lead to performance audit results.

(5.11.9.6) Effect of engagement and measures of success

Feedback and result of engagement is reflected by investment in MTU e.g. discussion at annual meeting.
[Add row]

C6. Environmental Performance - Consolidation Approach

(6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data.

	Consolidation approach used	Provide the rationale for the choice of consolidation approach
Climate change	*Select from:* ☑ Operational control	*The same consolidation approach is used as in our financial accounting*
Plastics	*Select from:* ☑ Operational control	*The same consolidation approach is used as in our financial accounting*
Biodiversity	*Select from:* ☑ Operational control	*The same consolidation approach is used as in our financial accounting*

[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?
	Select all that apply ☑ No

[Fixed row]

(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

(7.1.2.1) Change(s) in methodology, boundary, and/or reporting year definition?

Select all that apply

☑ Yes, a change in boundary

(7.1.2.2) Details of methodology, boundary, and/or reporting year definition change(s)

Climate strategy rolled out at MTU sites worldwide. MTU Maintenance Canada and MTU Maintenance Serbia (operations started in 2022) are now also included in target.

[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:

☑ Yes

(7.1.3.2) Scope(s) recalculated

Select all that apply

☑ Scope 1

☑ Scope 2, location-based

☑ Scope 2, market-based

(7.1.3.3) Base year emissions recalculation policy, including significance threshold

Base year for target has been recalculated now including MTU Maintenance Canada.

(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

☑ The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

(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

In each MTU site, scope 2 emissions comprise emissions from purchased electricity. In one MTU site, scope 2 emissions additionally comprise district heating. [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:

☑ Yes

(7.4.1) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

Row 1

(7.4.1.1) Source of excluded emissions

Scope 3 emissions (except business travel) are not included for all focused sites (Germany, Poland, Canada, Serbia)

(7.4.1.2) Scope(s) or Scope 3 category(ies)

Select all that apply

- ☑ Scope 3: Franchises
- ☑ Scope 3: Investments
- ☑ Scope 3: Capital goods
- ☑ Scope 3: Other (upstream)
- ☑ Scope 3: Other (downstream)
- ☑ Scope 3: Purchased goods and services
- ☑ Scope 3: Waste generated in operations
- ☑ Scope 3: End-of-life treatment of sold products
- ☑ Scope 3: Upstream transportation and distribution
- ☑ Scope 3: Downstream transportation and distribution
- ☑ Scope 3: Employee commuting
- ☑ Scope 3: Use of sold products
- ☑ Scope 3: Upstream leased assets
- ☑ Scope 3: Downstream leased assets
- ☑ Scope 3: Processing of sold products
- ☑ Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

(7.4.1.6) Relevance of Scope 3 emissions from this source

Select from:

☑ Emissions are relevant but not yet calculated

(7.4.1.9) Estimated percentage of total Scope 3 emissions this excluded source represents

100

(7.4.1.10) Explain why this source is excluded

We are currently only able to disclose our Scope 1 and Scope 2 emissions from our operating sites. Most of the Scope 3 categories have not yet been calculated.

(7.4.1.11) Explain how you estimated the percentage of emissions this excluded source represents

As business travel is only one of 15 categories in scope 3 and the use of manufactured products and the materials purchased for the manufacture of these products will clearly dominate scope 3, the excluded emissions have a very high share.

Row 2

(7.4.1.1) Source of excluded emissions

There are two more smaller MTU sites in the world, which are excluded from our CDP reporting: one office in the USA and one office in the Netherlands

(7.4.1.2) Scope(s) or Scope 3 category(ies)

Select all that apply

- ☑ Scope 1
- ☑ Scope 3: Franchises
- ☑ Scope 3: Investments
- ☑ Scope 2 (market-based)
- ☑ Scope 3: Capital goods
- ☑ Scope 3: Use of sold products
- ☑ Scope 3: Upstream leased assets
- ☑ Scope 3: Downstream leased assets
- ☑ Scope 3: Processing of sold products
- ☑ Scope 3: Purchased goods and services
- ☑ Scope 2 (location-based)
- ☑ Scope 3: Business travel
- ☑ Scope 3: Other (upstream)
- ☑ Scope 3: Other (downstream)
- ☑ Scope 3: Employee commuting
- ☑ Scope 3: Waste generated in operations
- ☑ Scope 3: End-of-life treatment of sold products
- ☑ Scope 3: Upstream transportation and distribution
- ☑ Scope 3: Downstream transportation and distribution
- ☑ Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

(7.4.1.3) Relevance of Scope 1 emissions from this source

Select from:

☑ Emissions are not relevant

(7.4.1.4) Relevance of location-based Scope 2 emissions from this source

Select from:

☑ Emissions are not relevant

(7.4.1.5) Relevance of market-based Scope 2 emissions from this source

Select from:

☑ Emissions are not relevant

(7.4.1.6) Relevance of Scope 3 emissions from this source

Select from:

☑ Emissions are relevant but not yet calculated

(7.4.1.8) Estimated percentage of total Scope 1+2 emissions this excluded source represents

1

(7.4.1.9) Estimated percentage of total Scope 3 emissions this excluded source represents

100

(7.4.1.10) Explain why this source is excluded

All of these sites' energy consumptions are determined lower than 1%.

(7.4.1.11) Explain how you estimated the percentage of emissions this excluded source represents

We have compared the average energy consumption of such an working place/office space with the total energy consumption of the company scopes 1 and 2.

Row 3

(7.4.1.1) Source of excluded emissions

We exclude very small amounts (

(7.4.1.2) Scope(s) or Scope 3 category(ies)

Select all that apply

☑ Scope 1

(7.4.1.3) Relevance of Scope 1 emissions from this source

Select from:

☑ Emissions are not relevant

(7.4.1.10) Explain why this source is excluded

These GHG emissions were calculated and are determined as less than 1%

(7.4.1.11) Explain how you estimated the percentage of emissions this excluded source represents

We have applied common emission factors on the refrigerants escaped and on heating oil and diesel fuel used on site
[Add row]

(7.5) Provide your base year and base year emissions.

	Base year end	Base year emissions (metric tons CO2e)	Methodological details
Scope 1	*12/31/2019*	*41439*	*Direct CO2 emissions*
Scope 2 (location-based)	*12/31/2019*	*76291*	*Indirect emissions based on location (country wise emission factors)*
Scope 2 (market-based)	*12/31/2019*	*46404*	*Indirect emissions based on market*
Scope 3 category 6: Business travel	*12/30/2019*	*6875*	*distance method*

[Fixed row]

(7.6) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

	Gross global Scope 1 emissions (metric tons CO2e)	Methodological details
Reporting year	*39775*	*direct emissions*

[Fixed row]

(7.7) What were your organization’s gross global Scope 2 emissions in metric tons CO2e?

	Gross global Scope 2, location-based emissions (metric tons CO2e)	Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)	Methodological details
Reporting year	*56427*	*9713*	*indirect emissions*

[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, not yet calculated

(7.8.5) Please explain

Emissions from purchased goods and services have been evaluated as relevant in terms of magnitude and impact compared to our overall GHG inventory. We are currently working on improving our data basis and thus gathering data in order to calculate and disclose emissions from this category in the near future.

Capital goods

(7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

(7.8.5) Please explain

Emissions from capital goods have been evaluated as relevant in terms of magnitude and impact compared to our overall GHG inventory. We are currently working on improving our data basis and thus gathering data in order to calculate and disclose emissions from this category in the near future.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

(7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

(7.8.5) Please explain

Emissions from fuel-and-energy-related activities, that have not already been included in Scope 1 or 2, have been evaluated as relevant in terms of magnitude and impact compared to our overall GHG inventory. We are currently working on improving our data basis and thus gathering data in order to calculate and disclose emissions from this category in the near future.

Upstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

(7.8.5) Please explain

Emissions from upstream transportation and distribution have been evaluated as relevant in terms of magnitude and impact compared to our overall GHG inventory. We are currently working on improving our data basis and thus gathering data in order to calculate and disclose emissions from this category in the near future.

Waste generated in operations

(7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

(7.8.5) Please explain

Emissions from waste generated in operations have been considered out of scope regarding the MTU climate management. Nevertheless, we have evaluated this as relevant in terms of magnitude and impact compared to our overall GHG inventory. Thus, we are currently working on gathering data in order to calculate and disclose emissions from this category in the near future.

Business travel

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

6129

(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

We receive distance data from travel agency and calculate emissions with distance-based EF

Employee commuting

(7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

(7.8.5) Please explain

Emissions from employee commuting have been evaluated as relevant in terms of magnitude and impact compared to our overall GHG inventory. Thus, we are currently working on gathering data through an employee survey in order to calculate and disclose emissions from this category in the near future.

Upstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

(7.8.5) Please explain

Emissions from upstream leased assets have been considered out of scope regarding the MTU climate management. Nevertheless, we have evaluated this as relevant in terms of magnitude and impact compared to our overall GHG inventory. Thus, we are currently working on gathering data in order to calculate and disclose emissions from this category in the near future.

Downstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

(7.8.5) Please explain

Emissions from downstream transportation and distribution have been considered out of scope regarding the MTU climate management. Nevertheless, we have evaluated this category as relevant in terms of magnitude and impact compared to our overall GHG inventory. As most of the transportation is initiated by the customers, we are currently lacking significant data to make any good assumptions about this. However, we are working towards developing a more comprehensive understanding of these emissions and gathering data to be able to account for this in future.

Processing of sold products

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Emissions from processing of our sold products have been identified as not relevant in terms of magnitude and impact compared to our overall GHG inventory. The assessment has been done based on the materiality threshold provided by the Greenhouse Gas Protocol of 5%. As MTU produces finished components, the processing of our products does not require material amounts of energy compared to our other emission sources.

Use of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

(7.8.5) Please explain

Emissions from the use of our sold products, have been evaluated as relevant to our business in terms of magnitude and impact compared to our overall GHG inventory. In fact, use phase emissions will take up by far the biggest share of our entire GHG inventory across scope 1-3. As this category is elementary to our business as well as our environmental impact, we will work on calculating emissions from this category in the upcoming years.

End of life treatment of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

(7.8.5) Please explain

Engines are considered high quality metals. As far as possible end of life engines are used as supplementary parts. Scrap parts, which are not treated as a product component, would be recycled in a melting furnace. As such, emissions from end of life treatment of our sold products, have been evaluated as relevant to our business in terms of magnitude and impact compared to our overall GHG inventory. We will work on calculating emissions from this category in the upcoming years.

Downstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

(7.8.5) Please explain

Emissions from downstream leased assets have been evaluated as relevant to our business in terms of magnitude and impact compared to our overall GHG inventory, especially since the leasing of products is a vital part of our business model. We will work on calculating emissions from this category in the upcoming years.

Franchises

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

We do not have franchises, hence the category franchises has been identified as not material to our business.

Investments

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

MTU did not make any investments in the reporting year that fell in the scope of our climate management of fully consolidated sites. We will reevaluate this category on a yearly basis in order to estimate whether the relevance of investments in terms of magnitude and impact compared to our overall GHG inventory changes. [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:* ☑ No third-party verification or assurance

[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:

☑ Reasonable assurance

(7.9.1.4) Attach the statement

MTU_GB2023_de_locked[1].pdf

(7.9.1.5) Page/section reference

249 ff

(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:

☑ Reasonable assurance

(7.9.2.5) Attach the statement

MTU_GB2023_de_locked[1].pdf

(7.9.2.6) Page/ section reference

249 ff

(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: Business travel

(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:

☑ Underway but not complete for current reporting year – first year it has taken place

[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:

☑ Increased

(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)

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 change

Other emissions reduction activities

(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 change

Divestment

(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 change

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 change

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 change

Change in output

(7.10.1.1) Change in emissions (metric tons CO2e)

2367

(7.10.1.2) Direction of change in emissions

Select from:

☑ Increased

(7.10.1.3) Emissions value (percentage)

5

(7.10.1.4) Please explain calculation

An increased production in all sites leads to an increase in CO2e emissions. However, most of the additional emissions come from the site in Serbia (2284 t CO2), which started to operate during 2022.

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 change

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 change

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 change

Unidentified

(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 change

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 change
[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.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
	87.8	*From SAF and RNG*

[Fixed row]

(7.15) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Select from:

☑ No

(7.16) Break down your total gross global Scope 1 and 2 emissions by country/area.

	Scope 1 emissions (metric tons CO2e)	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Canada	*2592*	*747*	*41*
Germany	*34229*	*40002*	*9671*
Poland	*671*	*9854*	*0*
Serbia	*2284*	*5825*	*0*

[Fixed row]

(7.17) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

Select all that apply

☑ By facility

(7.17.2) Break down your total gross global Scope 1 emissions by business facility.

Row 1

(7.17.2.1) Facility

MTU Aero Engines AG, Munich

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

19601

(7.17.2.3) Latitude

48.21

(7.17.2.4) Longitude

11.48

Row 2

(7.17.2.1) Facility

MTU Maintenance Berlin-Brandenburg GmbH

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

4039

(7.17.2.3) Latitude

52.32

(7.17.2.4) Longitude

13.26

Row 3

(7.17.2.1) Facility

MTU Maintenance Canada Ltd., Vancouver

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

2592

(7.17.2.3) Latitude

49.08

(7.17.2.4) Longitude

-123.0

Row 4

(7.17.2.1) Facility

MTU Aero Engines Polska, Rzeszów

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

671

(7.17.2.3) Latitude

50.12

(7.17.2.4) Longitude

22.02

Row 5

(7.17.2.1) Facility

MTU Maintenance Hannover GmbH

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

10588

(7.17.2.3) Latitude

52.44

(7.17.2.4) Longitude

9.71

Row 6

(7.17.2.1) Facility

MTU Maintenance Serbia, Nova Pazova

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

2284

(7.17.2.3) Latitude

44.57

(7.17.2.4) Longitude

20.13
[Add row]

(7.20) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

Select all that apply

☑ By facility

(7.20.2) Break down your total gross global Scope 2 emissions by business facility.

	Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Row 1	*MTU Aero Engines AG, Munich*	*28251*	*5329*
Row 2	*MTU Maintenance Berlin-Brandenburg GmbH*	*4407*	*2961*
Row 3	*MTU Maintenance Hannover GmbH*	*7344*	*1381*
Row 4	*MTU Maintenance Canada Ltd.*	*747*	*41*
Row 5	*MTU Polska, Rzeszów*	*9854*	*0*
Row 6	*MTU Maintenance Serbia, Nova Pazova*	*5825*	*0*

[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)

39775

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

56427

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

9713

(7.22.4) Please explain

Equals the total emissions.

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

No emissions data reported for other entities.
[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

(7.26) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

(7.29) What percentage of your total operational spend in the reporting year was on energy?

Select from:

☑ More than 0% but less than or equal to 5%

(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:

☑ HHV (higher heating value)

(7.30.1.2) MWh from renewable sources

368

(7.30.1.3) MWh from non-renewable sources

179603

(7.30.1.4) Total (renewable and non-renewable) MWh

179971

Consumption of purchased or acquired electricity

(7.30.1.1) Heating value

Select from:

☑ Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

116289

(7.30.1.3) MWh from non-renewable sources

22822

(7.30.1.4) Total (renewable and non-renewable) MWh

139111

Consumption of purchased or acquired heat

(7.30.1.1) Heating value

Select from:

☑ Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

4300

(7.30.1.3) MWh from non-renewable sources

2873

(7.30.1.4) Total (renewable and non-renewable) MWh

7173

Consumption of self-generated non-fuel renewable energy

(7.30.1.1) Heating value

Select from:

☑ Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

381

(7.30.1.4) Total (renewable and non-renewable) MWh

381

Total energy consumption

(7.30.1.1) Heating value

Select from:

☑ Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

121338

(7.30.1.3) MWh from non-renewable sources

205298

(7.30.1.4) Total (renewable and non-renewable) MWh

326636
[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:* ☑ No
Consumption of fuel for the generation of heat	*Select from:* ☑ Yes
Consumption of fuel for the generation of steam	*Select from:*

	Indicate whether your organization undertakes this fuel application
	☑ 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

368

(7.30.7.4) MWh fuel consumed for self-generation of heat

368

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

SAF RNG

Other biomass

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Not used

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

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Not used

Coal

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Not used

Oil

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

Not used

Gas

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

119410

(7.30.7.4) MWh fuel consumed for self-generation of heat

98475

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

20935

(7.30.7.8) Comment

microturbine

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

60192

(7.30.7.4) MWh fuel consumed for self-generation of heat

60192

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

kerosene,, diesel, petrol

Total fuel

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

179971

(7.30.7.4) MWh fuel consumed for self-generation of heat

159036

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

20935

(7.30.7.8) Comment

Sum
[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)

8652

(7.30.9.2) Generation that is consumed by the organization (MWh)

8652

(7.30.9.3) Gross generation from renewable sources (MWh)

381

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

381

Heat

(7.30.9.1) Total Gross generation (MWh)

88048

(7.30.9.2) Generation that is consumed by the organization (MWh)

88048

(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:
☑ Poland

(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)

4835

(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:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2011

(7.30.14.10) Comment

n/a

Row 2

(7.30.14.1) Country/area

Select from:

☑ Poland

(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)

1135

(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:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2022

(7.30.14.10) Comment

n/a

Row 3

(7.30.14.1) Country/area

Select from:

☑ Poland

(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:

☑ Large hydropower (>25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1296

(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:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1942

(7.30.14.10) Comment

n/a

Row 4

(7.30.14.1) Country/area

Select from:

☑ Poland

(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)

3744

(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:

☑ 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

n/a

Row 5

(7.30.14.1) Country/area

Select from:

☑ Poland

(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)

1337

(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:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2010

(7.30.14.10) Comment

n/a

Row 6

(7.30.14.1) Country/area

Select from:

☑ Poland

(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)

1281

(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:

☑ 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

n/a

Row 7

(7.30.14.1) Country/area

Select from:

☑ Poland

(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)

1125

(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:

☑ Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2010

(7.30.14.10) Comment

n/a

Row 8

(7.30.14.1) Country/area

Select from:

☑ Serbia

(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:

☑ Large hydropower (>25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

7819

(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

n/a
[Add row]

(7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.

Canada

(7.30.16.1) Consumption of purchased electricity (MWh)

5753

(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)

3690

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

9443.00

Germany

(7.30.16.1) Consumption of purchased electricity (MWh)

110947

(7.30.16.2) Consumption of self-generated electricity (MWh)

8451

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

7174

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

65860

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

192432.00

Poland

(7.30.16.1) Consumption of purchased electricity (MWh)

14753

(7.30.16.2) Consumption of self-generated electricity (MWh)

201

(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)

2752

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

17706.00

Serbia

(7.30.16.1) Consumption of purchased electricity (MWh)

7816

(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)

8668

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

16484.00
[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

0.0000092277

(7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

49488

(7.45.3) Metric denominator

Select from:
☑ unit total revenue

(7.45.4) Metric denominator: Unit total

5363000000

(7.45.5) Scope 2 figure used

Select from:
☑ Market-based

(7.45.6) % change from previous year

2.5

(7.45.7) Direction of change

Select from:

☑ Increased

(7.45.8) Reasons for change

Select all that apply

☑ Change in output

(7.45.9) Please explain

Start of operation at our new site in Nova Pazova/Serbia and a general growth in operations in all sites, which leads to a higher energy consumption and emissions [Add row]

(7.53) Did you have an emissions target that was active in the reporting year?

Select all that apply

☑ Absolute 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, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

(7.53.1.4) Target ambition

Select from:

☑ 1.5°C aligned

(7.53.1.5) Date target was set

03/08/2021

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Carbon dioxide (CO2)

(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)

41439

(7.53.1.13) Base year Scope 2 emissions covered by target (metric tons CO2e)

46404

(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)

87843.000

(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

11/29/2030

(7.53.1.55) Targeted reduction from base year (%)

60

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

35137.200

(7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)

39775

(7.53.1.58) Scope 2 emissions in reporting year covered by target (metric tons CO2e)

9713

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

49488.000

(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

72.77

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

Overfilled the target mainly from using green electricity

(7.53.1.83) Target objective

1,5C aligned

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

In its climate strategy, MTU has defined several pillars for achieving the set goals. These are energy efficiency in plant and machine operation, the expansion of in-house production of renewable energies and an expanded purchase of renewable energy. In order to achieve the energy efficiency goals, interdisciplinary specialist teams were formed at the locations, which regularly exchange ideas internally and across locations about measures and a best practice approach. There are implementation plans with a planning horizon of several years, which are continually reviewed and further developed. There is regular reporting to various committees and management levels about target achievement and implemented/planned measures. The production and procurement of renewable energies to reduce fossil sources is constantly being expanded. The goals of the climate strategy are part of the ESG objectives for management in the company. Significant reductions were achieved in the area of Scope2 emissions, but the result of the efficiency measures is better than the target value.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No

[Add row]

(7.54) Did you have any other climate-related targets that were active in the reporting year?

Select all that apply

☑ No other climate-related targets

(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 (only for rows marked *)
Under investigation	*1*	*`Numeric input*
To be implemented	*1*	*150*
Implementation commenced	*2*	*9000*
Implemented	*4*	*2180*
Not to be implemented	*1*	*`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

Low-carbon energy consumption

☑ Solar PV

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

120

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 2 (market-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

0

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ Ongoing

(7.55.2.9) Comment

n/a

Row 2

(7.55.2.1) Initiative category & Initiative type

Low-carbon energy generation

☑ Other, please specify **:**heatpump

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

220

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

0

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ Ongoing

(7.55.2.9) Comment

n/a

Row 3

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

☑ Other, please specify **:**optimization of operations and usage

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

440

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 2 (market-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

0

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ Ongoing

(7.55.2.9) Comment

n/a

Row 4

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

☑ Other, please specify **:**changes of engine test run routine

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

1400

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

0

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ Ongoing

(7.55.2.9) Comment

n/a
[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:

☑ Dedicated budget for low-carbon product R&D

(7.55.3.2) Comment

No further comment.

Row 2

(7.55.3.1) Method

Select from:

☑ Dedicated budget for energy efficiency

(7.55.3.2) Comment

No further comment.

Row 3

(7.55.3.1) Method

Select from:

☑ Compliance with regulatory requirements/standards

(7.55.3.2) Comment

It is not the only one, but one motivation for our engagement on CO2 reduction and energy efficiency is to fulfill all relevant legal requirements to have compliant site operations secured.

[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:

☑ Other, please specify **:**CO2 emissions from aero engines follow their fuel consumption. As climate protection arises as a significant player in the industry, airlines wish to operate low carbon engines. Any of our newly developed engines are aimed to be low carbon engines.

(7.74.1.3) Type of product(s) or service(s)

Aviation

☑ Other, please specify **:**Aero engines

(7.74.1.4) Description of product(s) or service(s)

Commercial aero engines are designed for minimum fuel burn and therefore carbon dioxide emissions. MTU Aero Engines is a partner in numerous pioneering commercial engine programs for all aircraft size classes operating on short- to medium- to long-haul routes. In the commercial OEM business, we play a key role in developing, manufacturing and marketing high-tech components such as high-pressure compressors, low-pressure turbines and turbine center frames. Around one-third of all aircraft in service worldwide today have MTU components on board. The efficiency of our products has a significant impact on the overall efficiency of the engine and therefore on carbon dioxide emissions.

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

☑ No

(7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

33

[Add row]

(7.79) Has your organization canceled any project-based carbon credits within the reporting year?

Select from:

☑ No

C11. Environmental performance - Biodiversity

(11.2) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Actions taken in the reporting period to progress your biodiversity-related commitments
	Select from: ☑ No, and we do not plan to undertake any biodiversity-related actions

[Fixed row]

(11.3) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?
	Select from: ☑ No

[Fixed row]

(11.4) Does your organization have activities located in or near to areas important for biodiversity in the reporting year?

	Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity
Legally protected areas	*Select from:* ☑ No
UNESCO World Heritage sites	*Select from:* ☑ No
UNESCO Man and the Biosphere Reserves	*Select from:* ☑ No
Ramsar sites	*Select from:* ☑ No
Key Biodiversity Areas	*Select from:* ☑ No
Other areas important for biodiversity	*Select from:* ☑ No

[Fixed 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

(13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Climate change

☑ Emissions reduction initiatives/activities

(13.1.1.3) Verification/assurance standard

General standards

☑ ISAE 3000

(13.1.1.4) Further details of the third-party verification/assurance process

The emissions reduction activities have been verified (Annual report, p. 99ff)

(13.1.1.5) Attach verification/assurance evidence/report (optional)

MTU_AnnualReport_en_locked.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.

	Attachment (optional)
	MTU_2023_Umweltbroschuere_en.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

CEO and CSO of MTU

(13.3.2) Corresponding job category

Select from:

☑ Chief Sustainability Officer (CSO)

[Fixed row]