Merck KGaA

2025 CDP Corporate Questionnaire 2025

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.
Read full terms of disclosure

.

08/22/2025, 01:11 pm

Contents

C1. Introduction 8

(1.1) In which language are you submitting your response? 8

(1.2) Select the currency used for all financial information disclosed throughout your response. 8

(1.3) Provide an overview and introduction to your organization. 8

(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. 9

(1.4.1) What is your organization's annual revenue for the reporting period? 10

(1.5) Provide details on your reporting boundary. 10

(1.6) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)? 10

(1.7) Select the countries/areas in which you operate. 12

(1.8) Are you able to provide geolocation data for your facilities? 13

(1.8.1) Please provide all available geolocation data for your facilities. 14

(1.24) Has your organization mapped its value chain? 95

C2. Identification, assessment, and management of dependencies, impacts, risks, and opportunities 96

(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? 96

(2.2) Does your organization have a process for identifying, assessing, and managing environmental dependencies and/or impacts? 97

(2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities? 98

(2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities. 98

(2.2.7) Are the interconnections between environmental dependencies, impacts, risks and/or opportunities assessed? 106

(2.3) Have you identified priority locations across your value chain? 106

(2.4) How does your organization define substantive effects on your organization? 108

(2.5) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health? 110

(2.5.1) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities. 111

C3. Disclosure of risks and opportunities 118

(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? 118

(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. 119

(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. 125

(3.3) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations? 126

(3.5) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)? 126

(3.5.1) Select the carbon pricing regulation(s) which impact your operations. 126

(3.5.2) Provide details of each Emissions Trading Scheme (ETS) your organization is regulated by. 126

(3.5.4) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by? 129

(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? 129

(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. 130

(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. 133

C4. Governance 135

(4.1) Does your organization have a board of directors or an equivalent governing body? 135

(4.1.1) Is there board-level oversight of environmental issues within your organization? 136

(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. 136

(4.2) Does your organization's board have competency on environmental issues? 139

(4.3) Is there management-level responsibility for environmental issues within your organization? 141

(4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals). 141

(4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets? 144

(4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals). 146

(4.6) Does your organization have an environmental policy that addresses environmental issues? 147

(4.6.1) Provide details of your environmental policies. 147

(4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives? 149

(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? 150

(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? 152

(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. 154

(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? 156

(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. 156

C5. Business strategy 159

(5.1) Does your organization use scenario analysis to identify environmental outcomes? 159

(5.1.1) Provide details of the scenarios used in your organization's scenario analysis. 159

(5.1.2) Provide details of the outcomes of your organization's scenario analysis. 165

(5.2) Does your organization's strategy include a climate transition plan? 166

(5.3) Have environmental risks and opportunities affected your strategy and/or financial planning? 167

(5.3.1) Describe where and how environmental risks and opportunities have affected your strategy. 167

(5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning. 170

(5.4) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition? 171

(5.9) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year? 171

(5.10) Does your organization use an internal price on environmental externalities? 172

(5.10.1) Provide details of your organization's internal price on carbon. 172

(5.10.2) Provide details of your organization's internal price on water. 175

(5.11) Do you engage with your value chain on environmental issues? 176

(5.11.1) Does your organization assess and classify suppliers according to their dependencies and/or impacts on the environment? 177

(5.11.2) Does your organization prioritize which suppliers to engage with on environmental issues? 179

(5.11.5) Do your suppliers have to meet environmental requirements as part of your organization's purchasing process? 181

(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. 182

(5.11.7) Provide further details of your organization's supplier engagement on environmental issues. 191

(5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain. 195

C6. Environmental Performance - Consolidation Approach 200
(6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data. 200

C7. Environmental performance - Climate Change 201
(7.1) Is this your first year of reporting emissions data to CDP? 201
(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? 201
(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year? 201
(7.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions. 202
(7.3) Describe your organization's approach to reporting Scope 2 emissions. 202
(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? 202
(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. 202
(7.5) Provide your base year and base year emissions. 206
(7.6) What were your organization's gross global Scope 1 emissions in metric tons CO2e? 217
(7.7) What were your organization's gross global Scope 2 emissions in metric tons CO2e? 217
(7.8) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions. 217
(7.9) Indicate the verification/assurance status that applies to your reported emissions. 230
(7.9.1) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements. 230
(7.9.2) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements. 231
(7.9.3) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements. 234
(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? 235
(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. 235
(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? 237
(7.12) Are carbon dioxide emissions from biogenic carbon relevant to your organization? 237
(7.12.1) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2. 238
(7.15) Does your organization break down its Scope 1 emissions by greenhouse gas type? 238
(7.15.1) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used global warming potential (GWP). 238

(7.16) Break down your total gross global Scope 1 and 2 emissions by country/area. 241
(7.17) Indicate which gross global Scope 1 emissions breakdowns you are able to provide. 261
(7.17.3) Break down your total gross global Scope 1 emissions by business activity. 261
(7.20) Indicate which gross global Scope 2 emissions breakdowns you are able to provide. 262
(7.20.3) Break down your total gross global Scope 2 emissions by business activity. 262
(7.22) Break down your gross Scope 1 and Scope 2 emissions between your consolidated accounting group and other entities included in your response. 262
(7.23) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response? 263
(7.23.1) Break down your gross Scope 1 and Scope 2 emissions by subsidiary. 264
(7.26) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period. 265
(7.27) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges? 389
(7.28) Do you plan to develop your capabilities to allocate emissions to your customers in the future? 391
(7.29) What percentage of your total operational spend in the reporting year was on energy? 392
(7.30) Select which energy-related activities your organization has undertaken. 392
(7.30.1) Report your organization’s energy consumption totals (excluding feedstocks) in MWh. 393
(7.30.6) Select the applications of your organization’s consumption of fuel. 396
(7.30.7) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type. 397
(7.30.9) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year. 405
(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. 407
(7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year. 445
(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. 476
(7.52) Provide any additional climate-related metrics relevant to your business. 477
(7.53) Did you have an emissions target that was active in the reporting year? 478
(7.53.1) Provide details of your absolute emissions targets and progress made against those targets. 478
(7.53.2) Provide details of your emissions intensity targets and progress made against those targets. 491
(7.54) Did you have any other climate-related targets that were active in the reporting year? 500
(7.54.1) Provide details of your targets to increase or maintain low-carbon energy consumption or production. 500
(7.54.2) Provide details of any other climate-related targets, including methane reduction targets. 503

(7.55) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases. 506
(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. 506
(7.55.2) Provide details on the initiatives implemented in the reporting year in the table below. 506
(7.55.3) What methods do you use to drive investment in emissions reduction activities? 511
(7.73) Are you providing product level data for your organization's goods or services? 513
(7.74) Do you classify any of your existing goods and/or services as low-carbon products? 513
(7.74.1) Provide details of your products and/or services that you classify as low-carbon products. 513
(7.79) Has your organization retired any project-based carbon credits within the reporting year? 514

C9. Environmental performance - Water security 515

(9.1) Are there any exclusions from your disclosure of water-related data? 515
(9.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored? 515
(9.2.2) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change? 524
(9.2.4) Indicate whether water is withdrawn from areas with water stress, provide the volume, how it compares with the previous reporting year, and how it is forecasted to change. 527
(9.2.7) Provide total water withdrawal data by source. 528
(9.2.8) Provide total water discharge data by destination. 532
(9.2.9) Within your direct operations, indicate the highest level(s) to which you treat your discharge. 535
(9.2.10) Provide details of your organization's emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year. 540
(9.3) In your direct operations and upstream value chain, what is the number of facilities where you have identified substantive water-related dependencies, impacts, risks, and opportunities? 541
(9.4) Could any of your facilities reported in 9.3.1 have an impact on a requesting CDP supply chain member? 542
(9.5) Provide a figure for your organization's total water withdrawal efficiency. 542
(9.13) Do any of your products contain substances classified as hazardous by a regulatory authority? 542
(9.13.1) What percentage of your company's revenue is associated with products containing substances classified as hazardous by a regulatory authority? 543
(9.14) Do you classify any of your current products and/or services as low water impact? 544
(9.15) Do you have any water-related targets? 544
(9.15.1) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories. 545

(9.15.2) Provide details of your water-related targets and the progress made. 546

C13. Further information & sign off 551

(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? 551

(13.1.1) Which data points within your CDP response are verified and/or assured by a third party, and which standards were used? 551

(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. 552

(13.3) Provide the following information for the person that has signed off (approved) your CDP response. 553

(13.4) Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website. 553

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

Merck, a leading science and technology company, operates across life science, healthcare and electronics. More than 62,000 employees work to make a positive difference to millions of people's lives every day by creating more joyful and sustainable ways to live. From providing products and services that accelerate drug development and manufacturing as well as discovering unique ways to treat the most challenging diseases to enabling the intelligence of devices – the company is everywhere. In 2024, Merck generated sales of € 21.2 billion in 65 countries. Scientific exploration and responsible entrepreneurship have been key to our technological and scientific advances. This is how Merck has thrived since its founding in 1668. Across our Life Science business sector, we collaborate with the global scientific community to deliver innovations. To this end, we offer a broad and deep product portfolio as well as global services as a contract development and manufacturing organization (CDMO), ranging from process development to commercialization. In 2024, we continued to consistently develop our strategy and strengthened our position as a diversified life science company with our three business units Science & Lab Solutions, Process Solutions and Life Science Services. The development of preventive and personalized medicine is progressing steadily. It is therefore essential to set standards for robust, scalable and efficient processes for production of novel modalities such as antibody-drug conjugates (ADCs) and those for cell-, gene- and mRNA-based therapies. This progress will support the expansion of novel therapies as well as the treatment of further complex and chronic conditions including cancer, heart disease, diabetes, and muscular dystrophy. Our Healthcare business sector helps to create, improve, and prolong lives across the therapeutic areas of oncology, neurology & immunology and fertility as well as cardiovascular, metabolic and endocrinological disorders. As a global specialty innovator, with a strong established business, we deliver a diversified portfolio of

therapies to millions of patients around the world, every day. With our Electronics business sector we are an integral part of the semiconductor ecosystem. With our materials, the related delivery equipment and tools for metrology and inspection, we are a significant part of the value chain for semiconductor processing. Our broad and innovative product portfolio helps solve key industry challenges. In doing so, we place a special focus on high-performance chips needed for applications including artificial intelligence (AI). We provide our materials, systems and services to all major industry players. To this end, we work closely with our customers in the key regions of North America, Europe and Asia Pacific and are a reliable and stable partner with our global network of R&D, production and distribution sites. [Fixed row]

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

(1.4.1) End date of reporting year

12/30/2024

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

Select from:

☑ Yes

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

Select from:

☑ Yes

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

Select from:

☑ Not providing past emissions data for Scope 1

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

Select from:

☑ Not providing past emissions data for Scope 2

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

Select from:

☑ Not providing past emissions data for Scope 3

[Fixed row]

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

21156000000

(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:

☑ No

CUSIP number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

589339209

Ticker symbol

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

MRK; MKKGY for DAX; MRCG for Reuters

SEDOL code

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

LEI number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

529900OAREIS0MOPTW25

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

☑ Peru
☑ Chile
☑ China
☑ Egypt
☑ India
☑ France
☑ Italy
☑ Japan
☑ Spain
☑ Brazil
☑ Canada
☑ Turkey

☑ Greece
☑ Israel
☑ Mexico
☑ Poland
☑ Czechia
☑ Denmark
☑ Ecuador
☑ Germany
☑ Hungary
☑ Malaysia
☑ Portugal
☑ Slovakia
☑ Slovenia
☑ Thailand
☑ Singapore
☑ Netherlands
☑ Philippines
☑ Switzerland
☑ South Africa
☑ United Kingdom of Great Britain and Northern Ireland
☑ Algeria
☑ Austria
☑ Belgium
☑ Croatia
☑ Ireland
☑ Tunisia
☑ Uruguay
☑ Bulgaria
☑ Colombia
☑ Viet Nam
☑ Argentina
☑ Australia
☑ Guatemala
☑ Indonesia
☑ Taiwan, China
☑ Republic of Korea
☑ Russian Federation
☑ United Arab Emirates
☑ United States of America

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

	Are you able to provide geolocation data for your facilities?	Comment
	Select from: ☑ Yes, for all facilities	*See 1.8.1*

[Fixed row]

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

Row 1

(1.8.1.1) Identifier

Allentown

(1.8.1.2) Latitude

40.59659

(1.8.1.3) Longitude

-75.614444

(1.8.1.4) Comment

Allentown, 6950 Ambassador Dr.

Row 2

(1.8.1.1) Identifier

Allentown - Vultee St

(1.8.1.2) Latitude

40.576007

(1.8.1.3) Longitude

-75.48349

(1.8.1.4) Comment

Allentown, 1919 Vultee Street

Row 3

(1.8.1.1) Identifier

Altdorf

(1.8.1.2) Latitude

46.86703

(1.8.1.3) Longitude

8.63334

(1.8.1.4) Comment

Altdorf, Weisshausmatte

Row 4

(1.8.1.1) Identifier

Ansan

(1.8.1.2) Latitude

37.325247

(1.8.1.3) Longitude

126.771544

(1.8.1.4) Comment

Ansan, 283, Haebong-Ro

Row 5

(1.8.1.1) Identifier

Anseong

(1.8.1.2) Latitude

36.975308

(1.8.1.3) Longitude

127.215323

(1.8.1.4) Comment

Anseong, #50-14 Hyupdongdanji-gil, Miyang-myeon, Kyeongki-do

Row 6

(1.8.1.1) Identifier

Arklow

(1.8.1.2) Latitude

52.801936

(1.8.1.3) Longitude

-6.173312

(1.8.1.4) Comment

Arklow, Vale Road, Arklo, Co.Wicklow, Ireland

Row 7

(1.8.1.1) Identifier

Atsugi

(1.8.1.2) Latitude

35.518614

(1.8.1.3) Longitude

139.339936

(1.8.1.4) Comment

Kanagawa-Pref., 4084, Nakatsu, Aikawa-machi Aiko-gun

Row 8

(1.8.1.1) Identifier

Aubonne

(1.8.1.2) Latitude

46.486758

(1.8.1.3) Longitude

6.400801

(1.8.1.4) Comment

Aubonne, Zone Industrielle de L´Ouriettaz

Row 9

(1.8.1.1) Identifier

Bangalore - Jigani

(1.8.1.2) Latitude

12.817576

(1.8.1.3) Longitude

77.679074

(1.8.1.4) Comment

Bangalore – Plot No. 12, Bommasandra Jigani Link Road, Industrial Area, Anekal Taluk

Row 10

(1.8.1.1) Identifier

Bangalore - Peenya

(1.8.1.2) Latitude

13.028587

(1.8.1.3) Longitude

77.519256

(1.8.1.4) Comment

Bangalore, 50A 2nd Phase, Ring Road, Peenya

Row 11

(1.8.1.1) Identifier

Bangalore - SBS

(1.8.1.2) Latitude

12.838436

(1.8.1.3) Longitude

77.674

(1.8.1.4) Comment

Bangalore- 560100, 7th Floor, Tower 2, Electronic City Phase 1, Survey # 94/2, Veerasandra Village

Row 12

(1.8.1.1) Identifier

Banwol

(1.8.1.2) Latitude

37.311002

(1.8.1.3) Longitude

126.764242

(1.8.1.4) Comment

Banwol, 82, Jangjagol-Ro

Row 13

(1.8.1.1) Identifier

Bedford - 75 Wiggins Ave

(1.8.1.2) Latitude

42.484406

(1.8.1.3) Longitude

-71.266739

(1.8.1.4) Comment

Bedford, 75 Wiggins Ave

Row 14

(1.8.1.1) Identifier

Bedford - 80 Ashby Rd

(1.8.1.2) Latitude

42.483709

(1.8.1.3) Longitude

-71.26952

(1.8.1.4) Comment

Bedford, 80 Ashby Road

Row 15

(1.8.1.1) Identifier

Beijing - DC

(1.8.1.2) Latitude

40.126653

(1.8.1.3) Longitude

116.596388

(1.8.1.4) Comment

Beijing, B3 warehouse, Shunchang Avenue 15#, Shunyi District, Beijing

Row 16

(1.8.1.1) Identifier

Bellefonte

(1.8.1.2) Latitude

40.882547

(1.8.1.3) Longitude

-77.739158

(1.8.1.4) Comment

Bellefonte, Harrison Road

Row 17

(1.8.1.1) Identifier

Bellevue

(1.8.1.2) Latitude

47.582579

(1.8.1.3) Longitude

-122.168588

(1.8.1.4) Comment

Bellevue, 12822 SE 32nd Street, WA 98005 Bellevue

Row 18

(1.8.1.1) Identifier

Billerica

(1.8.1.2) Latitude

42.562545

(1.8.1.3) Longitude

-71.268969

(1.8.1.4) Comment

Billerica, SRI, 45A Bourne North

Row 19

(1.8.1.1) Identifier

Billerica

(1.8.1.2) Latitude

42.562545

(1.8.1.3) Longitude

-71.268969

(1.8.1.4) Comment

Billerica, SRI, 45A Bourne South

Row 20

(1.8.1.1) Identifier

Billerica

(1.8.1.2) Latitude

42.562545

(1.8.1.3) Longitude

-71.268969

(1.8.1.4) Comment

Billerica, SRI, 45B Sagamore

Row 21

(1.8.1.1) Identifier

Billerica

(1.8.1.2) Latitude

42.562545

(1.8.1.3) Longitude

-71.268969

(1.8.1.4) Comment

Billerica, SRI, 45E Horizon

Row 22

(1.8.1.1) Identifier

Branchburg

(1.8.1.2) Latitude

40.601973

(1.8.1.3) Longitude

-74.699806

(1.8.1.4) Comment

Branchburg, 70 Meister Avenue

Row 23

(1.8.1.1) Identifier

Buchs

(1.8.1.2) Latitude

47.174479

(1.8.1.3) Longitude

9.478848

(1.8.1.4) Comment

Buchs, Industriestrasse 25, 9471 Buchs

Row 24

(1.8.1.1) Identifier

Buenos Aires -LS

(1.8.1.2) Latitude

-34.547203

(1.8.1.3) Longitude

-58.491225

(1.8.1.4) Comment

Buenos Aires, Estomba 835/837 Buenos Aires C1427COS

Row 25

(1.8.1.1) Identifier

Burlington - 400600 Summit

(1.8.1.2) Latitude

42.473463

(1.8.1.3) Longitude

-71.215921

(1.8.1.4) Comment

Burlington, 400 Summit Drive

Row 26

(1.8.1.1) Identifier

Burlington - CAN

(1.8.1.2) Latitude

43.392825

(1.8.1.3) Longitude

-79.770311

(1.8.1.4) Comment

Burlington, ON L7L 6A8, 5295 John Lucas Drive - Unit 6

Row 27

(1.8.1.1) Identifier

Cajamar

(1.8.1.2) Latitude

-23.405739

(1.8.1.3) Longitude

-46.827917

(1.8.1.4) Comment

CAJAMAR, VIA DE ACESSO SUL KM 30 ROD ANHANGUERA, Km 29,5, CEP 07790-330

Row 28

(1.8.1.1) Identifier

Calais

(1.8.1.2) Latitude

50.949606

(1.8.1.3) Longitude

1.91572

(1.8.1.4) Comment

Calais, 5, rue Clément-Ader

Row 29

(1.8.1.1) Identifier

Carlos Speggazini

(1.8.1.2) Latitude

-34.905984

(1.8.1.3) Longitude

-58.599785

(1.8.1.4) Comment

Carlos Speggazini, Marconi 877

Row 30

(1.8.1.1) Identifier

Carlsbad - Versum Materials

(1.8.1.2) Latitude

33.118414

(1.8.1.3) Longitude

-117.283615

(1.8.1.4) Comment

Carlsbad, 1969 Palomar Oaks Way

Row 31

(1.8.1.1) Identifier

Carlsbad - Viral Vector Mfg

(1.8.1.2) Latitude

33.124348

(1.8.1.3) Longitude

-117.270161

(1.8.1.4) Comment

Carlsbad, 6211 El Camino Real, Carlsbad, CA 92009

Row 32

(1.8.1.1) Identifier

Catoosa

(1.8.1.2) Latitude

36.22823

(1.8.1.3) Longitude

-95.747565

(1.8.1.4) Comment

Catoosa, 1115 W Keystone Ave

Row 33

(1.8.1.1) Identifier

Chandler Manufacturing

(1.8.1.2) Latitude

33.278884

(1.8.1.3) Longitude

-111.812198

(1.8.1.4) Comment

Chandler, 1720 E Germann Rd

Row 34

(1.8.1.1) Identifier

Chudong

(1.8.1.2) Latitude

24.021206

(1.8.1.3) Longitude

120.446468

(1.8.1.4) Comment

Chudong, 2F., No. 669, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 310

Row 35

(1.8.1.1) Identifier

Chupei

(1.8.1.2) Latitude

24.902502

(1.8.1.3) Longitude

121.048004

(1.8.1.4) Comment

Chupei, 2F., No. 25, Ln. 62, Zhonghe St., Zhubei City, Hsinchu County 302

Row 36

(1.8.1.1) Identifier

Ciudad de Guatemala (env)

(1.8.1.2) Latitude

14.65407

(1.8.1.3) Longitude

-90.504705

(1.8.1.4) Comment

Ciudad de Guatemala, 12 Avenida 0-33 Zona 2

Row 37

(1.8.1.1) Identifier

Cleveland

(1.8.1.2) Latitude

41.439681

(1.8.1.3) Longitude

-81.656333

(1.8.1.4) Comment

Cleveland, 4353 East 49th Street

Row 38

(1.8.1.1) Identifier

Coinsins

(1.8.1.2) Latitude

46.428331

(1.8.1.3) Longitude

6.232271

(1.8.1.4) Comment

Coinsins, Route de la Verrerie 6

Row 39

(1.8.1.1) Identifier

Cork - Carrigtwohill

(1.8.1.2) Latitude

51.905398

(1.8.1.3) Longitude

-8.284271

(1.8.1.4) Comment

Carrigtwohill, Tullagreen, County Cork

Row 40

(1.8.1.1) Identifier

Corsier-sur-Vevey

(1.8.1.2) Latitude

46.480106

(1.8.1.3) Longitude

6.858165

(1.8.1.4) Comment

Corsier-sur-Vevey, Route de Fenil Z.I.B.

Row 41

(1.8.1.1) Identifier

Daejeon - R&D

(1.8.1.2) Latitude

36.386947

(1.8.1.3) Longitude

127.404095

(1.8.1.4) Comment

Daejeion, 10-5, Expo-ro 339beon-gil

Row 42

(1.8.1.1) Identifier

Dallas

(1.8.1.2) Latitude

32.706718

(1.8.1.3) Longitude

-96.750962

(1.8.1.4) Comment

Dallas, 8201 South Central Expressway

Row 43

(1.8.1.1) Identifier

Danvers - 17 Cherry Hill Drive

(1.8.1.2) Latitude

42.576465

(1.8.1.3) Longitude

-70.915112

(1.8.1.4) Comment

Danvers, 17 Cherry Hill Drive

Row 44

(1.8.1.1) Identifier

Danvers - 54 Cherry Hill Drive

(1.8.1.2) Latitude

42.579918

(1.8.1.3) Longitude

-70.915416

(1.8.1.4) Comment

Danvers, 54 Cherry Hill Drive

Row 45

(1.8.1.1) Identifier

Danvers - 75 Sylvan Street

(1.8.1.2) Latitude

42.557608

(1.8.1.3) Longitude

-70.944529

(1.8.1.4) Comment

Danvers, 75 Sylvan Street

Row 46

(1.8.1.1) Identifier

Darmstadt

(1.8.1.2) Latitude

49.895578

(1.8.1.3) Longitude

8.654347

(1.8.1.4) Comment

Darmstadt, Frankfurter Strasse 250

Row 47

(1.8.1.1) Identifier

Dong Nai

(1.8.1.2) Latitude

10.705495

(1.8.1.3) Longitude

106.93621

(1.8.1.4) Comment

Ho Chi Minh City, Street No.6, Nhon Trach 3 Industrial Park, Nhon Trach District, Dong Nai Province, Viet Nam

Row 48

(1.8.1.1) Identifier

Eumseong

(1.8.1.2) Latitude

36.891755

(1.8.1.3) Longitude

127.673175

(1.8.1.4) Comment

Eumseong, 261, Wonnamsandan-ro

Row 49

(1.8.1.1) Identifier

Gernsheim

(1.8.1.2) Latitude

49.770055

(1.8.1.3) Longitude

8.478051

(1.8.1.4) Comment

Gernsheim, Mainzer Str. 41

Row 50

(1.8.1.1) Identifier

Gillingham

(1.8.1.2) Latitude

51.032232

(1.8.1.3) Longitude

-2.275532

(1.8.1.4) Comment

Gillingham, The Old Brickyard, New Road

Row 51

(1.8.1.1) Identifier

Glasgow

(1.8.1.2) Latitude

55.901492

(1.8.1.3) Longitude

-4.313765

(1.8.1.4) Comment

Glasgow, Unit 5, Todd Campus, West of Scotland Science Park

Row 52

(1.8.1.1) Identifier

Guidonia Montecelio (Tiburtina)

(1.8.1.2) Latitude

41.949738

(1.8.1.3) Longitude

12.689259

(1.8.1.4) Comment

Guidonia Montecelio, Via Luigi Einaudi 11

Row 53

(1.8.1.1) Identifier

Guyancourt

(1.8.1.2) Latitude

48.785087

(1.8.1.3) Longitude

2.064383

(1.8.1.4) Comment

Guyancourt, 1 Rue Jacques Monod, Rond-Point de Sangliers

Row 54

(1.8.1.1) Identifier

Hamburg

(1.8.1.2) Latitude

53.482696

(1.8.1.3) Longitude

9.901984

(1.8.1.4) Comment

Hamburg, Georg Heyken Str. 14

Row 55

(1.8.1.1) Identifier

Haverhill UK

(1.8.1.2) Latitude

52.073603

(1.8.1.3) Longitude

0.42865

(1.8.1.4) Comment

Haverhill UK, Homefield Business Park, Homefield Road

Row 56

(1.8.1.1) Identifier

Hohenbrunn

(1.8.1.2) Latitude

48.03872

(1.8.1.3) Longitude

11.71874

(1.8.1.4) Comment

Hohenbrunn, Eduard Buchner Strasse 14-20

Row 57

(1.8.1.1) Identifier

Hometown

(1.8.1.2) Latitude

40.834504

(1.8.1.3) Longitude

-76.031133

(1.8.1.4) Comment

357 Marian Ave, Tamaqua, PA 18252

Row 58

(1.8.1.1) Identifier

Hsinchu

(1.8.1.2) Latitude

24.881446

(1.8.1.3) Longitude

121.044977

(1.8.1.4) Comment

Hsinchu, No. 458-6, Sinsing Road, Hu Kou Township

Row 59

(1.8.1.1) Identifier

Hsinchu, Versum

(1.8.1.2) Latitude

24.881446

(1.8.1.3) Longitude

121.044977

(1.8.1.4) Comment

Hsin Chu, Rm. 3, 3F., No. 83, Sec. 2, Gongdao 5th Rd., East Dist., Hsinchu City 300

Row 60

(1.8.1.1) Identifier

Ichikawa

(1.8.1.2) Latitude

35.713572

(1.8.1.3) Longitude

139.927981

(1.8.1.4) Comment

Ichikawa, 386 Oomachi

Row 61

(1.8.1.1) Identifier

Indianapolis Building 1

(1.8.1.2) Latitude

39.88029

(1.8.1.3) Longitude

-86.230621

(1.8.1.4) Comment

Indianapolis, 6925 Guion Road

Row 62

(1.8.1.1) Identifier

Indianapolis Building 2

(1.8.1.2) Latitude

39.879295

(1.8.1.3) Longitude

-86.228545

(1.8.1.4) Comment

Indianapolis, 6815 Guion Road

Row 63

(1.8.1.1) Identifier

Indianapolis Building 3

(1.8.1.2) Latitude

39.867715

(1.8.1.3) Longitude

-86.266938

(1.8.1.4) Comment

Indianapolis, 6010 W 62nd Street

Row 64

(1.8.1.1) Identifier

Indianapolis Building 4

(1.8.1.2) Latitude

39.870649

(1.8.1.3) Longitude

-86.267481

(1.8.1.4) Comment

Indianapolis, 6102 Victory Way

Row 65

(1.8.1.1) Identifier

Irvine

(1.8.1.2) Latitude

55.608443

(1.8.1.3) Longitude

-4.667494

(1.8.1.4) Comment

Irvine, Second Avenue, Heatherhouse Industrial Estate, KA12 8NB Irvine

Row 66

(1.8.1.1) Identifier

Ivrea (Colleretto Giacosa)

(1.8.1.2) Latitude

45.440592

(1.8.1.3) Longitude

7.826087

(1.8.1.4) Comment

Colleretto Giacosa, Via Ribes 1

Row 67

(1.8.1.1) Identifier

Jaffrey

(1.8.1.2) Latitude

42.798398

(1.8.1.3) Longitude

-71.983148

(1.8.1.4) Comment

Jaffrey, 11 Prescott Road

Row 68

(1.8.1.1) Identifier

Jakarta

(1.8.1.2) Latitude

-6.30286

(1.8.1.3) Longitude

106.855404

(1.8.1.4) Comment

Jakarta Timur, Jl. TB. Simatupang no. 8

Row 69

(1.8.1.1) Identifier

Jerusalem

(1.8.1.2) Latitude

31.768319

(1.8.1.3) Longitude

35.21371

(1.8.1.4) Comment

Jerusalem, Kiryat Mada Street 13, Har Hotzvim Science Industrial Park, 97770 Jerusalem

Row 70

(1.8.1.1) Identifier

Kankakee - 195 West Birch Street

(1.8.1.2) Latitude

41.127527

(1.8.1.3) Longitude

-87.868247

(1.8.1.4) Comment

Kankakee, 195 West Birch Street

Row 71

(1.8.1.1) Identifier

Kankakee - 2407 Eastgate Industrial Parkway

(1.8.1.2) Latitude

41.124535

(1.8.1.3) Longitude

-87.829674

(1.8.1.4) Comment

Kankakee, 2407 Eastgate Industrial Parkway

Row 72

(1.8.1.1) Identifier

Kaohsiung

(1.8.1.2) Latitude

22.828661

(1.8.1.3) Longitude

120.261747

(1.8.1.4) Comment

Kaohsiung, No.15, Luke 3rd Rd., Luzhu Dist., Kaohsiung City, 821011 Kaohsiung

Row 73

(1.8.1.1) Identifier

Khopoli

(1.8.1.2) Latitude

18.864645

(1.8.1.3) Longitude

73.203314

(1.8.1.4) Comment

Khopoli, Savroli Village, Khalapur Taluka, Raigad District,

Row 74

(1.8.1.1) Identifier

LaMotte

(1.8.1.2) Latitude

49.404353

(1.8.1.3) Longitude

3.000259

(1.8.1.4) Comment

Trosly Breuil, 1 Rue du flottage

Row 75

(1.8.1.1) Identifier

Laramie

(1.8.1.2) Latitude

41.289308

(1.8.1.3) Longitude

-105.588521

(1.8.1.4) Comment

Laramie, 2931 Soldier Springs Road

Row 76

(1.8.1.1) Identifier

Lenexa - Rene

(1.8.1.2) Latitude

38.953617

(1.8.1.3) Longitude

-94.733571

(1.8.1.4) Comment

Lenexa, 13804 Rene Road

Row 77

(1.8.1.1) Identifier

Lenexa - Renner

(1.8.1.2) Latitude

38.924393

(1.8.1.3) Longitude

-94.780328

(1.8.1.4) Comment

Lenexa, 11296 Renner Blvd

Row 78

(1.8.1.1) Identifier

Livingston

(1.8.1.2) Latitude

55.883708

(1.8.1.3) Longitude

-3.551874

(1.8.1.4) Comment

Livingston, 2 Flemming Road, Kirkton Kampus

Row 79

(1.8.1.1) Identifier

Martillac (env)

(1.8.1.2) Latitude

44.711732

(1.8.1.3) Longitude

-0.58283

(1.8.1.4) Comment

Martillac, 1, Rue Jacques Monod

Row 80

(1.8.1.1) Identifier

Martin

(1.8.1.2) Latitude

33.042347

(1.8.1.3) Longitude

-81.475504

(1.8.1.4) Comment

Martin, 788 Chert Quarry Road

Row 81

(1.8.1.1) Identifier

Meyzieu

(1.8.1.2) Latitude

45.778892

(1.8.1.3) Longitude

5.027419

(1.8.1.4) Comment

Meyzieu, 10 Av. de Lattre de Tassigny

Row 82

(1.8.1.1) Identifier

Miamisburg

(1.8.1.2) Latitude

39.615889

(1.8.1.3) Longitude

-84.242409

(1.8.1.4) Comment

Miamisburg, 3858 Benner Road

Row 83

(1.8.1.1) Identifier

Milwaukee - Teutonia CDC

(1.8.1.2) Latitude

43.127202

(1.8.1.3) Longitude

-87.951717

(1.8.1.4) Comment

Allentown, 6950 Ambassador Dr.

Row 84

(1.8.1.1) Identifier

Milwaukee - Teutonia LABS / Packaging

(1.8.1.2) Latitude

43.127202

(1.8.1.3) Longitude

-87.951717

(1.8.1.4) Comment

Milwaukee, 6000 N Teutonia, WI-53209-3645 Milwaukee

Row 85

(1.8.1.1) Identifier

Modugno (Bari)

(1.8.1.2) Latitude

41.109383

(1.8.1.3) Longitude

16.761858

(1.8.1.4) Comment

Modugno, Viale della Magnolie 15, Z.I.

Row 86

(1.8.1.1) Identifier

Mollet

(1.8.1.2) Latitude

41.546539

(1.8.1.3) Longitude

2.22434

(1.8.1.4) Comment

Mollet del Valles, Poligono Merck, junto a la Carretera Nacional N-152

Row 87

(1.8.1.1) Identifier

Molsheim

(1.8.1.2) Latitude

48.541821

(1.8.1.3) Longitude

7.52977

(1.8.1.4) Comment

Molsheim, 39, Route Industrielle de la Hardt

Row 88

(1.8.1.1) Identifier

Montevideo

(1.8.1.2) Latitude

-34.783717

(1.8.1.3) Longitude

-56.075305

(1.8.1.4) Comment

Montevideo, Zonamerica Business & Technology Park - Ruta 8 - Km 17.500 - Edificio Merck Serono

Row 89

(1.8.1.1) Identifier

Nanke

(1.8.1.2) Latitude

23.129045

(1.8.1.3) Longitude

120.263254

(1.8.1.4) Comment

Nanke, No. 772, Xingnong Rd., Shanhua Dist., Tainan City 741

Row 90

(1.8.1.1) Identifier

Nantong HC

(1.8.1.2) Latitude

31.891847

(1.8.1.3) Longitude

120.952227

(1.8.1.4) Comment

Nantong, No. 168, Hexing Road, NETDA, Jiangsu, P.R. China

Row 91

(1.8.1.1) Identifier

Nantong LS

(1.8.1.2) Latitude

31.843479

(1.8.1.3) Longitude

120.976939

(1.8.1.4) Comment

Nantong, 39, Jianggang Road; 226017 Nantong, Jiangsu

Row 92

(1.8.1.1) Identifier

Naucalpan

(1.8.1.2) Latitude

19.469104

(1.8.1.3) Longitude

-99.224608

(1.8.1.4) Comment

Naucalpan de Juarez; Estado de Mexico, Calle 5 No. 7 Fracc. Ind. Alec Blanco,

Row 93

(1.8.1.1) Identifier

Navi Mumbai DC

(1.8.1.2) Latitude

19.08939

(1.8.1.3) Longitude

73.020798

(1.8.1.4) Comment

Navi Mumbai, A2/1, Patalganga MIDC, Borivali Industrial area, khalapur Raigad

Row 94

(1.8.1.1) Identifier

Norwood

(1.8.1.2) Latitude

39.166238

(1.8.1.3) Longitude

-84.435729

(1.8.1.4) Comment

Norwood, 2909, Highland Avenue

Row 95

(1.8.1.1) Identifier

Oakville

(1.8.1.2) Latitude

43.509472

(1.8.1.3) Longitude

-79.67306

(1.8.1.4) Comment

Oakville, 2149 Winston Park Drive

Row 96

(1.8.1.1) Identifier

Onahama

(1.8.1.2) Latitude

36.942491

(1.8.1.3) Longitude

140.892471

(1.8.1.4) Comment

Onahama, 51-15, Aza Egoshi, Kurosuno, Izumi-machi,Iwaki-shi,Fukushima-pref.

Row 97

(1.8.1.1) Identifier

Pentlands (Edinburgh)

(1.8.1.2) Latitude

55.858007

(1.8.1.3) Longitude

-3.193808

(1.8.1.4) Comment

Penicuik, Pentlands Science Park Bush Loan Penicuik Midlothian EH26 0PZ

Row 98

(1.8.1.1) Identifier

Poole

(1.8.1.2) Latitude

50.719058

(1.8.1.3) Longitude

-1.976479

(1.8.1.4) Comment

Poole, 11 Seldown Lane (Merck House)

Row 99

(1.8.1.1) Identifier

Port Washington

(1.8.1.2) Latitude

43.383763

(1.8.1.3) Longitude

-87.882499

(1.8.1.4) Comment

Port Washington, 690 W Oakland Avenue, Port Washington, WI 53074

Row 100

(1.8.1.1) Identifier

Poseung MPM

(1.8.1.2) Latitude

36.985683

(1.8.1.3) Longitude

126.837022

(1.8.1.4) Comment

Pyeongtaek-shi, Gyeonggi-do, 306 Pyeongtaekhang-Ro, Poseung-eup, 17956 Pyeongtaek

Row 101

(1.8.1.1) Identifier

Pudong

(1.8.1.2) Latitude

31.190315

(1.8.1.3) Longitude

121.588315

(1.8.1.4) Comment

Pudong, 509 Renqing Road, Bldg. 10, Zhangjiang High Tech East Park

Row 102

(1.8.1.1) Identifier

Pyeongtaek

(1.8.1.2) Latitude

37.035309

(1.8.1.3) Longitude

127.080422

(1.8.1.4) Comment

88-19, Sandan-Ro, 17745 Pyeongtaek-Si

Row 103

(1.8.1.1) Identifier

Rehovot

(1.8.1.2) Latitude

31.912399

(1.8.1.3) Longitude

34.806103

(1.8.1.4) Comment

Rehovot, 3 Plaut Street, Rabin Park

Row 104

(1.8.1.1) Identifier

Rio de Janeiro

(1.8.1.2) Latitude

-22.933713

(1.8.1.3) Longitude

-43.372179

(1.8.1.4) Comment

Rio de Janeiro - RJ, Estrada dos Bandeirantes, 1099

Row 105

(1.8.1.1) Identifier

Rockland MS

(1.8.1.2) Latitude

42.166652

(1.8.1.3) Longitude

-70.901836

(1.8.1.4) Comment

Rockland, One Technology Place

Row 106

(1.8.1.1) Identifier

Rocklin

(1.8.1.2) Latitude

38.774614

(1.8.1.3) Longitude

-121.20963

(1.8.1.4) Comment

Rocklin, 6600 Sierra College Blvd, Rocklin, CA 95677

Row 107

(1.8.1.1) Identifier

Rockville

(1.8.1.2) Latitude

39.104396

(1.8.1.3) Longitude

-77.195693

(1.8.1.4) Comment

Rockville, 9610 Medical Center Drive

Row 108

(1.8.1.1) Identifier

Round Rock

(1.8.1.2) Latitude

30.542001

(1.8.1.3) Longitude

-97.68983

(1.8.1.4) Comment

Round Rock, 811 Paloma Dr # A, Round Rock, TX 78665

Row 109

(1.8.1.1) Identifier

Saint Quentin Fallavier Distribution

(1.8.1.2) Latitude

45.644393

(1.8.1.3) Longitude

5.095607

(1.8.1.4) Comment

Saint Quentin Fallavier, 80 Rue De Luzais, L'Isle D'Abeau Chesnes B.P. 701

Row 110

(1.8.1.1) Identifier

Samutprakarn

(1.8.1.2) Latitude

13.517259

(1.8.1.3) Longitude

100.654927

(1.8.1.4) Comment

Samutprakan, 660 Soi3 Bangpoo Industrial Estate, Bangpoo Zone C Sukhumvit Road

Row 111

(1.8.1.1) Identifier

San Diego

(1.8.1.2) Latitude

32.886911

(1.8.1.3) Longitude

-117.180918

(1.8.1.4) Comment

San Diego, 6555 Nancy Ridge Drive

Row 112

(1.8.1.1) Identifier

San Jose

(1.8.1.2) Latitude

37.394148

(1.8.1.3) Longitude

-121.934744

(1.8.1.4) Comment

San Jose, 3011 N. 1st Street, San Jose, CA 95134

Row 113

(1.8.1.1) Identifier

Santiago de Chile

(1.8.1.2) Latitude

-33.422552

(1.8.1.3) Longitude

-70.621898

(1.8.1.4) Comment

Santiago de Chile, Los Conquistadores 1730

Row 114

(1.8.1.1) Identifier

Santiago de Chile Warehouse

(1.8.1.2) Latitude

-33.420999

(1.8.1.3) Longitude

-70.779959

(1.8.1.4) Comment

Santiago de Chile, Rio Palena 9669, Pudahuel

Row 115

(1.8.1.1) Identifier

Savannah

(1.8.1.2) Latitude

32.200882

(1.8.1.3) Longitude

-81.184547

(1.8.1.4) Comment

Savannah, 110 EMD Blvd.

Row 116

(1.8.1.1) Identifier

Schaffhausen

(1.8.1.2) Latitude

47.702156

(1.8.1.3) Longitude

8.647752

(1.8.1.4) Comment

Schaffhausen, Im Laternenacker 5

Row 117

(1.8.1.1) Identifier

Schnelldorf DC

(1.8.1.2) Latitude

49.19208

(1.8.1.3) Longitude

10.17773

(1.8.1.4) Comment

Schnelldorf, Kappelweg 1

Row 118

(1.8.1.1) Identifier

Schnelldorf Downfilling

(1.8.1.2) Latitude

49.19208

(1.8.1.3) Longitude

10.17773

(1.8.1.4) Comment

Schnelldorf, Kappelweg 1

Row 119

(1.8.1.1) Identifier

Semoy

(1.8.1.2) Latitude

47.943027

(1.8.1.3) Longitude

1.953592

(1.8.1.4) Comment

Semoy, Le Pressoir Vert

Row 120

(1.8.1.1) Identifier

Shah Alam

(1.8.1.2) Latitude

3.0839

(1.8.1.3) Longitude

101.561228

(1.8.1.4) Comment

Shah Alam /Selangor Darul Ehsan, No.4,Jalan U1/26, Section U1,Hicom Glenmarie Ind. Park

Row 121

(1.8.1.1) Identifier

Shanghai CTS LS-one Lab

(1.8.1.2) Latitude

31.204543

(1.8.1.3) Longitude

121.601966

(1.8.1.4) Comment

Shanghai, 2F, Building A, 2829 Jinke Road, Zhangjiang Hi-Tech Park, Pudong Shanghai 201203

Row 122

(1.8.1.1) Identifier

Shanghai MDM (env)

(1.8.1.2) Latitude

31.221517

(1.8.1.3) Longitude

121.544379

(1.8.1.4) Comment

Shanghai, East side of building 7, No. 211 Qin Qiao Road, Jinqiao Export Processing Zone, Pudong New Area

Row 123

(1.8.1.1) Identifier

Sheboygan

(1.8.1.2) Latitude

43.673041

(1.8.1.3) Longitude

-87.785688

(1.8.1.4) Comment

Sheboygan, 5485 County Road V, Sheboygan Falls, WI 53085

Row 124

(1.8.1.1) Identifier

Shizuoka-ken

(1.8.1.2) Latitude

34.658869

(1.8.1.3) Longitude

138.072911

(1.8.1.4) Comment

Shizuoka-ken, Shizuoka Technology Center, 3330 Chihama Kakegawa-shi

Row 125

(1.8.1.1) Identifier

Sihwa

(1.8.1.2) Latitude

37.342721

(1.8.1.3) Longitude

126.705353

(1.8.1.4) Comment

Sihwa, 143, Hyeomnyeok-Ro

Row 126

(1.8.1.1) Identifier

Singapore ACW

(1.8.1.2) Latitude

1.310262

(1.8.1.3) Longitude

103.736047

(1.8.1.4) Comment

Singapore, ACW, 20 Penjuru Lane

Row 127

(1.8.1.1) Identifier

Sinking Spring

(1.8.1.2) Latitude

40.321173

(1.8.1.3) Longitude

-76.049209

(1.8.1.4) Comment

Sinking Spring, 5 Dutch Court Sinking Spring Pa 19608

Row 128

(1.8.1.1) Identifier

SongDo Incheon Merck LS Operation Center

(1.8.1.2) Latitude

37.362319

(1.8.1.3) Longitude

126.654428

(1.8.1.4) Comment

SongDo Incheon, 113, Songdogukje-daero 343beon-gil, Yeonsu-gu, 21991 Incheon

Row 129

(1.8.1.1) Identifier

St. Louis - Broadway

(1.8.1.2) Latitude

38.590025

(1.8.1.3) Longitude

-90.216828

(1.8.1.4) Comment

Broadway, 3506 South Broadway, St. Louis, Missouri

Row 130

(1.8.1.1) Identifier

St. Louis - Cherokee ISCO

(1.8.1.2) Latitude

38.590859

(1.8.1.3) Longitude

-90.211749

(1.8.1.4) Comment

Cherokee, 3300 South Second Street, Saint Louis, Missouri

Row 131

(1.8.1.1) Identifier

St. Louis - Cherokee LSS

(1.8.1.2) Latitude

38.590859

(1.8.1.3) Longitude

-90.211749

(1.8.1.4) Comment

Cherokee, 3300 South Second Street, Saint Louis, Missouri

Row 132

(1.8.1.1) Identifier

St. Louis - Dekalb

(1.8.1.2) Latitude

38.588061

(1.8.1.3) Longitude

-90.215869

(1.8.1.4) Comment

Dekalb, 3500 Dekalb Street, St. Louis, Missouri

Row 133

(1.8.1.1) Identifier

St. Louis - Ewing

(1.8.1.2) Latitude

38.627293

(1.8.1.3) Longitude

-90.223938

(1.8.1.4) Comment

Ewing, 545 South Ewing Avenue, St. Louis, Missouri

Row 134

(1.8.1.1) Identifier

St. Louis - Laclede

(1.8.1.2) Latitude

38.632466

(1.8.1.3) Longitude

-90.221626

(1.8.1.4) Comment

Laclede, 2909 Laclede Avenue, St. Louis, Missouri

Row 135

(1.8.1.1) Identifier

St. Louis - Olive

(1.8.1.2) Latitude

38.634138

(1.8.1.3) Longitude

-90.21996

(1.8.1.4) Comment

Olive, 2838 Olive Street, Saint Louis, MO 63103

Row 136

(1.8.1.1) Identifier

St. Louis - Spruce (Env Data Only)

(1.8.1.2) Latitude

38.628803

(1.8.1.3) Longitude

-90.226382

(1.8.1.4) Comment

Spruce, 3050 Spruce Street, Saint Louis, MO 63103

Row 137

(1.8.1.1) Identifier

Steinheim

(1.8.1.2) Latitude

48.687702

(1.8.1.3) Longitude

10.076395

(1.8.1.4) Comment

Steinheim, Riedstrasse 2

Row 138

(1.8.1.1) Identifier

Stirling

(1.8.1.2) Latitude

56.14275

(1.8.1.3) Longitude

-3.917021

(1.8.1.4) Comment

Stirling, Innovation Park, Hillfoots Road

Row 139

(1.8.1.1) Identifier

Stoneham

(1.8.1.2) Latitude

42.479233

(1.8.1.3) Longitude

-71.108041

(1.8.1.4) Comment

Stoneham, 85 Maple St

Row 140

(1.8.1.1) Identifier

Suzhou

(1.8.1.2) Latitude

31.315639

(1.8.1.3) Longitude

120.804182

(1.8.1.4) Comment

Suzhou, Jiangsu, 70 Long Pu Road

Row 141

(1.8.1.1) Identifier

Taichung

(1.8.1.2) Latitude

24.245851

(1.8.1.3) Longitude

120.537306

(1.8.1.4) Comment

Taichung, No. 6, Dacheng S. Rd., Wuqi Dist., Taichung City 435

Row 142

(1.8.1.1) Identifier

Taipei - Versum

(1.8.1.2) Latitude

25.052967

(1.8.1.3) Longitude

121.520423

(1.8.1.4) Comment

Taipei, No. 223, Songjiang Rd., Zhongshan Dist., Taipei City 104

Row 143

(1.8.1.1) Identifier

Taoyuan- MPM TY 39 Ching Chien

(1.8.1.2) Latitude

25.057595

(1.8.1.3) Longitude

121.124736

(1.8.1.4) Comment

Taoyuan, No. 39, 39-1,Ching Chien 1st Road, Kuan Yin Industrial Park

Row 144

(1.8.1.1) Identifier

Taoyuan - Zufu

(1.8.1.2) Latitude

24.993628

(1.8.1.3) Longitude

121.30098

(1.8.1.4) Comment

Taoyuan, No. 38, Ching Chien 4th Road, Kuan Yin Industrial Park

Row 145

(1.8.1.1) Identifier

Taufkirchen (Munich)

(1.8.1.2) Latitude

48.052274

(1.8.1.3) Longitude

11.607654

(1.8.1.4) Comment

Munich, Eschenstrasse 5 D-82024 Taufkirchen Germany

Row 146

(1.8.1.1) Identifier

Temecula - 28820 Single Oak Drive (Building 20)

(1.8.1.2) Latitude

33.49952

(1.8.1.3) Longitude

-117.159855

(1.8.1.4) Comment

Temecula, 28820 Single Oak Drive

Row 147

(1.8.1.1) Identifier

Temecula - 28835 Single Oak Drive (Building 35)

(1.8.1.2) Latitude

33.498504

(1.8.1.3) Longitude

-117.15915

(1.8.1.4) Comment

Temecula, 28835 Single Oak Drive

Row 148

(1.8.1.1) Identifier

Temecula - 43455 Business Park Drive (Building 55)

(1.8.1.2) Latitude

33.499023

(1.8.1.3) Longitude

-117.159544

(1.8.1.4) Comment

Temecula, 43455 Single Oak Drive

Row 149

(1.8.1.1) Identifier

Tempe

(1.8.1.2) Latitude

33.337947

(1.8.1.3) Longitude

-111.898578

(1.8.1.4) Comment

Tempe, 8555 S. River Parkway

Row 150

(1.8.1.1) Identifier

The Woodlands

(1.8.1.2) Latitude

30.172568

(1.8.1.3) Longitude

-95.459578

(1.8.1.4) Comment

The Woodlands, 9186 Six Pines Drive

Row 151

(1.8.1.1) Identifier

Toluca

(1.8.1.2) Latitude

19.28261

(1.8.1.3) Longitude

-99.655665

(1.8.1.4) Comment

Toluca, Calle 6 Norte no. 107, Parque Industrial

Row 152

(1.8.1.1) Identifier

Tres Cantos

(1.8.1.2) Latitude

40.611517

(1.8.1.3) Longitude

-3.696322

(1.8.1.4) Comment

Tres Cantos, Calle de Batanes 1

Row 153

(1.8.1.1) Identifier

Tuas Basin - Versum Materials

(1.8.1.2) Latitude

1.317734

(1.8.1.3) Longitude

103.649293

(1.8.1.4) Comment

Tuas Basin, No 8 Tuas Basin Link

Row 154

(1.8.1.1) Identifier

Ulsan

(1.8.1.2) Latitude

35.485133

(1.8.1.3) Longitude

129.354233

(1.8.1.4) Comment

Ulsan, 48, Yongyeon-ro, 98 beon-gil, Nam-gu, 44784

Row 155

(1.8.1.1) Identifier

Urbana

(1.8.1.2) Latitude

40.137723

(1.8.1.3) Longitude

-88.226668

(1.8.1.4) Comment

Urbana, 1302 W. Anthony Drive, Urbana, Illinois

Row 156

(1.8.1.1) Identifier

Veldhoven

(1.8.1.2) Latitude

51.408545

(1.8.1.3) Longitude

5.412194

(1.8.1.4) Comment

Veldhoven, De Run 5432

Row 157

(1.8.1.1) Identifier

Verona

(1.8.1.2) Latitude

42.966792

(1.8.1.3) Longitude

-89.507517

(1.8.1.4) Comment

Verona, 1101 Kettle Moraine Trail

Row 158

(1.8.1.1) Identifier

Visalia

(1.8.1.2) Latitude

36.355597

(1.8.1.3) Longitude

-119.384796

(1.8.1.4) Comment

Visalia, 8511 W.Riggin Avenue, Visalia, CA 93291

Row 159

(1.8.1.1) Identifier

Wai Gao Qiao

(1.8.1.2) Latitude

31.310979

(1.8.1.3) Longitude

121.62265

(1.8.1.4) Comment

Wai Gao Qiao, No 238 Fenju Road

Row 160

(1.8.1.1) Identifier

Wiesbaden

(1.8.1.2) Latitude

50.034041

(1.8.1.3) Longitude

8.245519

(1.8.1.4) Comment

Wiesbaden, Rheingaustrasse 190-196

Row 161

(1.8.1.1) Identifier

Wuxi

(1.8.1.2) Latitude

31.522551

(1.8.1.3) Longitude

120.464205

(1.8.1.4) Comment

Wuxi, 99 Xi Mei Road, Wuxi New District

Row 162

(1.8.1.1) Identifier

Zhangjiagang

(1.8.1.2) Latitude

31.886018

(1.8.1.3) Longitude

120.554368

(1.8.1.4) Comment

Zhangjiagang, No. 2 Bohai Road, Deji District, Yangtze River International Chemical Industrial Park, Zhangjiagang Free Trade Zone, Jiangsu Province
[Add row]

(1.24) Has your organization mapped its value chain?

(1.24.1) Value chain mapped

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

(1.24.2) Value chain stages covered in mapping

Select all that apply
☑ Upstream value chain
☑ Downstream value chain

(1.24.3) Highest supplier tier mapped

Select from:
☑ Tier 1 suppliers

(1.24.4) Highest supplier tier known but not mapped

Select from:
☑ Tier 3 suppliers

(1.24.7) Description of mapping process and coverage

We have full transparency about our tier-1 suppliers; we have mapped our high risk supply chains (e.g. Mica, regulated Conflict Minerals suppliers) down to tier-x
[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)

2

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

Short-term horizon in line with group risk management processes

Medium-term

(2.1.1) From (years)

3

(2.1.3) To (years)

5

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

Mid-term horizon in line with group risk management processes. For standard risk reporting, we´re focusing on the current and the following four calendar years. Risks have to be reported with impact and likelihood in yearly time-slices for each calendar year

Long-term

(2.1.1) From (years)

6

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

Select from:
☑ No

(2.1.3) To (years)

20

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

In order to get an understanding of the long-term risk profile, relevant risks should be identified and described qualitatively (and where possible also quantitatively). Based on that, a risk map with relevant trends and threats is developed and monitored. In line with Merck's updated sustainability strategy, in relevant cases, a longer risk horizon shall be applied, e.g., up to 20 years or more with respect to the objective to achieve climate neutrality until 2040. In relation to climate- related scenarios, also risks beyond this could be taken into consideration.
[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

☑ Dependencies

☑ 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:

☑ Full

(2.2.2.5) Supplier tiers covered

Select all that apply

☑ Tier 1 suppliers

(2.2.2.7) Type of assessment

Select from:

☑ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

☑ 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

(2.2.2.12) Tools and methods used

International methodologies and standards

☑ ISO 14001 Environmental Management Standard

Other

☑ Scenario analysis

(2.2.2.13) Risk types and criteria considered

Acute physical

☑ Cold wave/frost

☑ Drought

☑ Flood (coastal, fluvial, pluvial, ground water)

☑ Heat waves

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

Chronic physical

☑ Heat stress

Policy

☑ Carbon pricing mechanisms

☑ Changes to international law and bilateral agreements

☑ Changes to national legislation

Market

☑ Availability and/or increased cost of raw materials

Reputation

☑ Impact on human health

Technology

☑ Transition to lower emissions technology and products

Liability

☑ Non-compliance with regulations

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Customers

☑ Employees

☑ Investors

☑ Regulators

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

Select from:

☑ Yes

(2.2.2.16) Further details of process

INVESTORS: Through the TCFD report (part of Sustainability Statement 2024), we inform investors and customers of the steps we have taken to identify and tackle climate risks and opportunities which could impact our organization. CUSTOMERS: Through the TCFD report (part of Sustainability Statement 2024), we inform investors and customers of the steps we have taken to identify and tackle climate risks and opportunities which could impact our organization. REGULATORS: Merck is actively engaged in industrial associations in order to identify upcoming regulations at a very early stage. Tightening regulations are considered a risk. EMPLOYEES: Employees can be informed via the TCFD report, and were considered while designing the risk and opportunities identification process.

Row 2

(2.2.2.1) Environmental issue

Select all that apply

☑ Water

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

Select all that apply

☑ Dependencies

☑ Impacts

☑ Risks

☑ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

(2.2.2.4) Coverage

Select from:

☑ Full

(2.2.2.5) Supplier tiers covered

Select all that apply

☑ Tier 1 suppliers

(2.2.2.7) Type of assessment

Select from:

☑ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

☑ 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

☑ Local

☑ National

(2.2.2.12) Tools and methods used

Commercially/publicly available tools

☑ EcoVadis

☑ WRI Aqueduct

Enterprise Risk Management

☑ Enterprise Risk Management

International methodologies and standards

☑ Environmental Impact Assessment

☑ ISO 14001 Environmental Management Standard

Other

☑ Scenario analysis

☑ Other, please specify **:**Together fo Sustainability (TfS)-Initiative, Pharmaceutical Supply Chain (PSCI)-Initiative

(2.2.2.13) Risk types and criteria considered

Acute physical

☑ Drought

☑ Flood (coastal, fluvial, pluvial, ground water)

Chronic physical

☑ Declining water quality

☑ Water stress

Policy

☑ Changes to international law and bilateral agreements

☑ Changes to national legislation

☑ Increased difficulty in obtaining operations permits

Market

☑ Uncertainty in the market signals

Reputation

☑ Impact on human health

Technology

☑ Transition to water efficient and low water intensity technologies and products

Liability

☑ Non-compliance with regulations

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ NGOs

☑ Customers

☑ Employees

☑ Investors

☑ Suppliers

☑ Local communities

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

Select from:

☑ No

(2.2.2.16) Further details of process

WATER RISK ASSESSMENT is integrated in risk prevention processes (hazard identification, assessment, and management) at DIFFERENT LEVELS of the organisation: As part of the enterprise risk assessment, as part of the global environmental risk assessment, and locally as part of the environmental aspect assessment and as dedicated water risk assessments. Water is integrated into our formalized enterprise-wide risk management process together with other non-financial risks. On this level risks are assessed using a long-term perspective, e.g., likelihood of occurrence based on a period of 10 years. Risks are monitored continuously by the risk owners while the risk portfolio is reviewed twice a year by Group Risk Management. Water is integrated in our Environmental Risk Assessments together with other environmental risks. Water specific input is given by water related KPIs from our central data mgmt. system CR360, audit results, high level climate trends, severe weather events, feedback from relevant stakeholders (e.g., investors and customers), and legal developments. On this level risks are assessed using a medium-term perspective, e.g., likelihood of occurrence based on a period of 3-5 years. The environmental risk portfolio is reviewed twice a year by Corporate EHS. Since water issues are of local relevance, manufacturing sites integrate water risks in their annual environmental risk assessments acc. to ISO14001 and are obliged to assess their specific water related risks. Water specific input is given by KPIs, local water related site context, weather events, feedback from relevant stakeholders (e.g., employees, neighbours, community and customers), and legal developments. Guidance is given by a Corp. standard on Water Risk Management. On this level short medium term perspectives are used. Every two years, we engage with a significant subset of our supplier portfolio based on country and business category risk and strategic importance and ask the suppliers to report on their water management performance through an EcoVadis assessment.

Through its questionnaire, EcoVadis also requires information on these criteria. The time horizons considered in our upstream assessment are short and medium-term.
[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

Assessing the interconnections between dependencies, impacts, risks, and opportunities in the context of the environment involves conducting a comprehensive environmental impact assessment (EIA). This involves evaluating the potential effects of our business processes on the environment, including its interdependencies with various ecosystems, natural resources, and communities. The assessment also considers the potential risks and opportunities associated with the business, such as the impact on air, water quantity, water quality, and biodiversity. By conducting a thorough EIA, we identified dependencies on environmental services, potential risks and opportunities, develop mitigation strategies, and make informed decisions to minimize negative impacts and maximize positive outcomes (opportunities). An environmental risk assessment ERA involves the expertise and input of various stakeholders as follows: 1. Representatives from the business sectors provide insights into the specific activities, processes, and products associated with their businesses. 2. Experts in environmental science and engineering provide technical knowledge and expertise in assessing environmental hazards, exposures, and impacts. 3. Experts in ecology and biology contribute to the assessment of impacts on ecosystems, habitats, and species. 4. Professionals with expertise in risk assessment methodologies and tools contribute to the quantitative analysis of environmental risks. By involving a diverse group of stakeholders with relevant expertise, perspectives, and interests, the ERA process provides a comprehensive and well-rounded evaluation. At Merck, a team of water experts is established to conduct workshops for identifying water related dependencies, impacts, risks, and opportunities. They concluded that Merck depends both on water for production and the discharge of treated wastewater. Identified impacts on nature are water withdrawal from water bodies and residual substances in treated wastewater. The negative impact in combination with dependencies results in risks for Merck in case of water supply shortages due to climate change or increased regulatory requirements for wastewater treatment. At our sites in Rio we applied an advanced wastewater treatment technology which allowed us to re-use treated wastewater and thus reduce our dependency on water supply. Since concentrations of trace substances in the discharged water are interconnected with water volumes, we managed to further treat higher concentrations in the outflowing water.
[Fixed row]

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

(2.3.1) Identification of priority locations

Select from:

☑ Yes, we have identified priority locations

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

Select all that apply

☑ Direct operations

(2.3.3) Types of priority locations identified

Sensitive locations

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

(2.3.4) Description of process to identify priority locations

We applied the overall water risk indicator from the WRI Aqueduct Water Tool to identify the sites in water-scarce regions. An overall water stress indicator of ”high” or “extremely high” flags a site in a water stress area. In 2023, we analyzed all manufacturing sites worldwide and monitor their water use quarterly in our central data mgmt. system “CR360”. In this process we identified 24 sites (India: Bangalore Jigani; USA: Carlsbad (2 sites), Ramona, Rocklin, Temecula, Tempe, Visalia; Guatelama: Ciudad de Guatemala; Brasilien: Cotia; Israel: Jerusalem, Rehovot; China: Pudong, Shanghai, Suzhou; Chile: Santiago de Chile; South Korea: SongDo Incheon; Mexico: Toluca, Naucalpan; France: LaMotte (Trosly Breuil); Italy: Guidonia, Modugno (Bari); Spain: Mollet, Tres Cantos) to be situated in water stress areas. In 2023 & 2024 we analyzed based on IBAT our sites which are close to Key Biodiversity Areas (KBA). Following sites are identified: Brazil, Rio de Janeiro; Canada, Burlington; France, LaMotte; Germany (4sites), Gernsheim, Hamburg, Steinheim, Wiesbaden; Ireland, Cork; Israel, Jerusalem; Japan (4 sites), Osaka, Shizuoka-ken, 2x Tokio; P.R.China, Wai Gao Qiao; Republic of Korea (4 sites), Ansan, Banwol, Poseung, Sihwa; Spain (2 sites), Mollet, Tres Cantos; Switzerland (3 sites), Buchs, Corsier-sur-Vevey; Taiwan (3 sites), Kaohsiung, Taichung City, Taoyuan; USA (3 sites), Carlsbad, San Diego, Temecula

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

Select from:

☑ Yes, we will be disclosing the list/geospatial map of priority locations

(2.3.6) Provide a list and/or spatial map of priority locations

List of site in water stress areas.docx
[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:

☑ Asset value

(2.4.3) Change to indicator

Select from:

☑ Absolute increase

(2.4.5) Absolute increase/ decrease figure

25000000

(2.4.6) Metrics considered in definition

Select all that apply

☑ Frequency of effect occurring

☑ Time horizon over which the effect occurs

☑ Likelihood of effect occurring

(2.4.7) Application of definition

Relevance of a risk is determined based on its probability to cause potential unfavorable deviations from our financial and non-financial targets. We provide a solid basis to evaluate risks from quantitative and/or qualitative point of view, whereby two separate but aligned matrices are used. The quantitative risk matrix shows the individual risks and their significance to the Group. Risks are clustered based on their maximum impact and probability in any year. Degree of impact: > € 500 million - Critical negative impact on the net asset, financial position, and results of operations € 100 – 500 million - Significant negative impact on the net asset, financial position, and results of operations € 25 – 100 million - Moderate negative impact on the net asset, financial position, and results of operations € 10 – 25 million - Minor negative impact on the net asset, financial position, and results of operations < € 10 million - Immaterial negative impact on the net asset, financial position, and results of operations Probability of occurrence: < 1% - Highly improbable 1 – 5% - Improbable 5 – 20% - Possible 20 – 50% - Likely > 50% - More than likely The combination of impact and likelihood in a 5x5 risk matrix visualizes the potential severity of a single risk. Following cluster relations lead to substantial/significant risk evaluation: a. € 25–100 million & > (20-50%) b. € 100–500 million & > (5 – 20%) c. > € 500 million & all probability clusters (>0%) For non-financial risks (such as Reputation, Environmental, Social, Governance (ESG)), we introduced a qualitative rating scale as a reference for comprehensive assessment. The evaluation range is from low to critical. All substantial, critical (and selected moderate) topics are regularly presented to respective management and committees. The definition for substantive financial or strategic impact is outlined in our group-wide risk management guidelines. The timeframe applied for internal risk reporting is five years. Nevertheless, it can go beyond five years, e.g., for regulatory risks related to climate change. By this, it covers short-, medium- and long-term time horizons.

Opportunities

(2.4.1) Type of definition

Select all that apply

☑ Qualitative

☑ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☑ EBITDA

(2.4.3) Change to indicator

Select from:

☑ % increase

(2.4.4) % change to indicator

Select from:

☑ Less than 1%

(2.4.6) Metrics considered in definition

Select all that apply

☑ Other, please specify :net present value NPV

(2.4.7) Application of definition

Opportunities are assessed within their respective business environment. During short-term and strategic planning, general measures of business functions are quantified, typically in relation to EBITDA pre (earnings before interest, taxes, depreciation, and amortization), and operating cash flow. In addition, we identify and leverage opportunities as part of our regular business operations and through our daily observation of internal processes and markets. Investment opportunities are primarily evaluated and prioritized using metrics such as net present value, internal rate of return, return on capital employed (ROCE), and the payback period of the investment. These indicators are used to assess the potential of investment projects and prioritize them accordingly. Similarly, scenarios are used to simulate the impact of possible fluctuations and changes in the respective parameters on results. As part of their daily work and as an integral part of their ISO 14001 and ISO 50001 certification our site EHS and Facility Management evaluate climate-related risks. Hereby, the direct impact on the sites is assessed as well as the up- and downstream value chain. Opportunities arising from the further integration of sustainability in the corporate strategy: In 2020, we integrated sustainability more strongly in the corporate strategy, setting three goals in the areas of science and technology, value chain, and climate and environment. By considering the goals of the sustainability strategy when making business decisions and actively shifting our portfolio to increase the positive sustainability impact, we contribute to achieving the United Nations Sustainable Development Goals. In 2022, we extended the targeted strategies for our business sectors. Also, we launched a sustainability scorecard for our research and development activities.
[Add row]

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

(2.5.1) Identification and classification of potential water pollutants

Select from:

☑ Yes, we identify and classify our potential water pollutants

(2.5.2) How potential water pollutants are identified and classified

Policies and processes in place: Authorities set standards based on national or supranational regulation, e.g., European Integrated Emission Directive IED and Best Available Technique Reference Documents Brefs, US Clean Water Act and National PDES Permits. However, with our group policy on sustainable wastewater management we go beyond legal compliance. Details: Sites maintain a substance inventory, identify relevant water hazardous substances, conduct water impact

assessments and mitigation actions. Our aim is to reduce the occurrence of such substances below no effect concentration to avoid detrimental impacts on water ecosystems or human health. Indicators to identify pollutants: Our sites handle substance that are centrally classified according to the GHS-System (Globally harmonized System of Classification, Labelling and Packaging of Chemicals) by our regulatory departments. Substances are classified by H-Phrases distinguishing between physical, health, and environmental hazards. We identified and classified pollutants of global relevance: (a) substances causing eutrophication (organic carbon, nitrogen, phosphorus), leading to reduced oxygen availability in water bodies and therefore decimating water organisms and damaging ecosystems, (b) substances which are toxic to water organisms (H-Phases 400, 410-413) which include organic substances and heavy metals, (c) substances which have cancerogenic, mutagenic or repro tox properties (CMRs), (d) endocrine disruptors.
[Fixed row]

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

Row 1

(2.5.1.1) Water pollutant category

Select from:

☑ Inorganic pollutants

(2.5.1.2) Description of water pollutant and potential impacts

Our production processes require the use of inorganic salts including those containing heavy metals and mineral acids. The source of heavy metals in effluent are production processes using heavy metals raw materials or as catalysts (e.g., Nickel for hydrogenation) and the production equipment itself. Steel is an alloy of iron and numerous metals to achieve certain properties (e.g., resistance to rust). Small amounts of these metals are released into the effluent through direct contact with process equipment, e.g., piping, pumps, distillation columns etc. Potential impact: Various heavy metals are eco-toxic and thus reduce biodiversity in aquatic systems. Mineral acids are used for various chemical synthesis and for downstream processes (e.g., for removal of inorganics from organic solutions). Potential impact on water is the pH-shift in the receiving water (acidification) with harm to fauna and flora. Metals with organic compounds (so called metalorganic complexes) are synthesized for customers in the Electronics industry. Potential impact: Metalorganic complexes are either very persistent and may reach drinking water resources or might release heavy metals which are eco-toxic and thus reduce biodiversity in aquatic systems.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

☑ Downstream value chain

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Provision of best practice instructions on product use

☑ Implementation of integrated solid waste management systems

☑ Requirement for suppliers to comply with regulatory requirements

☑ Industrial and chemical accidents prevention, preparedness, and response

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

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

(2.5.1.5) Please explain

Description of how the procedures selected manage the risks of potential impacts outlined: Local SOPs ensure, that requirements from local permits are met in routine operational mode. All equipment containing water hazardous substances including critical infrastructure sewers and storage facilities is designed, constructed, and maintained according to applicable local regulations, industrial standards, and internal global standards. It is regularly inspected and checked within a formalized preventive maintenance system. The discharge of water hazardous substances is minimized by (a) elimination at source including separation of highly concentrated solutions which are managed as waste (integrated waste management), (b) reduction by case specific pre-treatment (e.g., neutralization, precipitation, and flocculation), and (c) site specific wastewater treatment plants, which apply sector specific technologies to comply with regulatory requirements. Merck internal standards also require the sites to be prepared for emergency cases, e.g. to prevent accidents and to have an emergency response plan which includes potential leakages and spillages. Description of how success is measured and evaluated: We define success if discharge concentrations are below limits. Success is controlled by regular analytical measures.

Row 2

(2.5.1.1) Water pollutant category

Select from:

☑ Pathogens

(2.5.1.2) Description of water pollutant and potential impacts

Pathogens released into a receiving water may grow in the aquatic environment and represent a potential threat to human health e.g., untreated sanitary water contains bacteria excreted from humans. Humans getting into contact with this kind of water may suffer from diarrhea. Furthermore, our research and development activities require the use of genetically modified bacteria (e.g., Escherichia Coli) and mammalian cells. They are generally non-pathogenicnon-pathogenic, but our laboratories allow the use of organisms from low risk categories.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

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

(2.5.1.5) Please explain

Description of how the procedures selected manage the risks of potential impacts outlined: Local SOPs ensure, that requirements from local permits are met in routine operational mode. All equipment containing water hazardous substances including critical infrastructure sewers and storage facilities is designed, constructed, and maintained according to applicable local regulations, industrial standards, and internal global standards. It is regularly inspected and checked within a formalized preventive maintenance system. The discharge of water hazardous substances is minimized by (a) elimination at source including separation of highly concentrated solutions which are managed as waste (integrated waste management), (b) reduction by case specific pre-treatment (e.g., neutralization, precipitation, and flocculation), and (c) site specific wastewater treatment plants, which apply sector specific technologies to comply with regulatory requirements. Merck internal standards also require the sites to be prepared for emergency cases, e.g. to prevent accidents and to have an emergency response plan which includes potential leakages and spillages. Description of how success is measured and evaluated: We define success if discharge concentrations are below limits. Success is controlled by regular analytical measures.

Row 3

(2.5.1.1) Water pollutant category

Select from:

☑ Other synthetic organic compounds

(2.5.1.2) Description of water pollutant and potential impacts

Other synthetic organic compounds may have negative impacts due to properties like persistency or eco-toxicity. Persistent substances are not subject of degradation in wastewater treatment plant and may accumulated in the food chain if lipophile or reach drinking water resources if mobile. Substances with eco-toxic properties suppress certain organisms and thus reduce biodiversity. Merck is a manufacturer of chemicals for the Electronics and Life Science industry as well as of pharmaceuticals for Healthcare systems. The manufacturing of a small group of products (out of a scope of several 10.000 products in total) requires the formation of processes effluents containing different synthetic organic compounds. E.g., our site in Altdorf (Switzerland CH) produces Bisoprolol, an active pharmaceutical

ingredient used for the treatment of high blood pressure. The Phenol containing wastewater formed during the synthesis of Bisoprolol has eco-toxic and human- toxic properties. The wastewater of the Altdorf site (Switzerland) is discharged into the River Reuss which flows into the Lake Vielwaldstaett. The lake is the drinking water reservoir of several communities, inter alia the city of Luzerne (Switzerland).

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

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

(2.5.1.5) Please explain

Description of how the procedures selected manage the risks of potential impacts outlined: Local SOPs ensure, that requirements from local permits are met in routine operational mode. All equipment containing water hazardous substances including critical infrastructure sewers and storage facilities is designed, constructed, and maintained according to applicable local regulations, industrial standards, and internal global standards. It is regularly inspected and checked within a formalized preventive maintenance system. Our manufacturing effluent management comprises testing of new raw wastewater regarding degradability prior to the first discharge, selection of suitable treatment technology, frequent controls of raw and treated water in routine mode as well as emergency response plans to remain within the boundaries of the given licenses to discharge. All applied treatment technology, their operations and the discharges are subject to official authorization and monitoring. Effluent management is specific to the composition of the raw wastewater and the nature of the receiving wastewater. Merck internal standards also require the sites to be prepared for emergency cases, e.g. to prevent accidents and to have an emergency response plan which includes unintended release of pathogens. Description of how success is measured and evaluated: We define success if discharge concentrations are below limits. Success is controlled by regular analytical measures.

Row 4

(2.5.1.1) Water pollutant category

Select from:

☑ Nitrates

(2.5.1.2) Description of water pollutant and potential impacts

Nitrates have a potential of eutrophication when discharged in relevant amounts (overfertilization). In Gernsheim (Germany), Darmstadt (Germany) and Savannah (United States of America) nitrates are either used as raw materials or are formed by oxidation of nitrogen containing substances (e.g., ammonia or organic amines) in the biological step of our wastewater treatment plant. We don't sell nitrates in water relevant amounts.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Implementation of integrated solid waste management systems

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

(2.5.1.5) Please explain

Description of how the procedures selected manage the risks of potential impacts outlined: Local SOPs ensure, that requirements from local permits are met in routine operational mode. All equipment containing water hazardous substances including critical infrastructure sewers and storage facilities is designed, constructed, and maintained according to applicable local regulations, industrial standards, and internal global standards. It is regularly inspected and checked within a formalized preventive maintenance system. The discharge of nitrates is minimized by (a) elimination of nitrates or their biological precursors at source including separation of highly concentrated solutions which are managed as waste (integrated waste management), or (b) reduced in wastewater treatment plants by nitrification/denitrification (global standard wastewater treatment technology). Success is controlled by regular analytical measures. Merck internal standards also require the sites to be prepared for emergency cases, e.g. to prevent accidents and to have an emergency response plan which includes unintended release of pathogens. Description of how success is measured and evaluated: We define success if discharge concentrations are below limits. Success is controlled by regular analytical measures.

Row 5

(2.5.1.1) Water pollutant category

Select from:

☑ Other nutrients and oxygen demanding pollutants

(2.5.1.2) Description of water pollutant and potential impacts

Non-persistent organic substances discharged in higher concentrations into the environment represent an oversupply of nutrients which may lead to oxygen deficiency in water bodies because of the available nutrients, the growth rate of the animals and plants of the water increases. These, in turn, consume oxygen, which consequently leads to a lack of oxygen and ultimately to the death of animals in the water and to loss of biodiversity. This process caused by an oversupply of nutrients is called eutrophication.Wastewater from all sites contain biodegradable organic substances from sanitary water. Furthermore, a variety of our manufacturing processes like organic synthesis or tableting of pharmaceuticals produce wastewater containing biodegradable organic substances (e.g., organic solvents or active pharmaceutical ingredients). These substances have an eutrophying potential.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

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

(2.5.1.5) Please explain

Description of how the procedures selected manage the risks of potential impacts outlined: Local SOPs ensure, that requirements from local permits are met in routine operational mode. All equipment containing water hazardous substances including critical infrastructure sewers and storage facilities is designed, constructed, and maintained according to applicable local regulations, industrial standards, and internal global standards. It is regularly inspected and checked within a formalized preventive maintenance system. Our manufacturing effluent management comprises testing of new raw wastewater regarding degradability prior to the first discharge, selection of suitable treatment technology, frequent controls of raw and treated water to remain within the boundaries of the given licenses to discharge. All applied treatment technology, their operations and the discharges are subject to official authorization and monitoring. Effluent management is specific to the composition of the raw wastewater and the nature of the receiving wastewater. Merck internal standards also require the sites to be prepared for emergency cases, e.g. to prevent accidents and to have an emergency response plan which includes unintended release of pathogens. Description of how success is measured and evaluated: We define success if discharge concentrations are below limits. Success is controlled by regular analytical measures.

Row 6

(2.5.1.1) Water pollutant category

Select from:

☑ Phosphates

(2.5.1.2) Description of water pollutant and potential impacts

Phosphates have a potential of eutrophication when discharged in relevant amounts (overfertilization). At our Gernsheim (Germany) site, sodium phosphate is formed in a dedicated wastewater pre-treatment step by oxidation of a phosphorous containing substance (hypophosphite) We don't sell phosphates in water relevant amounts.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

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

(2.5.1.5) Please explain

Description of how the procedures selected manage the risks of potential impacts outlined: Local SOPs ensure, that requirements from local permits are met in routine operational mode. All equipment containing water hazardous substances including critical infrastructure sewers and storage facilities is designed, constructed, and maintained according to applicable local regulations, industrial standards, and internal global standards. It is regularly inspected and checked within a formalized preventive maintenance system. The discharge of Phosphate is limited by precipitation as insoluble Aluminum phosphate by adding Aluminum chloride to the raw wastewater in the on-site wastewater treatment plant. The discharge license defines a threshold limit in order to meet the requirements of the national water management plans. Merck internal standards also require the sites to be prepared for emergency cases, e.g. to prevent accidents and to have an emergency response plan which includes unintended release of pathogens. Description of how success is measured and evaluated: We define success if discharge concentrations are below limits. Success is controlled by regular analytical measures.
[Add row]

C3. Disclosure of risks and opportunities

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

Climate change

(3.1.1) Environmental risks identified

Select from:

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

Water

(3.1.1) Environmental risks identified

Select from:

☑ 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:

☑ Environmental risks exist, but none with the potential to have a substantive effect on our organization

(3.1.3) Please explain

DEFINITION: In our internal risk reporting, risks are defined as potential future events or developments that could result in unfavorable deviations from our financial and non-financial targets. Risk parameter in this context are the probability of financial (quantitative) impact (EBITDA pre / operating cash flow) or non-financial (qualitative) impact (reputation/bran; Strategy, operations and environment, social and governance in relation to workforce, ethics and other factors. Opportunities imply favorable deviations from targets. The significance of a risk is evaluated based on its potential unfavorable deviation in conjunction with the probability of the occurrence of the respective risk. A negative impact on EBIDTA pre / operating cash flow is defined as SUBSTANTIVE above a threshold of 100 m Euro. EXAMPLE:

In 2024, we identified 39 sites being as being situated in areas with high or very high-water stress (according to WRI aqueduct). Water stress is an inherent risk which might lead in its extreme form to interruption of production. However, no SUBSTANTIVE water-related dependencies, impacts, risks, or opportunities were identified. [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

Chronic physical

☑ Other chronic physical risk, please specify **:**Wind

(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

☑ Chile
☑ China
☑ India
☑ Italy
☑ Japan
☑ Spain
☑ Brazil
☑ France
☑ Greece
☑ Mexico

☑ Austria
☑ Belgium
☑ Denmark
☑ Germany
☑ Ireland
☑ Singapore
☑ Switzerland
☑ Taiwan, China
☑ Republic of Korea
☑ United Arab Emirates
☑ Portugal
☑ Thailand
☑ Viet Nam
☑ Argentina
☑ Indonesia
☑ United States of America
☑ United Kingdom of Great Britain and Northern Ireland

(3.1.1.9) Organization-specific description of risk

Wind damage is a physical climate risk that can result from increasingly intense and frequent storms or high wind events, causing destruction to buildings, infrastructure, and power lines. This can lead to operational disruptions, increased maintenance costs, and insurance claims for affected businesses.

(3.1.1.11) Primary financial effect of the risk

Select from:
☑ Increased direct 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
☑ Long-term

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

Select from:
☑ More likely than not

(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

Under the 4°C scenario projected to 2050, extreme wind risks are anticipated to have a moderate impact on Merck's financial position, performance, and cash flow, primarily through potential damages to buildings, contents, and business interruptions, which are manageable within the broader scope of physical and transition risks.

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

Select from:
☑ Yes

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

0

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

1

(3.1.1.25) Explanation of financial effect figure

We are currently working on updating our climate and water related risks and opportunities, and therefore cannot disclose financial figures at the present time.

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets
☑ Improve monitoring of direct operations

(3.1.1.27) Cost of response to risk

0

(3.1.1.28) Explanation of cost calculation

We are currently working on updating our climate and water related risks and opportunities, and therefore cannot disclose financial figures at the present time.

(3.1.1.29) Description of response

Merck has conducted a quantitative scenario analysis of climate risks to understand the impacts of key physical and transition risks and opportunities on the business, in line with TCFD recommendations. • Looking at our 100 most important site clusters, based on their total insured value (TIV), we identified the most important perils, which may impact them, and how those may develop over time. • Transition risks and opportunities: Revenue, scope 1 emissions, electricity costs, chemicals costs, labour costs • Physical risks: Heat, flood, wind • Transition risks and opportunities were modelled across a 1.5°C scenario, whereas physical risks across 4°C temperature pathway (temperature increase by 2100 versus pre-industrial levels), and across a time horizon out to 2050.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk2

(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

☑ China

☑ Japan

☑ Portugal

☑ Thailand

☑ Spain
☑ France
☑ Germany
☑ Republic of Korea
☑ United States of America
☑ United Kingdom of Great Britain and Northern Ireland
☑ Netherlands
☑ Switzerland
☑ Taiwan, China

(3.1.1.9) Organization-specific description of risk

A carbon pricing mechanism, such as a Scope 1 carbon tax, imposes a cost on direct greenhouse gas emissions to incentivize reductions, reflecting regulatory policies aimed at achieving climate targets.

(3.1.1.11) Primary financial effect of the risk

Select from:
☑ Increased direct 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
☑ Long-term

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

Select from:
☑ More likely than not

(3.1.1.14) Magnitude

Select from:
☑ Medium-low

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

Under the 1.5°C scenario projected to 2050, carbon pricing mechanisms, such as Scope 1 carbon taxes, are anticipated to moderately impact Merck's financial position, performance, and cash flow as planned mitigation efforts are expected to significantly reduce these risk.

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

Select from:

☑ Yes

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

0

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

1

(3.1.1.25) Explanation of financial effect figure

We are currently working on aupdating our climate and water related risks and opportunities, and therefore cannot disclose financial figures at the present time.

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☑ Establish organization-wide targets

(3.1.1.27) Cost of response to risk

0

(3.1.1.28) Explanation of cost calculation

We are currently working on updating our climate and water related risks and opportunities, and therefore cannot disclose financial figures at the present time.

(3.1.1.29) Description of response

Merck has conducted a quantitative scenario analysis of climate risks to understand the impacts of key physical and transition risks and opportunities on the business, in line with TCFD recommendations. • Looking at our 100 most important site clusters, based on their total insured value (TIV), we identified the most important perils, which may impact them, and how those may develop over time. • Transition risks and opportunities: Revenue, scope 1 emissions, electricity costs, chemicals costs, labour costs • Physical risks: Heat, flood, wind • Transition risks and opportunities were modelled across a 1.5°C scenario, whereas physical risks across 4°C temperature pathway (temperature increase by 2100 versus pre-industrial levels), and across a time horizon out to 2050.
[Add row]

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

Climate change

(3.1.2.1) Financial metric

Select from:
☑ Revenue

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

1

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

1

(3.1.2.7) Explanation of financial figures

We are currently working on updating our climate and water related risks and opportunities, and therefore cannot disclose financial figures at the present time.
[Add row]

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

(3.3.1) Water-related regulatory violations

Select from:

☑ No

(3.3.3) Comment

Compliance is important for Merck's license to operate and our social license to operate. This is why employees are obliged to meet regulatory requirements. Since incompliances may happen despite strict controls, we established a respective reporting system: All sites are obliged to report non-compliances including actions from authorities via the central reporting system CR360. No water related incompliances or violations were reported in 2024.
[Fixed row]

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

Select from:

☑ Yes

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

Select all that apply

☑ EU ETS

☑ Korea 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

8

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

0

(3.5.2.3) Period start date

12/31/2023

(3.5.2.4) Period end date

12/30/2024

(3.5.2.5) Allowances allocated

33202

(3.5.2.6) Allowances purchased

38304

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

71506

(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

With power plants at the Darmstadt and Gernsheim sites in Germany, Merck is covered by the EU Emission Trading Scheme (EU ETS) launched Europe-wide in 2005.

Korea ETS

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

0

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

8

(3.5.2.3) Period start date

12/31/2023

(3.5.2.4) Period end date

12/30/2024

(3.5.2.5) Allowances allocated

17539

(3.5.2.6) Allowances purchased

0

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

0

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

17539

(3.5.2.9) Details of ownership

Select from:

☑ Facilities we own and operate

(3.5.2.10) Comment

--

[Fixed row]

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

With power plants at the Darmstadt and Gernsheim sites in Germany, Merck is covered by the EU Emission Trading Scheme (EU ETS) launched Europe-wide in 2005. When issuing emissions certificates, the German Emissions Trading Authority (DEHSt) acknowledged our previous measures (the substitution of brown and black coal with gas) as “early actions”. In the trading periods I and II (2006-2012) Merck benefited from free allowances. In the third trading period (2013-2020) new allocation rules were implemented. Merck’s benefited from free allocation which was based on heat benchmarks and industrial exceptions. But Merck had to purchase first additional allowances. In the meantime, the allocation rules for the fourth period (2021-2030) have been established. A first application for free allocation (until 2025) has been submitted. A purchase will remain necessary in the next years.There is still the risk of changes of the EU ETS in the coming years and still there are planning and investment uncertainties caused by such discussions and by possible regulatory changes within the next years.In the context of the EU Green Deal the complete climate and energy legislation is being reviewed. There is currently a discussion on extending the scope of the EU-ETS, further restricting the free allocation up to let them expire from 2030 (in connection with the CBAM initiative). Merck reacts on changes of the EU ETS in different ways. Scenario planning is used to estimate the possible financial impact by the changes in EU ETS. Merck observes tightly the discussions and decisions of the EU regarding the period until 2030 and beyond to adapt strategy if needed.Besides this, we reduce the need for emissions certificates by implementing energy saving and greenhouse gas reduction projects. To have a solid basis to improve energy efficiency and to save energy, the two sites have been certified according to ISO 50001 Energy Management Systems already in 2012.At the Darmstadt and Gernsheim sites, an energy strategy was developed to fulfil Merck’s 2030 and 2040 climate goals and to align the energy supply even more closely with Merck's climate protection goals. The strategy combines different projects and technologies such as: Reduction of steam consumption: Replacing existing steam (where possible) with low temperature heat grids and the usage of heat pumps. Within this workstream one focus is on the Delta project (Sustainability Research Project) to use industrial waste heat and to connect the Merck industrial with local municipal heat grids. Usage of geothermal energy as a source for low temperature water grids and support of cooling in summer. This technology is in several projects under investigation and in other under construction. Several photovoltaic projects are being set up on the site. At the end of 2024 a capacity of more than 7 MW will be installed.The focus of the strategy is to combine these different technologies adequately. A special focus is also on energy-efficient new buildings: e.g., selection of highly efficient technologies, intensification of life cycle considerations, increased usage of renewable energies (photovoltaic, geothermal, solar thermal etc.) and the expansion of e-mobility. Overall, sustainability considerations are integrated in all major investments.

(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?

Climate change

(3.6.1) Environmental opportunities identified

Select from:

☑ Yes, we have identified opportunities, and some/all are being realized

Water

(3.6.1) Environmental opportunities identified

Select from:

☑ No

(3.6.2) Primary reason why your organization does not consider itself to have environmental opportunities

Select from:

☑ Opportunities exist, but none anticipated to have a substantive effect on organization

(3.6.3) Please explain

Merck is constantly improving its water efficiency (target is to improve water intake per revenue by 50% by 2030 vs 2020) and to improve wastewater quality (target is to reach concentrations below the scientifically defined no-effect threshold by 2030). These improvements are the results of two underlying programs each consisting of a large number of actions in more than 80 manufacturing sites. Neither any of the actions nor the programs in total have a financial effect above the limit as defined by our finance department (25 Mio Euro per year).
[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

Capital flow and financing

☑ Other capital flow and financing opportunity, please specify **:**Increased revenue

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ China

☑ Japan

☑ Spain

☑ France

☑ Germany

☑ Republic of Korea

☑ United States of America

☑ United Kingdom of Great Britain and Northern Ireland

☑ Portugal

☑ Thailand

☑ Netherlands

☑ Switzerland

☑ Taiwan, China

(3.6.1.8) Organization specific description

The "increased revenue" opportunity refers to the projected financial growth for Merck KGaA, Darmstadt, Germany under a 1.5°C climate transition scenario, driven by expanding customer demand and sector growth across Pharmaceuticals, Life Science, and Electronics.

(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

☑ Long-term

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

Select from:

☑ More likely than not (50–100%)

(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 primary financial effect of the "increased revenue" opportunity would be significant growth in Merck's overall value, driven by expanding revenue across its Pharmaceuticals, Life Science, and Electronics sectors under a low-carbon transition scenario.

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

Select from:

☑ Yes

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

0

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

1

(3.6.1.23) Explanation of financial effect figures

We are currently working on updating our climate and water related risks and opportunities, and therefore cannot disclose financial figures at the present time.

(3.6.1.24) Cost to realize opportunity

0

(3.6.1.25) Explanation of cost calculation

We are currently working on updating our climate and water related risks and opportunities, and therefore cannot disclose financial figures at the present time.

(3.6.1.26) Strategy to realize opportunity

We are currently working on updating our climate and water related risks and opportunities, and therefore cannot disclose financial figures at the present time.
[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:
☑ Revenue

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

1

(3.6.2.4) Explanation of financial figures

We are currently working on updating our climate and water related risks and opportunities, and therefore cannot disclose financial figures at the present time.
[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

Merck's Position on Diversity, Equity & Inclusion Included the following points: • Diversity, Equity & Incl (DE&I) is a value. This includes, but is not limited to, gender identity, culture, ethnicity, race, religion, sexual orientation, nationality, socioeconomic and family status, language, different mental or physical abilities, age, mindset, faiths, military service, and political perspective. • Commitment to Diversity, Equity, & Inclusion (DE&I) as a driver of progress, innovation, and business progress. • DE&I is imperative to fuel our future by attracting, retaining, and developing high-performing talents. • Call managers to be purposeful in how they include DE&I in recruiting, retaining and developing their staff. • Value Chain: Our partners, our patients, and our industry are pledged to move the needle on DE&I efforts with robust aspirations.

(4.1.6) Attach the policy (optional)

Geschäftsverteilungsplan.pdf
[Fixed row]

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

	Board-level oversight of this environmental issue
Climate change	*Select from:* ☑ Yes
Water	*Select from:* ☑ Yes

[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

☑ Board Terms of Reference

(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

☑ Overseeing and guiding scenario analysis

☑ Overseeing the setting of corporate targets

☑ Monitoring progress towards corporate targets

☑ Overseeing and guiding public policy engagement

☑ Approving and/or overseeing employee incentives

☑ Overseeing and guiding major capital expenditures

☑ Monitoring the implementation of the business strategy

☑ Overseeing and guiding the development of a business strategy

☑ Overseeing and guiding acquisitions, mergers, and divestitures

☑ Overseeing and guiding the development of a climate transition plan

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

(4.1.2.7) Please explain

The CEO of Merck has the overarching responsibility for climate-related issues as part of the CEO's wider responsibility for Merck's overall sustainability strategy. In this role, the CEO takes care of the development of climate protection targets, monitoring of target performance, promoting measures towards target achievement etc. Overall Board oversight over climate-related issues is safeguarded via different channels. for instance: - The head of Merck's Corporate Sustainability, Quality & Trade Compliance unit (SQ), represents the highest responsibility for the overall governance for climate-related issues below Merck's Executive Board (= delegation of governance from Board). SQ coordinates and steers activities to implement Merck's climate protection program to reach Merck's climate targets 2030 and 2040. SQ monitors GHG emissions regularly using a central IT platform and monitors the implementation of energy efficiency and GHG reduction projects. The head of SQ reports directly to the CEO and informs the whole Board regularly on the current state and next steps of our climate protection program. In case, action on climate protection by the Board is needed, top management decisions, such as corporate environmental goal setting, are prepared. - The head of Merck's Corporate Sustainability, Quality & Trade Compliance unit (SQ) also heads the Merck Sustainability Board that consists of representatives from our business sectors and from key Group functions, such as Procurement, Communications, as well as Controlling and Risk Management. It aligns the strategy with the individual business strategies, defines priorities and specifies globally applicable sustainability guidelines. In addition, the Merck Sustainability Board ensures that the initiatives of our various business sectors, Group functions and subsidiaries align with our global sustainability strategy. Moreover, it recommends corresponding initiatives to the Executive Board. The council is sponsored by the CEO and another member of Merck's Executive Board. Outcomes of the monthly meetings are reported to the whole Board. - In the context of Merck's risk management, Group Controlling & Risk Management informs the Board twice a year about the aggregated opportunity/risk exposure of Merck, including climate-related risks. - Decisions by the Board on major, long-term renewable electricity agreements such as Virtual Power Purchase Agreements.

Water

(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

☑ Board Terms of Reference

(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

☑ Overseeing and guiding the development of a business strategy

☑ Overseeing and guiding acquisitions, mergers, and divestitures

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

(4.1.2.7) Please explain

The CEO of Merck has the overarching responsibility for water-related issues as part of the CEO's wider responsibility for Merck's overall sustainability strategy. In this role, the CEO takes care of the development of water sustainability targets, monitoring of target performance, promoting measures towards target achievement etc. Overall Board oversight over water-related issues is safeguarded via different channels. for instance: - The head of Merck's Corporate Sustainability, Quality & Trade Compliance unit (SQ), represents the highest responsibility for the overall governance for water-related issues below Merck's Executive Board (delegation of governance from Board). SQ coordinates and steers activities to implement Merck's water sustainability program to reach Merck's water targets 2025 and 2030. SQ monitors water intake and wastewater emissions regularly using a central IT platform and monitors the implementation of water saving and emission reduction projects. The head of SQ reports directly to the CEO and informs the whole Board regularly on the current state and next steps of our water sustainability program. In case, action on water sustainability by the Board is needed, top management decisions, such as corporate environmental goal setting, are prepared. - The head of Merck's Corporate Sustainability, Quality & Trade Compliance unit (SQ) also heads the Sustainability Board that consists of representatives from our business sectors and from key Group functions, such as Procurement, Communications, and Controlling. It aligns the strategy with the individual business strategies, defines priorities and specifies globally applicable sustainability guidelines. In addition, the Sustainability Board ensures that the initiatives of our various business sectors, Group functions and subsidiaries align with our global sustainability strategy. Moreover, it recommends corresponding initiatives to the Executive Board. The council is sponsored by the CEO and another member of Merck's Executive Board. Outcomes of the monthly meetings are reported to the whole Board. - In the context of Merck's risk management, Group Controlling & Risk Management informs the Board twice a year about the aggregated opportunity/risk exposure of Merck, including water-related risks
[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
☑ Integrating knowledge of environmental issues into board nominating process
☑ Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)
☑ Having at least one board member with expertise on this environmental issue

(4.2.3) Environmental expertise of the board member

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

Water

(4.2.1) Board-level competency on this environmental issue

Select from:
☑ Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply
☑ Consulting regularly with an internal, permanent, subject-expert working group
☑ Engaging regularly with external stakeholders and experts on environmental issues
☑ Integrating knowledge of environmental issues into board nominating process
☑ Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)
☑ Having at least one board member with expertise on this environmental issue

(4.2.3) Environmental expertise of the board member

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

[Fixed row]

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

	Management-level responsibility for this environmental issue
Climate change	*Select from:* ☑ Yes
Water	*Select from:* ☑ Yes

[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

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

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing supplier compliance with environmental requirements

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Measuring progress towards environmental science-based targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Conducting environmental scenario analysis

☑ Implementing the business strategy related to environmental issues

☑ Developing a business strategy which considers environmental issues

☑ Managing environmental reporting, audit, and verification processes

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

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

Select from:

☑ More frequently than quarterly

(4.3.1.6) Please explain

The Merck Sustainability Board which is headed by the head (President) of Corporate Sustainability, Quality & Trade Compliance unit (SQ), consists of representatives from our business sectors and from key Group functions, such as Procurement, Communications, as well as Controlling. Members from Europe, the United States and Asia provide input on regional sustainability aspects. The Merck Sustainability Board steers and monitors the Group-wide implementation of the

sustainability strategy. It aligns the strategy with the individual business strategies, defines priorities and specifies globally applicable sustainability guidelines. In addition, the Merck Sustainability Board ensures that the initiatives of our various business sectors, Group functions and subsidiaries align with our global sustainability strategy. Moreover, it recommends corresponding initiatives to the Executive Board. In 2024, the Merck Sustainability Board met 12 times: 4 times in person and 8 times by video conference. The participants addressed the following topics: Sustainability strategy review, Roadmap for sustainability goals, key indicator review (goal status), water strategy, new water and waste goals, net zero ambition, product carbon footprint, carbon capture, utilization and storage. The measures adopted by the Merck Sustainability Board are implemented by our line managers as well as by interdisciplinary project teams. To achieve our operational sustainability goals and depending on the topic, responsibility is assigned to specific teams, functions, and business units. Those responsible for implementation exchange ideas and coordinate actions in an overarching committee. They identify synergies between the projects and tailor their direction to our sustainability goals.

Water

(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

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

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing supplier compliance with environmental requirements

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Implementing the business strategy related to environmental issues

☑ Managing environmental reporting, audit, and verification processes

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

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

Select from:

☑ More frequently than quarterly

(4.3.1.6) Please explain

The Merck Sustainability Board which is headed by the head (President) of Corporate Sustainability, Quality & Trade Compliance unit (SQ), consists of representatives from our business sectors and from key Group functions, such as Procurement, Communications, as well as Controlling. Members from Europe, the United States and Asia provide input on regional sustainability aspects. The Merck Sustainability Board steers and monitors the Group-wide implementation of the sustainability strategy. It aligns the strategy with the individual business strategies, defines priorities and specifies globally applicable sustainability guidelines. In addition, the Merck Sustainability Board ensures that the initiatives of our various business sectors, Group functions and subsidiaries align with our global sustainability strategy. Moreover, it recommends corresponding initiatives to the Executive Board. In 2023, the Merck Sustainability Board met 11 times by video conference. The participants addressed the following topics: Sustainability strategy review, Roadmap for sustainability goals, key indicator review (goal status), water strategy, new water and waste goals, net zero ambition, product carbon footprint, carbon capture, utilization and storage. The measures adopted by the Merck Sustainability Board are implemented by our line managers as well as by interdisciplinary project teams. To achieve our operational sustainability goals and depending on the topic, responsibility is assigned to specific teams, functions, and business units. Those responsible for implementation exchange ideas and coordinate actions in an overarching committee. They identify synergies between the projects and tailor their direction to our sustainability goals.
[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

8

(4.5.3) Please explain

Merck added a Sustainability Factor to its Long-Term Incentive Plan (LTIP) for senior management in 2022. The LTIP is based on future-oriented performance with a three-year target achievement cycle. Since 2022, sustainability targets are taken into consideration by incorporating a Sustainability Factor into the LTIP in addition to three financial performance indicators. The Sustainability Factor has a range of 0.8 to 1.2 and can increase or reduce the overall LTIP result by up to 20%. The Sustainability Factor reflects the three pillars of Merck's sustainability strategy (Human progress, Sustainable value chains, Ecological footprint). The pillar 'Ecological footprint' measures the reduction of Merck's greenhouse gas emissions (scope 1 & 2). While the Sustainability Factor has a 20% overall impact on the LTIP, the scope 1&2 target represents 40% of the Sustainability Factor, thus the climate element has an 8% overall impact on the LTIP

Water

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

Select from:

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

(4.5.3) Please explain

Water is a key element of the Ecological Footprint pillar of Merck's Sustainability Strategy. Performance indicators regarding water consumption and wastewater quality are measured at Merck's relevant sites. For the Sustainability Factor of Merck's the Long Term Incentive Plan is was decided to initially focus on the reduction of greenhouse gas emissions. However, water aspects might well be included in the individual targets of managers at site level.
[Fixed row]

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

Climate change

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

☑ Board/Executive board

(4.5.1.2) Incentives

Select all that apply

☑ Bonus - % of salary

(4.5.1.3) Performance metrics

Targets

☑ Progress towards environmental targets

Emission reduction

☑ Reduction in absolute emissions

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

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

(4.5.1.5) Further details of incentives

Merck added a Sustainability Factor to its Long-Term Incentive Plan (LTIP) for senior management in 2022. The LTIP is based on future-oriented performance with a three-year target achievement cycle. Since 2022, sustainability targets are taken into consideration by incorporating a Sustainability Factor into the LTIP in addition to three financial performance indicators. The Sustainability Factor has a range of 0.8 to 1.2 and can increase or reduce the overall LTIP result by up to 20%. The

Sustainability Factor reflects the three pillars of Merck's sustainability strategy (Human progress, Sustainable value chains, Ecological footprint). The pillar 'Ecological footprint' measures the reduction of Merck's greenhouse gas emissions (scope 1 & 2). While the Sustainability Factor has a 20% overall impact on the LTIP, the scope 1&2 target represents 40% of the Sustainability Factor. The LTIP targets for scope 1&2 emissions reflect the progress made towards an overall target of 50% reduction of Scope 1&2 emissions by 2030 compared to 2020.

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

The LTIP not only applies to the Executive Board but also to a wider group of senior managers. The inclusion of climate targets with a 40% weight in the Sustainability Factor of the LTIP clearly drives awareness and behaviour throughout the organization towards reaching Merck's climate goals. Those targets are not only included in corporate decision making processes, but managers typically further cascade those overarching goals down to individual objectives of relevant employees that can positively contribute to the achievement of the 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

☑ Water

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

(4.6.1.4) Explain the coverage

Our EHS policies are based on Merck's Commitment to the UN Global Compact and are complemented by sector specific policies (e.g. Merck Principles for Sustainable Water Management). We outline our EHS-related policies in our 1) Annual Sustainability Report 2) Principles for Sustainable Water Management 3) Position on the Human Rights 4) Human rights charter 5) Human rights policy statement 6) Supplier Code of Conduct 7) Commitment to Nagoya Protocol The scope of the policies cover all sites of the Merck KGaA and its fully consolidated subsidiaries (Companies, entities or groups over which financial control is exercised).

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to a circular economy strategy

☑ Commitment to comply with regulations and mandatory standards

☑ Commitment to take environmental action beyond regulatory compliance

☑ Commitment to stakeholder engagement and capacity building on environmental issues

Water-specific commitments

☑ Commitment to control/reduce/eliminate water pollution

Social commitments

☑ Adoption of the UN International Labour Organization principles

☑ Commitment to promote gender equality and women's empowerment
☑ Commitment to respect and protect the customary rights to land, resources, and territory of Indigenous Peoples and Local Communities
☑ Commitment to respect internationally recognized human rights

Additional references/Descriptions

☑ Description of environmental requirements for procurement
☑ Description of impacts on natural resources and ecosystems
☑ Acknowledgement of the human right to water and sanitation
☑ Description of dependencies on natural resources and ecosystems
☑ Description of grievance/whistleblower mechanism to monitor non-compliance with the environmental policy and raise/address/escalate any other greenwashing concerns
☑ Other additional reference/description, please specify :Commitment to Nagoya Protocol

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

Select all that apply

☑ Yes, in line with the Paris Agreement
☑ Yes, in line with Sustainable Development Goal 6 on Clean Water and Sanitation
☑ Yes, in line with another global environmental treaty or policy goal, please specify :Green Deal

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

EHS Policy.pdf
[Add row]

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

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

Select from:

☑ Yes

(4.10.2) Collaborative framework or initiative

Select all that apply

☑ Science-Based Targets Initiative (SBTi)

☑ UN Global Compact

☑ Other, please specify **:**Responsible Care® Global Charter, Together for Sustainability (TfS) network, Pharmaceutical Supply Chain Initiative (PSCI)

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

We support the following responsible governance initiatives: • We have been a participant in the United Nations Global Compact since 2005 and are committed to complying with its principles. Within the UN Global Compact Network Germany, we are a member of the Climate and Business & Human Rights Peer Learning Groups. In this context, we discuss challenges, current issues, experiences, and successful approaches with other companies. • As a signatory to the chemical industry's Responsible Care® Global Charter, we voluntarily go above and beyond what is required by law and have adopted mandatory standards for product responsibility, environmental impact mitigation and health and safety. • As a member of the Together for Sustainability (TfS) network, we are dedicated to improving the supply chain with respect to environmental, compliance and social standards. In 2022, we collaborated closely with member companies in TfS workstreams focusing on sustainability capacity building and supplier decarbonization. We supported the development of a capability-building concept and deployed the TfS Academy. This training platform offers sourcing managers, interested employees and suppliers of TfS member companies 165 courses in up to nine languages on topics such as sustainable procurement, environment, health and safety, as well as labor and human rights. We also contributed to several best practice sharing and collaboration formats such as the TfS Talks as well as TfS Coordinator Roundtable. Furthermore, we supported the development and launch of the TfS Product Carbon Footprint (PCF) Guideline, which harmonizes PCF calculation methodology across the industry, and led the development of decarbonization training materials for TfS member companies and their suppliers. • We are a member of the Pharmaceutical Supply Chain Initiative (PSCI), which aims to continuously improve health, safety and environmental aspects throughout the supply chain.
[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

Carbon-Reduction-Plan-Merck-KGaA.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

Lobby register Deutscher Bundestag, register no. R001503 AND EU Transparency register

(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

Merck's engagement activities are mainly driven by our Group function Corporate Affairs and by technical Merck experts working in the associations. This group is well aware of Merck's overall position on climate change (sustainability strategy, targets etc.). Information about Merck's climate strategy etc. is shared among all employees via different means (e.g., intranet, webinars, townhall meetings of the Board). Employees involved in advocacy activities are often deeply involved in our climate action program as well. By this, consistency between Merck's strategy and our advocacy activities is ensured. Our interactions with actors in the political sphere focus on political dialogue, information exchange and open and transparent knowledge sharing. Our guidelines stipulate that our interactions and contributions must comply with all applicable laws and must never aim to inappropriately influence or compensate officials for political favors. Even if permitted by local law, we do not make contributions in the form of donations to or sponsorships of political parties or related organizations. Furthermore, we do not make donations to or sponsor holders of public office or candidates for such, nor do we make other types of financial contributions. Merck's organizational set-up and processes ensure a common approach for all direct and indirect engagement activities aligned with our water strategy - across business sectors and countries. The three most important instruments for ensuring the alignment of our engagement activities with our overall water commitments are -Merck Sustainability Board (MSB), -Operational Leadership Committee (OLC) and -Advocacy Steering Committee (SC Advo). Our Corp. Sustainability unit (SQ) is in charge for the water strategy. Leading representatives of SQ take part in the MSB, OLC, and the SC Advo. The SC Advo coordinates the political work (incl. work on water-related issues) for Merck. Experts from different departments are mandated to advocacy work and participate in the meetings. The moderated flow of information between the three committees into and out of the business organization ensures the consideration of water related topics in Merck's political activities.
[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

CSRD,

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

Select all that apply
☑ Climate change
☑ Water

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

Other

☑ Climate transition plans

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

Select from:

☑ Regional

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

Select all that apply

☑ Italy

☑ France

☑ Spain

☑ Belgium

☑ Denmark

☑ Germany

☑ Luxembourg

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

Select from:

☑ Support with minor exceptions

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

Proposed potential improvements include implementing efficiency measures within the legislation and ensuring there is no duplication of regulatory frameworks between the Corporate Sustainability Reporting Directive (CSRD) and the Corporate Sustainability Due Diligence Directive (CSDDDD).

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

Select all that apply

☑ Participation in working groups organized by policy makers

☑ Responding to consultations

(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

The Corporate Sustainability Reporting Directive (CSRD) is relevant and important to our sustainability objectives, particularly regarding climate and water, as it establishes a framework for transparent reporting on environmental impacts and resource usage. By complying with the CSRD, we can systematically track and disclose our progress in managing climate-related risks and water consumption, aligning our operations with our sustainability goals. This directive not only enhances accountability but also fosters stakeholder trust, demonstrating our commitment to responsible resource management and climate action. Ultimately, the CSRD supports our efforts to identify improvement areas, drive innovation, and contribute positively to environmental sustainability. Funding figures cannot be provided on this specific and granular level.

(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

☑ Sustainable Development Goal 6 on Clean Water and Sanitation

[Add row]

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

Row 1

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

☑ German Chemical Industry Association (VCI)

(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

☑ Water

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

Select from:

☑ Consistent

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

Select from:

☑ Yes, we publicly promoted their current position

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

Merck is supporting the aim to reduce water pollutants emitted from public wastewater treatment systems as described in the Urban Wastewater Treatment Directive, which is consistent with our commitment to the UN Sustainable Development Goal SDG 6 and its underlying Target 6.3 (reducing pollution). However, we oppose the related finance mechanisms which will put unacceptably high cost on the Pharmaceutical Industry. We supported the VCI in defining their position.

(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
☑ Sustainable Development Goal 6 on Clean Water and Sanitation
[Add row]

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

Select from:
☑ Yes

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

Row 1

(4.12.1.1) Publication

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

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

Select all that apply

☑ ESRS

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

☑ Water

(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

☑ Value chain engagement

☑ Dependencies & Impacts

☑ Public policy engagement

☑ Water accounting figures

☑ Water pollution indicators

(4.12.1.6) Page/section reference

Pages 104 to 297 Sustainability statement - Pages 143 to 167 E1 Climate change - Pages 168 to 184 E2 Pollution (incl. Water pollution) - Pages 185 to 188 E3 Water and Marine Resources - Pages 280 to 296 ESRS 2 Governance

(4.12.1.7) Attach the relevant publication

Annual Report 2024 entire-merck-ar24.pdf

(4.12.1.8) Comment

No comment
[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

Water

(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

Climate transition scenarios

☑ IEA NZE 2050

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Reputation

☑ Technology

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.5°C or lower

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Stakeholder and customer demands

☑ Other stakeholder and customer demands driving forces, please specify **:**requests from customers, investors etc.

Regulators, legal and policy regimes

☑ Global regulation

☑ Global targets

☑ Other regulators, legal and policy regimes driving forces, please specify **:**e.g., TCFD, CSRD

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Parameters: - Derivation of relevant cost factors and development markets based on data input and interviews with company experts, incl. criticality of products - Research and assumptions based on the climate scenario models regarding the drivers and developments behind the relevant factors and markets in a 1.5°C scenario - Derivation of the effects of the defined risk drivers on the status quo of Merck and the possible development of the company in a future 1.5°C scenario - Short-term assessment (2030), long-term assessment (2050) Assumptions: - 1.5°C temperature increase due to intensive action tackling climate change; more transition risks (e.g., policy and legal, technology, market, reputation) and opportunities (e.g., resource efficiency, market) will materialize if we embark on a transition path. Analytical choices: - Policy & Legal: Increasing Carbon Prices, Increasing regulations regarding environmentally critical materials, Additional disclosures about environmental information - Market Change: Change in the global energy mix leading to decreasing energy prices, Changing stakeholder preferences towards products seen as environmentally friendly, Transformation of the transportation sector to sustainable fuels, Gross Domestic Product GDP and population growth as an underlying scenario driver - Technological Advancement: Efficiency gains and re-use of materials, Technological solutions to support a green transformation across sectors and a low-carbon transition, Advancements in packaging materials and usage - Reputation: Increased stakeholder concern and pressure toward climate actions, Consumer concerns about impact of chemicals and waste for the environment, Increased relevance of external sustainability ratings

(5.1.1.11) Rationale for choice of scenario

Worst case scenario for transitional risks.

Water

(5.1.1.1) Scenario used

Water scenarios

☑ WRI Aqueduct

(5.1.1.3) Approach to scenario

Select from:

☑ Quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Chronic physical

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2040

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

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

Stakeholder and customer demands

☑ Impact of nature footprint on reputation

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Assumptions: - ~4°C temperature increase due to lacking action tackling climate change resulting in high risks Uncertainties: - By definition, climate scenarios describe one possible future to which one cannot assign a probability Constrains: The scope of selected sites encompasses Merck operations sites for which we have precise geodata. However, we have limited knowledge about the location of sites in the supply chain.

(5.1.1.11) Rationale for choice of scenario

We monitor water related trends and forecasts driven by climate change and population development considering the impact on own operations and the value chain. We track the physical developments like availability of water in the required quality (water stress) as well as the occurrence of floods, heavy rains, and sea level rising and assess the vulnerability of our business e.g., by interruption of supply chains or market changes. We also include social (e.g., migration) and legislative (e.g., EU Green Deal, Non-toxic environment ambition in the EU or Pharmaceuticals in the Environment and integrate relevant proceedings in our corporate sustainability program) in our analysis. Despite an increase in isolated events of climate related business interruptions on a local level, we rely on the Business-as-Usual climate scenario, assuming there will be no major changes, due to the immanent uncertainties in internal statistics and the current international efforts to mitigate climate change.

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:

☑ No SSP used

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative

(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:

☑ 4.0°C and above

(5.1.1.7) Reference year

2023

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Regulators, legal and policy regimes

☑ Global regulation

☑ Global targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Parameters: - Suppliers: name, addresses, supplied volume, relevance of supplier to Merck; country based analysis (top 25 countries by purchasing costs) - Own Operations: address and occupancy type; focus on current production sites (country level and site specific) - Customers: sales volume and destination countries; country based analysis - Short-term assessment (2030), long-term assessment (2050) Assumptions: - ~4°C temperature increase due to lacking action tackling climate change resulting in high risks - By definition, climate scenarios describe one possible future to which one cannot assign a probability. Analytical choices: - In the qualitative analysis, the three parts of Merck's value chain – supply, production and customers – are considered independently from each other. - The approach is based on annual average impacts of physical climate risk. Events with high return periods, e.g., 100 years, are not explicitly captured, but rather implicitly included over time as part of the annual average impact. - The current level of adaptive capacity (including fire and flood protection) is not part of the qualitative analysis. - The selection of sites is based on the economic materiality (production costs, manufacturing and insurance assessments), a geographical diversification, regulatory requirements as well as business section expertise. - While considering current risks locally for specific assets, the future scenarios are based on sector and country averages, company-specific effects are smoothed across the entire sector and local differences in hazards are smoothed across entire countries.

(5.1.1.11) Rationale for choice of scenario

Worst case scenario for physical risks.
[Add row]

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

Climate change

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

Select all that apply

☑ Risk and opportunities identification, assessment and management

☑ Strategy and financial planning

☑ Resilience of business model and strategy

☑ Capacity building

☑ Target setting and transition planning

(5.1.2.2) Coverage of analysis

Select from:

☑ Organization-wide

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

The transition to a low carbon economy presents an overall opportunity for Merck from revenue generation. According to our analysis, Merck could also benefit from lower costs of chemicals under 1.5°C scenario, compared to the base case scenario. Merck's emission and electricity costs could increase in a low carbon transition as a result of carbon price rises, electricity price changes, and differences in electricity consumption. However, the impact on emissions is limited due to planned mitigations which will significantly reduce Merck's emissions, especially in the Electronics sector. This presents an opportunity for Merck to reduce additional cost through the early transition to renewables. Merck's labour costs are projected to rise under 1.5°C scenario with limited financial impact. Across a time horizon out to 2050, we found that the impact of physical risk on our sites is limited under a 4°C scenario. In fact, the financial impact of the physical risk is projected to be significantly lower than the impact of transition risk. Action: To further detail our Transition, in 2024, we have started to develop our Climate Transition Plan.

Water

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

Select all that apply

☑ Risk and opportunities identification, assessment and management

(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

In general, 74 out of 129 sites (57.36%) show an increase of the water stress level until 2030 and 2040. 12 sites (9.3%) are situated in an area with an extremely high-water stress level already in 2024. In 2030 and 2040 this number is likely to grow up to 32 sites (24.8%). Additionally, 16 sites (12.4%) are already in an area with high water stress in 2024. In 2030 and 2040 this number is expected to be about 28 sites (21.7%). If just these two categories are considered, in 2030 and 2040 60 (46.51%) of Merck´s selected production sites are situated in areas with at least high-water stress. In these areas, increasing water prices and stricter policy regulations can be expected. In the worst case, limited access, or a prioritized distribution of water in these regions could also have an impact on the continuity of production processes relying on water as source or process material. In 2024, the results resulted in the decision to better manage water intake of sites in water stress areas. A respective SOP was written and made mandatory group-wide.
[Fixed row]

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

	Transition plan	Primary reason for not having a climate transition plan that aligns with a 1.5°C world	Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world
	Select from: ☑ No, but we are developing a climate transition plan within the next two years	*Select from:* ☑ Other, please specify :In 2023 our primary focus has been risks and opportunities due to climate change. In 2024 we have started to work on a climate transition plan.	*In 2023 our primary focus has been risks and opportunities due to climate change. In 2024 we have started to work on a climate transition plan.*

[Fixed row]

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

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

Select from:

☑ Yes, both strategy and financial planning

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

Select all that apply

☑ Products and services

☑ Upstream/downstream value chain

☑ Investment in R&D

☑ Operations

[Fixed row]

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

Products and services

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

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

Select all that apply

☑ Climate change

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

The sustainable innovation we actively promote aligns with the three core goals outlined in our sustainability strategy. In our pursuit of sustainability, we recognize the pivotal role of Research and Development (R&D) within the realm of science and technology to create sustainable products. Aligned with our sustainability strategy, evaluating our R&D projects regarding their sustainability impact along the value chain is an integral part of our global product development process across the whole organization. We have assessed the majority of relevant R&D projects and consolidated the insights gained from our Design for Sustainability scorecards such as emissions, waste, water, substances of concern and human progress data. Recognizing the integral role of sustainable products, we acknowledge their significance in mitigating transition risks, such as reputation concerns, while simultaneously capitalizing on opportunities arising from climate change, such as increased revenue through elevated demand for sustainable products. This underscores the strategic importance of embedding sustainability into our innovation processes to navigate challenges and leverage emerging opportunities in the dynamic business landscape.

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

Our corporate strategy embeds value chain decarbonization as a strategic lever to mitigate supply chain risks and strengthen resilience. Climate-related risks, such as supplier non-compliance, upstream emissions, and physical climate disruptions, are addressed through established governance and engagement processes, including supplier sustainability assessments and targeted collaboration programs to co-develop lower-impact products and services.

Investment in R&D

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

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

Select all that apply

☑ Climate change

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

The R&D governance framework incorporates environmental risk and opportunity assessments as a standard CAPEX gate for all major innovation projects. This ensures that investments are aligned with our sustainability strategy and climate targets, and that potential risks such as stranded assets or non-compliance with future regulation are avoided. Opportunities are seized by steering R&D towards low-carbon technologies, sustainable materials, and circular solutions. All large R&D CAPEX projects undergo climate-alignment reviews to ensure they support our 50% Scope 1 and 2 reduction target by 2030 and climate neutrality by 2040.

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

Our operational strategy integrates environmental risk and opportunity considerations into asset management, technology transitions, and energy sourcing decisions. These considerations are embedded in global operational planning and are aligned with our long-term climate objectives. By incorporating sustainability criteria into operational governance, we address risks such as carbon cost exposure, climate-related hazards, and energy market volatility, while enabling operational improvements that support our strategic goals.
[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
☑ 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

We are actively addressing these challenges and, for the moment, are integrating the financial quantification element into our comprehensive risk management strategy. This proactive approach ensures that we are well-equipped to evaluate and respond to potential financial impacts associated with water and climate risks, ultimately enhancing our resilience and sustainability efforts.
[Add row]

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

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

[Fixed row]

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

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

0

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

0

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

0

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

0

(5.9.5) Please explain

We do not intend to change our high level of spendings for water related topics BECAUSE we started two programs in 2020 (one to improve water efficiency and one to improve water quality). The financial implications to reach these goals were included in short and middle-term CAPEX / OPEX plannings. These plans provide for expenditure on a constant level until 2030. There is no need to go beyond these plans.
[Fixed row]

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

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

[Fixed row]

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

Row 1

(5.10.1.1) Type of pricing scheme

Select from:
☑ Shadow price

(5.10.1.2) Objectives for implementing internal price

Select all that apply

☑ Drive energy efficiency
☑ Drive low-carbon investment
☑ Identify and seize low-carbon opportunities
☑ Influence strategy and/or financial planning
☑ Incentivize consideration of climate-related issues in decision making
☑ Incentivize consideration of climate-related issues in risk assessment

(5.10.1.3) Factors considered when determining the price

Select all that apply

☑ Alignment to scientific guidance
☑ Alignment with the price of allowances under an Emissions Trading Scheme
☑ Benchmarking against peers
☑ Existing or pending legislation
☑ Scenario analysis

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

Mixed approach with the main contribution of: prices of allowances under an Emission Trading Scheme and benchmarking with peers.

(5.10.1.5) Scopes covered

Select all that apply

☑ Scope 1
☑ Scope 2

(5.10.1.6) Pricing approach used – spatial variance

Select from:

☑ Uniform

(5.10.1.8) Pricing approach used – temporal variance

Select from:

☑ Evolutionary

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

Generally, we expect an increase of internal carbon price in the long-term but given the current global macro-economical conditions and market fluctuations, more short term-price projections (e.g., EU ETS) are going along with significant risks.

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

100

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

100

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

Select all that apply

☑ Capital expenditure

☑ Risk management

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

Select from:

☑ Yes, for some decision-making processes, please specify **:**CapEx

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

1

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

Select from:

☑ Yes

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

Merck introduced a sustainability evaluation ("Green business case" with CO2e emission measures and cost savings) using a shadow price of 100 Euro/t CO2e. This shadow price is mandatory since January 2022 for all investment projects larger than 10 million Euros. This shadow price has to be considered for the whole Merck Group irrespective of regional, sectoral, and/or operational context. Clear implication is to set a focus and sensitivity to the carbon emissions in large capital expenditure projects. Besides the carbon price we set more climate related guardrails in our investment process. Calculations on capital spending for GHG savings measures (photovoltaic, building insulation, etc.) must be treated differently than the overall business investment projects. These kind of projects are calculated with a GHG discount rate of 5.0%, the useful economic lifetime of the GHG investment is not limited to the investment projects' typical 10- or 15-year horizon. By applying those special measures exclusively for sustainability investments, we actively support and incentivize project teams to go for sustainable investments throughout our company. The carbon price used for large investments helps to reach Merck's near-term GHG goals. Furthermore, because of the long-term impact of the investments covered by the carbon pricing the transition to carbon neutrality (Merck's long-term 2040 goal) is supported. The pricing approach is monitored and evaluated within the finance organization and specifically in our Investment Committee which is meeting quarterly.
[Add row]

(5.10.2) Provide details of your organization's internal price on water.

Row 1

(5.10.2.1) Type of pricing scheme

Select from:
☑ Implicit price

(5.10.2.2) Objectives for implementing internal price

Select all that apply
☑ Drive water efficiency
☑ Identify and seize low-water impact opportunities

(5.10.2.3) Factors beyond current market price are considered in the price

Select from:
☑ No

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

The cost for supplying water of different qualities as well as for the treatment of wastewater is calculated locally according to site specific water treatment efforts and allocated to water consumers whenever reasonable possible, e.g., at complex manufacturing sites. E.g., at our most important site Darmstadt (Germany), there are different tariffs for cooling water, water for manufacturing, drinking water and de-ionized water.
[Add row]

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

Suppliers

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:
☑ Yes

(5.11.2) Environmental issues covered

Select all that apply
☑ Climate change
☑ Water

Customers

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:
☑ Yes

(5.11.2) Environmental issues covered

Select all that apply
☑ Climate change
☑ Water

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

☑ Water

Other value chain stakeholders

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

☑ No, but we 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

Our main value chain stakeholders are suppliers, customers, and investors/shareholders respectively. We engage with other stakeholders like NGOs or neighbors if a specific issue occurs. These events are rare and do not require a systematic approach.
[Fixed row]

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

Climate change

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

Select from:

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

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

Select all that apply

☑ Contribution to supplier-related Scope 3 emissions

(5.11.1.3) % Tier 1 suppliers assessed

Select from:

☑ 1-25%

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

In general, we aim to assess suppliers' impacts on the environment contributing to 80% of our scope 3 category 1 & 2 emissions. We have a key focus on suppliers contributing to our top 50% of scope 3 cat. 1 & 2 emissions and classify those as having a substantive impact in the environment.

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

Select from:

☑ 1-25%

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

834

Water

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

Select from:

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

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

Select all that apply

☑ Dependence on water

☑ Impact on pollution levels

☑ Other, please specify **:**We are in the process of developing a supply chain water risk management strategy, including supplier assessment criteria. We assess our suppliers through EcoVadis, with currently 1.8% of our relevant suppliers disclosing water-related information.

(5.11.1.3) % Tier 1 suppliers assessed

Select from:

☑ 1-25%

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

We are in the process of developing a supply chain water risk management strategy. This strategy will encompass criteria for assessing suppliers, definitions of thresholds for prioritizing suppliers, and guidelines for engaging with suppliers.

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

Select from:

☑ None

[Fixed row]

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

Climate change

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

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

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

Select all that apply

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

☑ Procurement spend

☑ Strategic status of suppliers

☑ Other, please specify **:**Relevant for and contribution to Scope 3 cat. 1+2 emissions

(5.11.2.4) Please explain

When engaging with suppliers on decarbonization issues, we prioritize suppliers relevant for Scope 3 cat. 1+2 emissions, because these emissions have the biggest share in our corporate carbon footprint. Among these emissions, we prioritize the suppliers with highest contribution emission/spend-wise and/or are strategically important from a Procurement perspective.

Water

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

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

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

Select all that apply

☑ Material sourcing

☑ Regulatory compliance

☑ Business risk mitigation

☑ Vulnerability of suppliers

☑ Product safety and compliance

☑ Supplier performance improvement

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

(5.11.2.4) Please explain

We are in the process of developing a supply chain water risk management strategy. This strategy will encompass criteria for assessing suppliers, definitions of thresholds for prioritizing suppliers, and guidelines for engaging with suppliers.
[Fixed row]

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

Climate change

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

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

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

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

(5.11.5.3) Comment

Yes, climate-related requirements are included in our supplier contracts (e.g. via the Supplier Code of Conduct): monitoring and reducing Scope 1-3 emissions and setting respective targets, establishing an energy management system, sourcing renewable energy (ambition to cover min 80%), engaging with their own suppliers on emissions reduction, and establishing circular economy practices.

Water

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

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

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

Select from:

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

(5.11.5.3) Comment

Yes, water-related requirements are included in our supplier contracts (e.g. via the Supplier Code of Conduct): we require our suppliers to report on their progress on reducing water consumption and to have systems and processes in place to handle and control the storage, recycling, reuse, and disposal of waste and wastewater. [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

☑ Supplier self-assessment

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

Select from:

☑ 100%

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

Select from:

☑ 26-50%

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

Select from:
☑ 100%

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

Select from:
☑ 26-50%

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

Select from:
☑ Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:
☑ 51-75%

(5.11.6.11) Procedures to engage non-compliant suppliers

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

(5.11.6.12) Comment

Supplier Code of Conduct requirement, which is monitored in our Supplier Decarbonization Program. Figures refer to the share of suppliers who have/have not an emissions reduction plan (or SBT) in place. Focus on Top Emitters (80% emissions scope 3.1/3.2), while tracking on whole supplier portfolio.

Water

(5.11.6.1) Environmental requirement

Select from:

☑ Setting and monitoring withdrawal reduction targets

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Other, please specify **:**We are in the process of developing a supply chain water risk management strategy which will include mechanisms for monitoring compliance with the water risk management requirements which are in the process of being defined.

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

Select from:

☑ 100%

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

Select from:

☑ Less than 1%

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

Select from:

☑ Other, please specify **:**We are in the process of developing a supply chain water risk management strategy which will include mechanisms for monitoring compliance with the water risk management requirements which are in the process of being defined.

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ Less than 1%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

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

(5.11.6.12) Comment

Supplier Code of Conduct requirements: Suppliers shall report their progress towards environmentally relevant targets, e.g. water consumption. We require our suppliers to have systems in place to handle and control the storage, recycling, reuse and disposal of wastewater.

Climate change

(5.11.6.1) Environmental requirement

Select from:

☑ Environmental disclosure through a non-public platform

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Supplier scorecard or rating

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

Select from:

☑ 76-99%

(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:

☑ 76-99%

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

Select from:

☑ 51-75%

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

Select from:

☑ Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ None

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Other, please specify **:**See comment field

(5.11.6.12) Comment

We identify suppliers for assessments based on whether they have specific country and/or industry risk or contribute to a significant percentage of our supplier spend (at least 50%). For non-compliant suppliers we have an escalation process in place.

Climate change

(5.11.6.1) Environmental requirement

Select from:

☑ Purchasing of low-carbon or renewable energy

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Supplier self-assessment

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

Select from:

☑ 100%

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

Select from:

☑ 26-50%

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

Select from:

☑ 100%

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

Select from:

☑ 26-50%

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

Select from:

☑ Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ 51-75%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

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

(5.11.6.12) Comment

Supplier Code of Conduct requirement, which is monitored in our Supplier Decarbonization Program. Figures refer to the share of suppliers who already source low-carbon or renewable energy.

Climate change

(5.11.6.1) Environmental requirement

Select from:

☑ Other, please specify **:**Engage with their own suppliers to reduce GHG emissions

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Supplier self-assessment

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

Select from:

☑ 100%

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

Select from:

☑ 26-50%

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

Select from:
☑ 100%

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

Select from:
☑ 26-50%

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

Select from:
☑ Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:
☑ 51-75%

(5.11.6.11) Procedures to engage non-compliant suppliers

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

(5.11.6.12) Comment

Supplier Code of Conduct requirement, which is monitored in our Supplier Decarbonization Program. Figures refer to the share of suppliers who make/don't make Scope 3 efforts (engaging with their own suppliers on decarbonization issues).

Water

(5.11.6.1) Environmental requirement

Select from:
☑ Environmental disclosure through a non-public platform

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Supplier self-assessment

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

Select from:

☑ 76-99%

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

Select from:

☑ 1-25%

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

Select from:

☑ Other, please specify **:**Whenever a supplier falls below a specified threshold, we implement a CAPA (Corrective and Preventive Action) plan with those suppliers.

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ Less than 1%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Other, please specify **:**Whenever a supplier falls below a specified threshold, we implement a CAPA (Corrective and Preventive Action) plan with those suppliers.

(5.11.6.12) Comment

We identify suppliers for assessments based on whether they have specific country and/or industry risk or contribute to a significant percentage of our supplier spend (at least 50%). For non-compliant suppliers we have an escalation process in place. We are in the process of developing a supply chain water risk management strategy. This strategy will include supplier assessment criteria, threshold definitions for supplier prioritization and criteria definitions for engaging with suppliers. We assess our suppliers through EcoVadis, with currently 1.8% of our relevant suppliers disclosing water-related information.
[Add row]

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

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:
☑ Emissions reduction

(5.11.7.3) Type and details of engagement

Capacity building
☑ Provide training, support and best practices on how to make credible renewable energy usage claims
☑ Provide training, support and best practices on how to measure GHG emissions

Information collection
☑ Collect GHG emissions data at least annually from suppliers
☑ Collect targets information at least annually from suppliers
☑ Other information collection activity, please specify :Collect information if suppliers engage with their own suppliers to reduce GHG emissions, collect information on PCF availability, collect information on consumption of renewable energy

(5.11.7.4) Upstream value chain coverage

Select all that apply
☑ Tier 1 suppliers

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

Select from:

☑ 51-75%

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

Select from:

☑ 76-99%

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

Our Supplier Decarbonization Program is a key element contributing to reducing our emissions in line with our Science Based Target. Through the program, we aim to reduce greenhouse gas emissions associated with purchased goods and services as well as capital goods which sum up to 62% of our overall scope 3 emissions. We set up a cross-functional Supplier Decarbonization Program team within Group Procurement to define our strategy and drive the execution of a ten-year program plan. We approach our suppliers in waves and contacted the first target group in 2021 with a letter from our Chief Procurement Officer, information about our aspirations and a questionnaire to assess their decarbonization status. Target of the first wave was to cover approx. 50% of Merck's scope 3, category 1 and 2 emissions. We continued to further expand our supplier engagement efforts in 2022. In 2023, we engaged further with suppliers by sharing information about our climate targets. Follow-up discussions were again held based on the supplier answers to our questionnaire to assess the current decarbonization status and progress made since 2022. To obtain more detailed information, we developed a new supplier questionnaire. This allows our Category Sourcing Teams to collate relevant supplier data in a global monitoring database. Regarding our engagement with our first wave suppliers, we found that many suppliers are already on their own decarbonization journey. We have also seen improvements of suppliers that had not been as progressed initially. We measure our success with different indicators e.g., how many of our first wave suppliers are monitoring their GHG emissions. We offer our suppliers access to solutions to reduce their Scope 2 emissions. This includes a renewable electricity supplier toolkit with tips and in-house best practices, which is available for free download from our website. We also joined the Energize program as a new sponsor. Energize is a collective initiative by a group of industry-leading pharmaceutical and fine chemical companies that have committed themselves to engaging their suppliers to support the adoption of renewable energy. We offer all our suppliers the opportunity to join the program for free and to find out more about renewable electricity options leading to reduced Scope 2 emissions.

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

Select from:

☑ Yes, please specify the environmental requirement **:**Implementation of emissions reduction initiatives, purchasing of low-carbon or renewable energy, suppliers engage with their own suppliers to reduce GHG emissions

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

Select from:

☑ Yes

Water

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Total water withdrawal volumes reduction

(5.11.7.3) Type and details of engagement

Capacity building

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

Information collection

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

☑ Collect water quality information at least annually from suppliers (e.g., discharge quality, pollution incidents, hazardous substances)

☑ Collect water quantity information at least annually from suppliers (e.g., withdrawal and discharge volumes)

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

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

Select from:

☑ 1-25%

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

We provide training for our suppliers on environmental topics, including water, while we also gather water-related metrics through EcoVadis. We are currently developing a supply chain water risk management strategy that will encompass criteria for supplier assessment, definitions of thresholds for prioritizing suppliers, and guidelines for engaging with them.

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

Select from:

☑ Yes, please specify the environmental requirement :Our Supplier Code of Conduct sets forth the minimum standards our suppliers shall comply with. Suppliers shall monitor, address and document risks to the principles set forth in the Supplier Code of Conduct in their supply chains.

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

Select from:

☑ Unknown

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Emissions reduction

(5.11.7.3) Type and details of engagement

Capacity building

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

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

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

☑ Provide training, support and best practices on how to set science-based targets

☑ Other capacity building activity, please specify :Provide training, support and best practices on PCF calculation, Provide training, support and best practices on decarbonizing supply chains

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

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

Select from:

☑ 100%

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

Select from:

☑ 100%

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

We offer our suppliers a variety of training and support opportunities and share best practices in different ways. All of our suppliers are eligible for free access to the TfS Academy, which we can offer as a member of the industry initiative Together for Sustainability (TfS). The academy offers a wide variety of sustainability trainings, including on topics of decarbonization and on how to engage supply chains. Another one of our activities in the area of providing training, support and best practices was our Supplier Awareness Call, to which we invited a focus group of suppliers to share our company sustainability targets, our expectations and learning materials about decarbonization. Furthermore, we continued our collaboration with member companies in TfS workstreams. We introduced the TfS Product Carbon Footprint (PCF) Guideline and rolled it out to employees of TfS member companies, our employees, our suppliers and other stakeholders. This comprehensive guideline harmonizes PCF calculation methodology across the industry.

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

Select from:

☑ Yes, please specify the environmental requirement **:**Implementation of emissions reduction initiatives, purchasing of low-carbon or renewable energy, suppliers engage with their own suppliers to reduce GHG emissions.

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

Select from:

☑ Yes

[Add row]

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

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Educate and work with stakeholders on understanding and measuring exposure to environmental risks

☑ Run an engagement campaign to educate stakeholders about the environmental impacts about your products, goods and/or services

Innovation and collaboration

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

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

☑ Engage with stakeholders to advocate for policy or regulatory change

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 1-25%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ 1-25%

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

In the Electronics industry various chemicals are used, e.g., Etch and Clean gases. Several of them like NF3 show high greenhouse gas warming potentials (GWP) and are emitted as process-related scope 1 emissions at our customers. Low-GWP gases solutions help to reduce our customer's scope 1 emissions as well as Merck's scope 3 emissions. So, they are a meaningful step forward in support of both side's sustainability goals. We see this as an opportunity to expand our market share, further establishing Merck as an innovation partner. Only few customers are responsible for our overall Scope 3, cat. 11 GHG emissions.

(5.11.9.6) Effect of engagement and measures of success

Our strategy is to be a reliable provider of sustainable solutions to customers. Success is measured indirectly as customer satisfaction.

Water

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Run an engagement campaign to educate stakeholders about the environmental impacts about your products, goods and/or services

☑ Share information about your products and relevant certification schemes

Innovation and collaboration

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

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ Unknown

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

Depending on both their nature and their respective use at our industrial customers, Merck's products can support water efficiency at customers or pose a hazard to the environment. In order to influence our customers in the direction of water sustainability, we are in direct or indirect contact with customers, especially with those who request information on water related matters. Our program Design for Sustainability (DfS) aims to launch products on the market delivering added value for customers regarding environmental footprint including water use. E.g., test kits, lab water and equipment for generating lab water. In our M-Lab collaboration centers around the globe, we demonstrate and train our customers in using such equipment.

(5.11.9.6) Effect of engagement and measures of success

Our strategy is to be a reliable provider of sustainable solutions to customers. Success is measured indirectly as customer satisfaction.

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

☑ Educate and work with stakeholders on understanding and measuring exposure to environmental risks

Innovation and collaboration

☑ Collaborate with stakeholders in creation and review of your climate transition plan

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 76-99%

(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

Investors and shareholders have a strong interest in how our company manages opportunities and risks in the area of climate. They are extremely knowledgeable and have a deep insight into best practices across industries. We therefore provide this stakeholder group with comprehensive information as part of our reporting. We also discuss the details with interested parties.

(5.11.9.6) Effect of engagement and measures of success

The outside view and deep knowledge in climate transition over the industries helps us to improve and sanity check our strategy and targets. Investors have accompanied us on our journey from strategy over milestones towards our targets. We constantly challenged our ambitions based on stakeholder feedback and showed continuous improvement of our objectives and target achievements.

Water

(5.11.9.1) Type of stakeholder

Select from:

☑ Investors and shareholders

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Educate and work with stakeholders on understanding and measuring exposure to environmental risks

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ Unknown

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

Investors and shareholders have a strong interest in how our company manages opportunities and risks in water consumption and quality. They are extremely knowledgeable and have a deep insight into best practices across industries. We therefore provide this stakeholder group with comprehensive information as part of our reporting. We also discuss the details with interested parties.

(5.11.9.6) Effect of engagement and measures of success

The outside view and deep knowledge in water security approaches over the industries helps us to improve and sanity check our strategy and targets. Investors have accompanied us on our journey from strategy over milestones towards our targets. We constantly challenged our ambitions based on stakeholder feedback and showed continuous improvement of our objectives and target achievements.
[Add row]

C6. Environmental Performance - Consolidation Approach

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

Climate change

(6.1.1) Consolidation approach used

Select from:
☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

Companies, entities or groups over which financial control is exercised, in order to have the same consolidation approach as used in financial accounting

Water

(6.1.1) Consolidation approach used

Select from:
☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

Companies, entities or groups over which financial control is exercised, in order to have the same consolidation approach as used in financial accounting

Biodiversity

(6.1.2) Provide the rationale for the choice of consolidation approach

[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?

	Change(s) in methodology, boundary, and/or reporting year definition?
	Select all that apply ☑ 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)

☑ The Greenhouse Gas Protocol: Scope 2 Guidance

☑ The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard

(7.3) Describe your organization's approach to reporting Scope 2 emissions.

	Scope 2, location-based	Scope 2, market-based	Comment
	Select from: ☑ We are reporting a Scope 2, location-based figure	*Select from:* ☑ We are reporting a Scope 2, market-based figure	--

[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

Company owned vehicles

(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

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

2

(7.4.1.10) Explain why this source is excluded

Combustion of fossil fuels in company owned vehicles is only partly considered. Merck accounts dispenses of gasoline and diesel at filling stations owned/controlled by Merck to have comparable and meaningful data. Collecting information on the energy consumption of all vehicles owned/controlled by Merck is not included due to lacking data availability.

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

Due to lacking availability emissions from company owned vehicles are excluded from reporting. This estimate was done by using the number of company owned vehicles, an average annual driving distance and an average emission factor. We estimate their share to be below 2%.

Row 2

(7.4.1.1) Source of excluded emissions

Smaller sites, not included in central reporting tool

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

Select all that apply

☑ Scope 1

☑ Scope 2 (location-based)

☑ Scope 2 (market-based)

(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

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

0.5

(7.4.1.10) Explain why this source is excluded

Merck's GHG accounting covers all production sites, (large) R&D sites, (large) sites with warehouses and (large) commercial affiliates (in total around 250 sites). A number of small commercial affiliates, labs, etc. have not been incorporated into Merck's EHS data management system because we assessed their GHG emissions as being minor in relation to the sites already included in our accounting. For one, integrating these sites requires a huge effort for GHG emissions that are minor in relation to the sites already included in our accounting. Secondly, very often these small sites are not able to provide the necessary data because they use rented offices and do not receive energy-related information from their landlord. In the past years, around 90% of Merck's emissions (Scope 1, 2, 3.3, 3.5) come from just 25 production sites. Therefore, these sites are in the main focus for the reduction of GHG emissions.

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

Not all small Merck sites are excluded from our GHG inventory. Data from these sites was used to extrapolate the gap. We estimate their share to be far below 1%.

Row 3

(7.4.1.1) Source of excluded emissions

Thermal waste air purification

(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

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

0.5

(7.4.1.10) Explain why this source is excluded

Emissions of thermal waste air purification (e.g., from regenerative thermal oxidizers for the destruction of VOC's) are only partly included in the GHG inventory. GHG emissions from thermal waste air purification devices are caused by the fuels used to operate the device (mainly natural gas) and by the VOC's etc. that shall be destroyed in the device. The overwhelming share of GHG emissions comes from fuel usage and is included in the Scope 1 data. The negligible share from the destroyed VOC's is excluded as these data are not available.

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

The gap was estimated based on an assessment that has been conducted for one of our thermal waste air purification systems. Based on this we did an extrapolation which resulted in a gap of far below 1%

Row 4

(7.4.1.1) Source of excluded emissions

Smaller companies that either do not have an ERP system in place or that have a very specific system setup

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

Select all that apply

☑ Scope 3: Purchased goods and services

☑ Scope 3: Capital goods

(7.4.1.6) Relevance of Scope 3 emissions from this source

Select from:

☑ Emissions are not relevant

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

1

(7.4.1.10) Explain why this source is excluded

The procurement system which is basis for the Scope 3.1 and 3.2 calculations contains 95-97% of our total spend; i.e., there is a minor under-reporting. The gap is related to our smaller companies that either do not have a system in place or that have a very specific system setup (e.g., a small local ERP system).

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

Impact was estimated based on a comparison of the out-of-scope companies with similar companies that are included.
[Add row]

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

Scope 1

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

1827123

(7.5.3) Methodological details

Reporting according to GHG Protocol; GWP from IPCC Assessment Report 6

Scope 2 (location-based)

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

381640

(7.5.3) Methodological details

Reporting according to GHG Protocol; main sources for emission factors: IEA, eGRID

Scope 2 (market-based)

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

324698

(7.5.3) Methodological details

Reporting according to GHG Protocol; emission factor hierarchy according to GHG Protocol: supplier-specific emission factors reported by sites, residual mix factors (Green-e, Reliable Disclosure (RE-DISS) and AIB European Residual Mixes), location-based emission factors mainly from IEA and eGRID.

Scope 3 category 1: Purchased goods and services

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

3040000

(7.5.3) Methodological details

Category 1 includes all upstream emissions from the extraction, production, and transportation of goods and services that were purchased or acquired in the reporting year. Emissions from products are calculated using a spend-based approach based on a procurement data management system (which integrates various ERP systems) and environmentally extended input-output (EEIO) data (source: US Environmentally-Extended Input-Output (USEEIO) Technical Content, United States Environmental Protection Agency). USEEIO provides emission factors on a spend basis for different industrial sectors and does not consider regional differences. Emissions from services are calculated with a spend-based approach based on the same procurement data management system. The calculation method takes into account the emission data of our main suppliers. The procurement system contains 95–97% of our total spend, meaning there is a minor underreporting. This gap is related to our subsidiaries that either do not have their own procurement system or have a very specific system (e.g., a small local ERP system). To further increase accuracy, we are working on a weight-based approach. Our target is to calculate these emissions based on supplier-specific data.

Scope 3 category 2: Capital goods

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

293000

(7.5.3) Methodological details

Category 2 includes all upstream emissions from the extraction, production, and transportation of capital goods purchased or acquired by the reporting company in the reporting year. As with category 1, emissions are calculated using a spend-based approach based on a procurement data management system (which integrates various ERP systems) and environmentally extended input-output (EEIO) data (source: US Environmentally-Extended Input-Output (USEEIO) Technical Content, United States Environmental Protection Agency). USEEIO provides emission factors on a spend basis for different industrial sectors and does not consider regional

differences. The procurement system contains 95–97% of our total spend, meaning there is a minor underreporting. This gap is related to our smaller subsidiaries that either do not have a system or have a very specific system (e.g., a small local ERP system). The target is to calculate these emissions based on supplier-specific data.

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

102528

(7.5.3) Methodological details

Category 3 includes emissions related to the production of fuels and energy purchased and consumed by the reporting company in the reporting year that are not included in category 1 or 2. Data on purchased and consumed fuels (mainly natural gas) and electricity, steam/heat, and cold, which form the basis for calculating category 3 emissions, are collected via our central EHS data management system. To determine upstream emissions of purchased fuels, we multiply the fuel quantities by the well-to-tank emission factors (source: DEFRA, WTT – fuels). Upstream emissions as well as transportation and distribution losses of purchased heat/steam and cold are calculated by multiplying the consumption figures with the respective emission factors (source: DEFRA; WTT – heat and steam, WTT – heat and steam – district heat and steam, respectively DEFRA; WTT – heat and steam, WTT – distribution of district heat and steam, 5% loss for losses). To calculate emissions from the generation and transport and distribution (T&D) of minor quantities of purchased cold, we use the same emission factors as for heat/steam, as no specific factors are available. Upstream emissions from purchased electricity are determined by multiplying the consumption figures with the respective emission factors (source: DEFRA; WTT – overseas electricity [generation]). Here, electricity purchased from renewable sources is deducted (direct supply of renewable electricity as well as electricity covered by energy attribute certificates). Electricity T&D losses are determined based on the quantities of electricity purchased and country-specific loss factors. The data from the IEA provide the basis for country-specific electricity transmission and distribution losses. In this process, the electricity sourced from renewable sources (direct supply of renewable electricity) is deducted. Emissions from the generation of purchased electricity sold to end-users are not relevant for us because we do not sell electricity.

Scope 3 category 4: Upstream transportation and distribution

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

264397

(7.5.3) Methodological details

Category 4 includes the transportation and distribution of products purchased by the reporting company in the reporting year. This refers to transportation and distribution between the company's tier 1 suppliers and its own operations, where the vehicles and facilities are not owned or controlled by the reporting company. Additionally, category 4 includes the transportation and distribution of services purchased by the reporting company in the reporting year. This includes both inbound logistics and outbound logistics, such as for sold products, as well as transportation and distribution between the company's own facilities in vehicles and facilities not owned or controlled by the reporting company. To calculate emissions from these transportation activities, we use a mixed approach. Primary data from logistics service providers are provided by them and integrated into the reporting. If these data are not available, greenhouse gas emissions are calculated by a third-party provider using an energy-based bottom-up approach. For the Life Science business sector, shipment data from forwarders serve as the main data source, while for the Electronics business sector, delivery notes from our own ERP systems form the basis for calculation. For the Healthcare business sector, there are multiple sources: forwarder data as well as data from various ERP systems. These data are consolidated in internal systems together with primary data from suppliers/logistics service providers. The respective shipment data are sent to the third-party provider EcoTransIT and processed there. Processing steps include routing from origin to destination based on zip and port codes, determination of fuel consumption, energy and emission calculation, and summing up all section emissions per mode of transportation. For our Life Science business sector, no data on road transportation for the LATAM and Asia regions are available. Therefore, a spend-based approach is used to estimate these emissions. If data for the entire year is not yet available, appropriate extrapolations based on previous year data are conducted. Currently, we do not consider deliveries from tier 1 suppliers that are not directly paid by us but are delivered to us due to lack of data.

Scope 3 category 5: Waste generated in operations

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

85047

(7.5.3) Methodological details

Category 5 includes emissions from the disposal and treatment of waste generated in facilities owned or controlled by us. This also includes the disposal of solid waste and wastewater by third parties. The calculation of emissions from waste generated in operations and disposed of by third parties is based on primary data from our manufacturing sites, collected annually via our central EHS data management system. These data are divided into various waste types, such as solvent waste and soil waste, and distinguished by waste disposal methods, such as waste-to-energy, landfill, or recycling. For the emission factors based on the carbon content of the waste, we use the "Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain." This states that recycling and energy recovery are attributed to the organization that uses the recycled material or uses the waste to generate energy. This means emissions from these activities are not included in our greenhouse gas inventory. The carbon content factors are mainly taken from the "2006 IPCC Guidelines for National Greenhouse

Gas Inventories." These data are then multiplied with each other. Emissions resulting from the transportation of waste materials are not taken into account. To calculate greenhouse gas emissions from wastewater treatment in third-party municipal or industrial wastewater treatment plants, we use primary data from our manufacturing sites, collected annually via our central EHS data management system. Wastewater quantities are multiplied by the DEFRA emission factor for water treatment.

Scope 3 category 6: Business travel

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

32157

(7.5.3) Methodological details

Category 6 includes emissions from the transportation of employees for business-related activities in vehicles owned or operated by third parties, such as aircraft, trains, buses, and passenger cars. Air travel: Based on our flight booking and billing processes, our payment solution service provider supplies detailed data on all flights booked. Greenhouse gas emissions are calculated by atmosfair, a recognized non-governmental organization dealing with climate protection focused on travel. Rail travel: Rail travel is considered relevant in some European countries, such as Germany, France, and Spain. In non-European countries, it is considered rather negligible. Currently, data for rail travel are only available for Germany and is provided by Deutsche Bahn AG. Rental cars: Emissions data are provided by our global rental car providers on an annual basis. Data on other means of transportation, such as trams, taxis, and buses, are not available. Their impact on our overall emissions is expected to be negligible. Hotel accommodation: Emissions from hotel stays are calculated based on the number of hotel stays per country (source: internal ERP system) and the DEFRA emission factors for hotel stays.

Scope 3 category 7: Employee commuting

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

89571

(7.5.3) Methodological details

Category 7 includes emissions from the transportation of employees between their homes and work. We conduct a global Employee Engagement Survey each year. The Covid-19 pandemic has changed working habits toward a more flexible remote working approach. Given this fact and our ambition toward more transparency and accuracy on greenhouse gas emissions, we have included commuting habits in the employee engagement survey as of 2023. This allows us to build our calculation on a solid basis and extrapolate to the global employee population. This is combined with the assumption of 220 working days derived from the "Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain." Emission factors for modes of transport are taken from DEFRA, business travel, and include electric vehicles and working from home.

Scope 3 category 8: Upstream leased assets

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

0.0

(7.5.3) Methodological details

Category 8 includes emissions from the operation of assets that are leased and that are not already included in our Scope 1 or Scope 2 reporting. Emissions from this category are not relevant for our Scope 3 reporting because leased assets, such as rented offices, labs, or warehouses, are part of our Scope 1 and 2 GHG inventory.

Scope 3 category 9: Downstream transportation and distribution

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

8435

(7.5.3) Methodological details

Category 9 includes the transportation and distribution of products sold by the reporting company in the reporting year from the reporting company's operations to end consumers, if not paid for by the reporting company. This also includes retail and storage in vehicles and facilities not owned or controlled by the reporting company.

The calculation of category 9 emissions is similar to that of category 4. The emissions are calculated by a third-party provider using an energy-based bottom-up approach. This way, we can provide emissions data for our Healthcare and Electronics business sectors. The downstream data of category 9 from the Life Science business sector is negligible. To ensure the effectiveness of logistic processes, the transport of Life Science products is organized and contracted by us and is therefore covered under category 4.

Scope 3 category 10: Processing of sold products

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

0.0

(7.5.3) Methodological details

Category 10 includes emissions from the processing of sold intermediate products by third parties (e.g., manufacturers) after sale by the reporting company. We produce a wide variety of intermediate products for various purposes. Due to the range of potential applications and our customer structure, the related greenhouse gas emissions cannot be tracked in a practical manner. It is difficult to obtain reliable figures. We adhere to the recommendation of the "Guidance for Accounting and Reporting Corporate GHG Emissions in the Chemical Sector Value Chain" of the World Business Council for Sustainable Development, which states: "Chemical companies are not required to report Scope 3, category 10 emissions, since reliable figures are difficult to obtain, due to the diverse application and customer structure."

Scope 3 category 11: Use of sold products

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

1163923

(7.5.3) Methodological details

Category 11 includes emissions from the use of goods and services sold by the reporting company in the reporting year. Internal expert assessments of our extensive and very diverse product portfolio show that for us, "greenhouse gases and products that contain or form greenhouse gases that are emitted during use" are the main driver of greenhouse gas emissions in this category. "Products that directly consume energy (electricity) during use" contribute to a much lesser extent to the overall emissions. "Fuels and feedstocks" as well as indirect use phase emissions are not relevant for us. "Indirect use-phase emissions" are optional and are not reported by us. Electronics business sector: Among our Electronics product portfolio, there are some specialty gases with high Global Warming Potential (GWP) that are emitted during the use phase. Emissions are calculated based on the technical expertise of internal experts on the percentage of gas quantities that escape the processes at our customers, abatement efficiency, sales volumes, and global warming potentials (source: IPCC, 6th Assessment Report). Besides this, some product control devices consume electricity. Emissions of these devices are calculated based on runtime, average lifetime, and an estimated global emission factor. Other product lines are negligible or do not contribute at all to the overall emissions within this category. Our Life Science business sector offers two product lines (Biology, Biomonitoring, Chemistry, LabWater, and Process Solutions portfolios) that consume electricity during the use phase. The calculation of emissions is based on internal expert estimations of the product energy consumption, sales volumes, and respective emission factors per country (source: IEA). Sales data covers approximately 90–95% of sales. Our Healthcare business sector offers some battery-based injection devices that fall under category 11. Emissions are calculated based on energy consumption, sales volumes, and the respective emission factors per country (source: IEA). Compared with other Scope 3 categories, the screening of the emissions in this category contains more uncertainties and is meant to provide an initial indication of the impact of these Scope 3 emissions.

Scope 3 category 12: End of life treatment of sold products

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

23351

(7.5.3) Methodological details

Category 12 includes emissions from the waste disposal and treatment of products at the end of their life, sold by the reporting company in the reporting year. Emissions from the disposal of sold products and respective packaging materials are calculated based on sales data, the weight data of products and packaging material, average weighted emission factors based on statistical data on regional disposal methods, and DEFRA emission factors (source: DEFRA).

Scope 3 category 13: Downstream leased assets

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

1678

(7.5.3) Methodological details

Category 13 includes emissions from the operation of assets owned by the reporting company (acting as lessor) and leased to other entities. In Darmstadt, we are the lessor of a number of residential and commercial buildings. Emissions are calculated based on building master data, such as energy demand from energy certificates, and respective emission factors. To split the energy demand into heating and electricity for residential and commercial buildings, we use data from the IEA. Emissions from heating energy are calculated using the fuel type and DEFRA emission factors. Emissions from electricity demand are calculated using the German grid emission factor provided by BDWE (Bundesverband der Energie- und Wasserwirtschaft e.V.).

Scope 3 category 14: Franchises

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Category 14 includes emissions from the operation of franchises. This category is not relevant for us as we do not operate franchises, i.e., businesses operating under a license to sell or distribute another company's goods or services within a certain location. Out-licensing in the pharmaceutical sector is not regarded as franchising.

Scope 3 category 15: Investments

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

421

(7.5.3) Methodological details

Category 15 includes emissions from the operation of investments, including equity and debt investments and project finance, in the reporting year, which are not included in Scope 1 or Scope 2. Emissions are calculated based on the direct share of capital, the respective annual revenue, and environmentally extended input-output (EEIO) data (source: US Environmentally Extended Input-Output (USEEIO) Technical Content, United States Environmental Protection Agency). USEEIO provides emission factors on a spend basis for different industrial sectors and does not consider regional differences.

Scope 3: Other (upstream)

(7.5.1) Base year end

12/30/2020

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not applicable; Scope 3 is covered by categories 1-15

Scope 3: Other (downstream)

(7.5.1) Base year end

12/30/2020

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not applicable; Scope 3 is covered by categories 1-15

[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	*857547*	*Reporting according to GHG Protocol; GWP from IPCC Assessment Report 6*

[Fixed row]

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

Reporting year

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

385483

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e)

227070

(7.7.4) Methodological details

Location-based: Reporting according to GHG Protocol; main sources for emission factors: IEA, eGRID. Market-based: Reporting according to GHG Protocol; emission factor hierarchy according to GHG Protocol: supplier-specific emission factors reported by sites, residual mix factors (Green-e, Reliable Disclosure (RE-DISS) and AIB European Residual Mixes), location-based emission factors mainly from IEA and eGRID.
[Fixed row]

(7.8) Account for your organization’s gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

2470278

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Spend-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

2

(7.8.5) Please explain

Category 1 includes all upstream emissions from the extraction, production, and transportation of goods and services that were purchased or acquired in the reporting year. Emissions from products are calculated using a spend-based approach based on a procurement data management system (which integrates various ERP systems) and environmentally extended input-output (EEIO) data (source: US Environmentally-Extended Input-Output (USEEIO) Technical Content, United States Environmental Protection Agency). USEEIO provides emission factors on a spend basis for different industrial sectors and does not consider regional differences. Emissions from services are calculated with a spend-based approach based on the same procurement data management system. The calculation method takes into account the emission data of our main suppliers. The procurement system contains 95–97% of our total spend, meaning there is a minor underreporting. This gap is related to our subsidiaries that either do not have their own procurement system or have a very specific system (e.g., a small local ERP system). To further increase accuracy, we are working on a weight-based approach. Our target is to calculate these emissions based on supplier-specific data.

Capital goods

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

371086

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Spend-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

1

(7.8.5) Please explain

Category 2 includes all upstream emissions from the extraction, production, and transportation of capital goods purchased or acquired by the reporting company in the reporting year. As with category 1, emissions are calculated using a spend-based approach based on a procurement data management system (which integrates various ERP systems) and environmentally extended input-output (EEIO) data (source: US Environmentally-Extended Input-Output (USEEIO) Technical Content, United States Environmental Protection Agency). USEEIO provides emission factors on a spend basis for different industrial sectors and does not consider regional differences. The procurement system contains 95–97% of our total spend, meaning there is a minor underreporting. This gap is related to our smaller subsidiaries that either do not have a system or have a very specific system (e.g., a small local ERP system). The target is to calculate these emissions based on supplier-specific data.

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

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

112528

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Site-specific method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Category 3 includes emissions related to the production of fuels and energy purchased and consumed by the reporting company in the reporting year that are not included in category 1 or 2. Data on purchased and consumed fuels (mainly natural gas) and electricity, steam/heat, and cold, which form the basis for calculating category 3 emissions, are collected via our central EHS data management system. To determine upstream emissions of purchased fuels, we multiply the fuel quantities by the well-to-tank emission factors (source: DEFRA, WTT – fuels). Upstream emissions as well as transportation and distribution losses of purchased heat/steam and cold are calculated by multiplying the consumption figures with the respective emission factors (source: DEFRA; WTT – heat and steam, WTT – heat and steam – district heat and steam, respectively DEFRA; WTT – heat and steam, WTT – distribution of district heat and steam, 5% loss for losses). To calculate emissions from the generation and transport and distribution (T&D) of minor quantities of purchased cold, we use the same emission factors as for heat/steam, as no specific factors are available. Upstream emissions from purchased electricity are determined by multiplying the consumption figures with the respective emission factors (source: DEFRA; WTT – overseas electricity [generation]). Here, electricity purchased from renewable sources is deducted (direct supply of renewable electricity as well as electricity covered by energy attribute certificates). Electricity T&D losses are determined based on the quantities of electricity purchased and country-specific loss factors. The data from the IEA provide the basis for country-specific electricity transmission and distribution losses. In this process, the electricity sourced from renewable sources (direct supply of renewable electricity) is deducted. Emissions from the generation of purchased electricity sold to end-users are not relevant for us because we do not sell electricity.

Upstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

231580

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Fuel-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Category 4 includes the transportation and distribution of products purchased by the reporting company in the reporting year. This refers to transportation and distribution between the company's tier 1 suppliers and its own operations, where the vehicles and facilities are not owned or controlled by the reporting company. Additionally, category 4 includes the transportation and distribution of services purchased by the reporting company in the reporting year. This includes both inbound logistics and outbound logistics, such as for sold products, as well as transportation and distribution between the company's own facilities in vehicles and facilities not owned or controlled by the reporting company. To calculate emissions from these transportation activities, we use a mixed approach. Primary data from logistics service providers are provided by them and integrated into the reporting. If these data are not available, greenhouse gas emissions are calculated by a third-party provider using an energy-based bottom-up approach. For the Life Science business sector, shipment data from forwarders serve as the main data source, while for the Electronics business sector, delivery notes from our own ERP systems form the basis for calculation. For the Healthcare business sector, there are multiple sources: forwarder data as well as data from various ERP systems. These data are consolidated in internal systems together with primary data from suppliers/logistics service providers. The respective shipment data are sent to the third-party provider EcoTransIT and processed there. Processing steps include routing from origin to destination based on zip and port codes, determination of fuel consumption, energy and emission calculation, and summing up all section emissions per mode of transportation. For our Life Science business sector, no data on road transportation for the LATAM and Asia regions are available. Therefore, a spend-based approach is used to estimate these emissions. If data for the entire year is not yet available, appropriate extrapolations based on previous year data are conducted. Currently, we do not consider deliveries from tier 1 suppliers that are not directly paid by us but are delivered to us due to lack of data.

Waste generated in operations

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

26901

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Waste-type-specific method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Category 5 includes emissions from the disposal and treatment of waste generated in facilities owned or controlled by us. This also includes the disposal of solid waste and wastewater by third parties. The calculation of emissions from waste generated in operations and disposed of by third parties is based on primary data from our manufacturing sites, collected annually via our central EHS data management system. These data are divided into various waste types, such as solvent waste and soil waste, and distinguished by waste disposal methods, such as waste-to-energy, landfill, or recycling. For the emission factors based on the carbon content of the waste, we use the "Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain." This states that recycling and energy recovery are attributed to the organization that uses the recycled material or uses the waste to generate energy. This means emissions from these activities are not included in our greenhouse gas inventory. The carbon content factors are mainly taken from the "2006 IPCC Guidelines for National Greenhouse Gas Inventories." These data are then multiplied with each other. Emissions resulting from the transportation of waste materials are not taken into account. To calculate greenhouse gas emissions from wastewater treatment in third-party municipal or industrial wastewater treatment plants, we use primary data from our manufacturing sites, collected annually via our central EHS data management system. Wastewater quantities are multiplied by the DEFRA emission factor for water treatment.

Business travel

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

106060

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Category 6 includes emissions from the transportation of employees for business-related activities in vehicles owned or operated by third parties, such as aircraft, trains, buses, and passenger cars. Air travel: Based on our flight booking and billing processes, our payment solution service provider supplies detailed data on all flights booked. Greenhouse gas emissions are calculated by atmosfair, a recognized non-governmental organization dealing with climate protection focused on travel. Rail travel: Rail travel is considered relevant in some European countries, such as Germany, France, and Spain. In non-European countries, it is considered rather negligible. Currently, data for rail travel are only available for Germany and is provided by Deutsche Bahn AG. Rental cars: Emissions data are provided by our global rental car providers on an annual basis. Data on other means of transportation, such as trams, taxis, and buses, are not available. Their impact on our overall emissions is expected to be negligible. Hotel accommodation: Emissions from hotel stays are calculated based on the number of hotel stays per country (source: internal ERP system) and the DEFRA emission factors for hotel stays.

Employee commuting

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

77061

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Category 7 includes emissions from the transportation of employees between their homes and work. We conduct a global Employee Engagement Survey each year. The Covid-19 pandemic has changed working habits toward a more flexible remote working approach. Given this fact and our ambition toward more transparency and accuracy on greenhouse gas emissions, we have included commuting habits in the employee engagement survey as of 2023. This allows us to build our calculation on a solid basis and extrapolate to the global employee population. This is combined with the assumption of 220 working days derived from the "Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain." Emission factors for modes of transport are taken from DEFRA, business travel, and include electric vehicles and working from home.

Upstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Category 8 includes emissions from the operation of assets that are leased and that are not already included in our Scope 1 or Scope 2 reporting. Emissions from this category are not relevant for our Scope 3 reporting because leased assets, such as rented offices, labs, or warehouses, are part of our Scope 1 and 2 GHG inventory.

Downstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

7922

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Fuel-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Category 9 includes the transportation and distribution of products sold by the reporting company in the reporting year from the reporting company's operations to end consumers, if not paid for by the reporting company. This also includes retail and storage in vehicles and facilities not owned or controlled by the reporting company. The calculation of category 9 emissions is similar to that of category 4. The emissions are calculated by a third-party provider using an energy-based bottom-up approach. This way, we can provide emissions data for our Healthcare and Electronics business sectors. The downstream data of category 9 from the Life Science business sector is negligible. To ensure the effectiveness of logistic processes, the transport of Life Science products is organized and contracted by us and is therefore covered under category 4.

Processing of sold products

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Category 10 includes emissions from the processing of sold intermediate products by third parties (e.g., manufacturers) after sale by the reporting company. We produce a wide variety of intermediate products for various purposes. Due to the range of potential applications and our customer structure, the related greenhouse gas emissions cannot be tracked in a practical manner. It is difficult to obtain reliable figures. We adhere to the recommendation of the "Guidance for Accounting and Reporting Corporate GHG Emissions in the Chemical Sector Value Chain" of the World Business Council for Sustainable Development, which states: "Chemical companies are not required to report Scope 3, category 10 emissions, since reliable figures are difficult to obtain, due to the diverse application and customer structure."

Use of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

1021008

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Category 11 includes emissions from the use of goods and services sold by the reporting company in the reporting year. Internal expert assessments of our extensive and very diverse product portfolio show that for us, "greenhouse gases and products that contain or form greenhouse gases that are emitted during use" are the main driver of greenhouse gas emissions in this category. "Products that directly consume energy (electricity) during use" contribute to a much lesser extent to the overall emissions. "Fuels and feedstocks" as well as indirect use phase emissions are not relevant for us. "Indirect use-phase emissions" are optional and are not reported by us. Electronics business sector: Among our Electronics product portfolio, there are some specialty gases with high Global Warming Potential (GWP) that are emitted during the use phase. Emissions are calculated based on the technical expertise of internal experts on the percentage of gas quantities that escape the processes at our customers, abatement efficiency, sales volumes, and global warming potentials (source: IPCC, 6th Assessment Report). Besides this, some product control devices consume electricity. Emissions of these devices are calculated based on runtime, average lifetime, and an estimated global emission factor. Other product lines are negligible or do not contribute at all to the overall emissions within this category. Our Life Science business sector offers two product lines (Biology, Biomonitoring, Chemistry, LabWater, and Process Solutions portfolios) that consume electricity during the use phase. The calculation of emissions is based on internal expert estimations of the product energy consumption, sales volumes, and respective emission factors per country (source: IEA). Sales data covers approximately 90–95% of sales. Our Healthcare business sector offers some battery-based injection devices that fall under category 11. Emissions are calculated based on energy consumption, sales volumes, and the respective emission factors per country (source: IEA). Compared with other Scope 3 categories, the screening of the emissions in this category contains more uncertainties and is meant to provide an initial indication of the impact of these Scope 3 emissions.

End of life treatment of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

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

55816

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Category 12 includes emissions from the waste disposal and treatment of products at the end of their life, sold by the reporting company in the reporting year. Emissions from the disposal of sold products and respective packaging materials are calculated based on sales data, the weight data of products and packaging material, average weighted emission factors based on statistical data on regional disposal methods, and DEFRA emission factors (source: DEFRA).

Downstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, calculated

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

1722

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Asset-specific method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Category 13 includes emissions from the operation of assets owned by the reporting company (acting as lessor) and leased to other entities. In Darmstadt, we are the lessor of a number of residential and commercial buildings. Emissions are calculated based on building master data, such as energy demand from energy certificates, and respective emission factors. To split the energy demand into heating and electricity for residential and commercial buildings, we use data from the IEA. Emissions from heating energy are calculated using the fuel type and DEFRA emission factors. Emissions from electricity demand are calculated using the German grid emission factor provided by BDWE (Bundesverband der Energie- und Wasserwirtschaft e.V.).

Franchises

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Category 14 includes emissions from the operation of franchises. This category is not relevant for us as we do not operate franchises, i.e., businesses operating under a license to sell or distribute another company's goods or services within a certain location. Out-licensing in the pharmaceutical sector is not regarded as franchising.

Investments

(7.8.1) Evaluation status

Select from:

☑ Not relevant, calculated

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

974

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Investment-specific method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Category 15 includes emissions from the operation of investments, including equity and debt investments and project finance, in the reporting year, which are not included in Scope 1 or Scope 2. Emissions are calculated based on the direct share of capital, the respective annual revenue, and environmentally extended input-output (EEIO) data (source: US Environmentally Extended Input-Output (USEEIO) Technical Content, United States Environmental Protection Agency). USEEIO provides emission factors on a spend basis for different industrial sectors and does not consider regional differences.

Other (upstream)

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

All emissions covered via categories 1-15.

Other (downstream)

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

All emissions covered via categories 1-15.
[Fixed row]

(7.9) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	*Select from:* ☑ Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	*Select from:* ☑ Third-party verification or assurance process in place
Scope 3	*Select from:* ☑ Third-party verification or assurance process in place

[Fixed row]

(7.9.1) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Row 1

(7.9.1.1) Verification or assurance cycle in place

Select from:
☑ Annual process

(7.9.1.2) Status in the current reporting year

Select from:
☑ Complete

(7.9.1.3) Type of verification or assurance

Select from:
☑ Limited assurance

(7.9.1.4) Attach the statement

CDP_Letter_2024_Merck_Deloitte.pdf,Annual Report 2024 entire-merck-ar24.pdf,Annual Report 2024 entire-merck-ar24.pdf

(7.9.1.5) Page/section reference

Merck Annual Report: - Assurance statement (p.508) - Gross S1, S2, S3 emissions for 2024 (p.161)

(7.9.1.6) Relevant standard

Select from:
☑ ISAE3000

(7.9.1.7) Proportion of reported emissions verified (%)

100
[Add row]

(7.9.2) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Row 1

(7.9.2.1) Scope 2 approach

Select from:

☑ Scope 2 market-based

(7.9.2.2) Verification or assurance cycle in place

Select from:
☑ Annual process

(7.9.2.3) Status in the current reporting year

Select from:
☑ Complete

(7.9.2.4) Type of verification or assurance

Select from:
☑ Limited assurance

(7.9.2.5) Attach the statement

CDP_Letter_2024_Merck_Deloitte.pdf,Annual Report 2024 entire-merck-ar24.pdf,Annual Report 2024 entire-merck-ar24.pdf

(7.9.2.6) Page/ section reference

Merck Annual Report: - Assurance statement (p.508) - Gross S1, S2, S3 emissions for 2024 (p.161)

(7.9.2.7) Relevant standard

Select from:
☑ ISAE3000

(7.9.2.8) Proportion of reported emissions verified (%)

100

Row 2

(7.9.2.1) Scope 2 approach

Select from:

☑ Scope 2 location-based

(7.9.2.2) Verification or assurance cycle in place

Select from:

☑ Annual process

(7.9.2.3) Status in the current reporting year

Select from:

☑ Complete

(7.9.2.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.2.5) Attach the statement

CDP_Letter_2024_Merck_Deloitte.pdf,Annual Report 2024 entire-merck-ar24.pdf

(7.9.2.6) Page/ section reference

Merck Annual Report: - Assurance statement (p.508) - Gross S1, S2, S3 emissions for 2024 (p.161)

(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: Franchises
- ☑ Scope 3: Investments
- ☑ Scope 3: Capital goods
- ☑ Scope 3: Business travel
- ☑ 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)
- ☑ 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

(7.9.3.2) Verification or assurance cycle in place

Select from:

☑ Annual process

(7.9.3.3) Status in the current reporting year

Select from:

☑ Complete

(7.9.3.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.3.5) Attach the statement

CDP_Letter_2024_Merck_Deloitte.pdf,Annual Report 2024 entire-merck-ar24.pdf

(7.9.3.6) Page/section reference

Merck Annual Report: - Assurance statement (p.508) - Gross S1, S2, S3 emissions for 2024 (p.161)

(7.9.3.7) Relevant standard

Select from:

☑ ISAE3000

(7.9.3.8) Proportion of reported emissions verified (%)

100
[Add row]

(7.10) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Select from:

☑ Decreased

(7.10.1) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

Change in renewable energy consumption

(7.10.1.1) Change in emissions (metric tons CO2e)

23771

(7.10.1.2) Direction of change in emissions

Select from:
☑ Decreased

(7.10.1.3) Emissions value (percentage)

1.6

(7.10.1.4) Please explain calculation

*CO2e savings from the purchase of renewable electricity and from own photovoltaics in 2024'/'Scope 1+2 Emissions 2023'*100: 23,771/1,463,070*100=1.6*

Other emissions reduction activities

(7.10.1.1) Change in emissions (metric tons CO2e)

402238

(7.10.1.2) Direction of change in emissions

Select from:
☑ Decreased

(7.10.1.3) Emissions value (percentage)

27.5

(7.10.1.4) Please explain calculation

*CO2e savings from reduction projects implemented in 2024'/'Scope 1+2 Emissions 2023'*100: 402,238/1,463,070*100=27.5*

Change in output

(7.10.1.1) Change in emissions (metric tons CO2e)

47556

(7.10.1.2) Direction of change in emissions

Select from:

☑ Increased

(7.10.1.3) Emissions value (percentage)

3.3

(7.10.1.4) Please explain calculation

Calculation 1 - increase because of organic growth: Scope 1+2 Emissions 2023'-'Scope 1+2 Emissions 2024'-'CO2e savings from reduction projects implemented in 2024'-'Additional CO2e savings from the purchase of renewable electricity and from own photovoltaics in 2024 ': 1,463,070-1,084,617-402,238-23,771=-47,556;
*Calculation 2 - percent change because of organic growth/decline: Result from Calculation 1 (see above)'/'Scope 1+2 Emissions 2023'*100: 47,556/1,463,070*100=3.3*
[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
	13084	*Scope 1&2 biogenic CO2 emissions*

[Fixed row]

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

Select from:

☑ Yes

(7.15.1) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used global warming potential (GWP).

Row 1

(7.15.1.1) Greenhouse gas

Select from:

☑ CO2

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

246980

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Sixth Assessment Report (AR6 - 100 year)

Row 2

(7.15.1.1) Greenhouse gas

Select from:

☑ NF3

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

371249

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Sixth Assessment Report (AR6 - 100 year)

Row 3

(7.15.1.1) Greenhouse gas

Select from:

☑ PFCs

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

111526

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Sixth Assessment Report (AR6 - 100 year)

Row 4

(7.15.1.1) Greenhouse gas

Select from:
☑ N2O

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

105345

(7.15.1.3) GWP Reference

Select from:
☑ IPCC Sixth Assessment Report (AR6 - 100 year)

Row 5

(7.15.1.1) Greenhouse gas

Select from:
☑ HFCs

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

21369

(7.15.1.3) GWP Reference

Select from:
☑ IPCC Sixth Assessment Report (AR6 - 100 year)

Row 6

(7.15.1.1) Greenhouse gas

Select from:
☑ CH4

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

220

(7.15.1.3) GWP Reference

Select from:
☑ IPCC Sixth Assessment Report (AR6 - 100 year)

Row 7

(7.15.1.1) Greenhouse gas

Select from:
☑ Other, please specify :CFCs, HCFCs

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

858

(7.15.1.3) GWP Reference

Select from:
☑ IPCC Sixth Assessment Report (AR6 - 100 year)
[Add row]

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

Algeria

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

31

(7.16.3) Scope 2, market-based (metric tons CO2e)

31

Argentina

(7.16.1) Scope 1 emissions (metric tons CO2e)

5

(7.16.2) Scope 2, location-based (metric tons CO2e)

374

(7.16.3) Scope 2, market-based (metric tons CO2e)

0

Australia

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

112

(7.16.3) Scope 2, market-based (metric tons CO2e)

47

Austria

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

99

(7.16.3) Scope 2, market-based (metric tons CO2e)

99

Belgium

(7.16.1) Scope 1 emissions (metric tons CO2e)

15

(7.16.2) Scope 2, location-based (metric tons CO2e)

6

(7.16.3) Scope 2, market-based (metric tons CO2e)

7

Brazil

(7.16.1) Scope 1 emissions (metric tons CO2e)

3217

(7.16.2) Scope 2, location-based (metric tons CO2e)

1298

(7.16.3) Scope 2, market-based (metric tons CO2e)

0

Bulgaria

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

17

(7.16.3) Scope 2, market-based (metric tons CO2e)

16

Canada

(7.16.1) Scope 1 emissions (metric tons CO2e)

513

(7.16.2) Scope 2, location-based (metric tons CO2e)

205

(7.16.3) Scope 2, market-based (metric tons CO2e)

205

Chile

(7.16.1) Scope 1 emissions (metric tons CO2e)

93

(7.16.2) Scope 2, location-based (metric tons CO2e)

322

(7.16.3) Scope 2, market-based (metric tons CO2e)

0

China

(7.16.1) Scope 1 emissions (metric tons CO2e)

585

(7.16.2) Scope 2, location-based (metric tons CO2e)

42621

(7.16.3) Scope 2, market-based (metric tons CO2e)

21338

Colombia

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

14

(7.16.3) Scope 2, market-based (metric tons CO2e)

0

Croatia

(7.16.1) Scope 1 emissions (metric tons CO2e)

23

(7.16.2) Scope 2, location-based (metric tons CO2e)

40

(7.16.3) Scope 2, market-based (metric tons CO2e)

117

Czechia

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

51

(7.16.3) Scope 2, market-based (metric tons CO2e)

65

Denmark

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

6

(7.16.3) Scope 2, market-based (metric tons CO2e)

15

Ecuador

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

1

(7.16.3) Scope 2, market-based (metric tons CO2e)

0

Egypt

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

83

(7.16.3) Scope 2, market-based (metric tons CO2e)

83

France

(7.16.1) Scope 1 emissions (metric tons CO2e)

10545

(7.16.2) Scope 2, location-based (metric tons CO2e)

10116

(7.16.3) Scope 2, market-based (metric tons CO2e)

9515

Germany

(7.16.1) Scope 1 emissions (metric tons CO2e)

108874

(7.16.2) Scope 2, location-based (metric tons CO2e)

26605

(7.16.3) Scope 2, market-based (metric tons CO2e)

47932

Greece

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

23

(7.16.3) Scope 2, market-based (metric tons CO2e)

34

Guatemala

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

41

(7.16.3) Scope 2, market-based (metric tons CO2e)

0

Hungary

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

12

(7.16.3) Scope 2, market-based (metric tons CO2e)

21

India

(7.16.1) Scope 1 emissions (metric tons CO2e)

888

(7.16.2) Scope 2, location-based (metric tons CO2e)

8801

(7.16.3) Scope 2, market-based (metric tons CO2e)

8801

Indonesia

(7.16.1) Scope 1 emissions (metric tons CO2e)

585

(7.16.2) Scope 2, location-based (metric tons CO2e)

3980

(7.16.3) Scope 2, market-based (metric tons CO2e)

3299

Ireland

(7.16.1) Scope 1 emissions (metric tons CO2e)

11364

(7.16.2) Scope 2, location-based (metric tons CO2e)

9208

(7.16.3) Scope 2, market-based (metric tons CO2e)

0

Israel

(7.16.1) Scope 1 emissions (metric tons CO2e)

1667

(7.16.2) Scope 2, location-based (metric tons CO2e)

6810

(7.16.3) Scope 2, market-based (metric tons CO2e)

9323

Italy

(7.16.1) Scope 1 emissions (metric tons CO2e)

10123

(7.16.2) Scope 2, location-based (metric tons CO2e)

6546

(7.16.3) Scope 2, market-based (metric tons CO2e)

27

Japan

(7.16.1) Scope 1 emissions (metric tons CO2e)

8689

(7.16.2) Scope 2, location-based (metric tons CO2e)

12666

(7.16.3) Scope 2, market-based (metric tons CO2e)

12577

Malaysia

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

213

(7.16.3) Scope 2, market-based (metric tons CO2e)

213

Mexico

(7.16.1) Scope 1 emissions (metric tons CO2e)

3671

(7.16.2) Scope 2, location-based (metric tons CO2e)

4913

(7.16.3) Scope 2, market-based (metric tons CO2e)

50

Netherlands

(7.16.1) Scope 1 emissions (metric tons CO2e)

156

(7.16.2) Scope 2, location-based (metric tons CO2e)

793

(7.16.3) Scope 2, market-based (metric tons CO2e)

133

Peru

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

25

(7.16.3) Scope 2, market-based (metric tons CO2e)

0

Philippines

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

898

(7.16.3) Scope 2, market-based (metric tons CO2e)

898

Poland

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

154

(7.16.3) Scope 2, market-based (metric tons CO2e)

191

Portugal

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

10

(7.16.3) Scope 2, market-based (metric tons CO2e)

34

Republic of Korea

(7.16.1) Scope 1 emissions (metric tons CO2e)

238766

(7.16.2) Scope 2, location-based (metric tons CO2e)

43723

(7.16.3) Scope 2, market-based (metric tons CO2e)

43723

Russian Federation

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

268

(7.16.3) Scope 2, market-based (metric tons CO2e)

268

Singapore

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

937

(7.16.3) Scope 2, market-based (metric tons CO2e)

937

Slovakia

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

3

(7.16.3) Scope 2, market-based (metric tons CO2e)

8

Slovenia

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

1

(7.16.3) Scope 2, market-based (metric tons CO2e)

0

South Africa

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

225

(7.16.3) Scope 2, market-based (metric tons CO2e)

225

Spain

(7.16.1) Scope 1 emissions (metric tons CO2e)

5025

(7.16.2) Scope 2, location-based (metric tons CO2e)

3252

(7.16.3) Scope 2, market-based (metric tons CO2e)

38

Switzerland

(7.16.1) Scope 1 emissions (metric tons CO2e)

8762

(7.16.2) Scope 2, location-based (metric tons CO2e)

3366

(7.16.3) Scope 2, market-based (metric tons CO2e)

212

Taiwan, China

(7.16.1) Scope 1 emissions (metric tons CO2e)

128787

(7.16.2) Scope 2, location-based (metric tons CO2e)

10785

(7.16.3) Scope 2, market-based (metric tons CO2e)

10785

Thailand

(7.16.1) Scope 1 emissions (metric tons CO2e)

1

(7.16.2) Scope 2, location-based (metric tons CO2e)

459

(7.16.3) Scope 2, market-based (metric tons CO2e)

459

Tunisia

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

53

(7.16.3) Scope 2, market-based (metric tons CO2e)

53

Turkey

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

78

(7.16.3) Scope 2, market-based (metric tons CO2e)

78

United Arab Emirates

(7.16.1) Scope 1 emissions (metric tons CO2e)

0

(7.16.2) Scope 2, location-based (metric tons CO2e)

141

(7.16.3) Scope 2, market-based (metric tons CO2e)

141

United Kingdom of Great Britain and Northern Ireland

(7.16.1) Scope 1 emissions (metric tons CO2e)

4111

(7.16.2) Scope 2, location-based (metric tons CO2e)

4060

(7.16.3) Scope 2, market-based (metric tons CO2e)

238

United States of America

(7.16.1) Scope 1 emissions (metric tons CO2e)

310987

(7.16.2) Scope 2, location-based (metric tons CO2e)

180394

(7.16.3) Scope 2, market-based (metric tons CO2e)

54109

Uruguay

(7.16.1) Scope 1 emissions (metric tons CO2e)

94

(7.16.2) Scope 2, location-based (metric tons CO2e)

52

(7.16.3) Scope 2, market-based (metric tons CO2e)

0

Viet Nam

(7.16.1) Scope 1 emissions (metric tons CO2e)

1

(7.16.2) Scope 2, location-based (metric tons CO2e)

592

(7.16.3) Scope 2, market-based (metric tons CO2e)

725
[Fixed row]

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

Select all that apply
☑ By activity

(7.17.3) Break down your total gross global Scope 1 emissions by business activity.

	Activity	Scope 1 emissions (metric tons CO2e)
Row 1	*Emissions from manufacturing sites*	*836568*
Row 2	*Emissions from non-manufacturing sites*	*20979*

[Add row]

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

Select all that apply

☑ By activity

(7.20.3) Break down your total gross global Scope 2 emissions by business activity.

	Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Row 1	*Emissions from manufacturing sites*	*332671*	*199875*
Row 2	*Emissions from non-manufacturing sites*	*52812*	*27195*

[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)

857547

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

385483

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

227070

(7.22.4) Please explain

These emissions represent the entire Merck group, we do not have any other entities to account for.

All other entities

(7.22.1) Scope 1 emissions (metric tons CO2e)

0

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

0

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

0

(7.22.4) Please explain

-The emissions above represent the entire Merck group, we do not have any other entities to account for.
[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:
☑ Yes

(7.23.1) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

Row 1

(7.23.1.1) Subsidiary name

Merck KGaA

(7.23.1.2) Primary activity

Select from:
☑ Specialty chemicals

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply
☑ Other unique identifier, please specify :Merck KGaA, Frankfurter Str. 250, 64293 Darmstadt

(7.23.1.11) Other unique identifier

Merck KGaA, Frankfurter Str. 250, 64293 Darmstadt

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

18744

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

3721

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

7303

(7.23.1.15) Comment

Merck KGaA is the parent company of the Merck Group. Energy/GHG reporting is done on site level. This is the way how energy invoices are provided by energy suppliers. Often, there are multiple subsidiaries working at one site and one subsidiary regularly covers multiple sites. So, providing detailed data on subsidiary level is basically not possible with reasonable effort.
[Add row]

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

Row 1

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

271029501

(7.26.9) Emissions in metric tonnes of CO2e

10791

(7.26.10) Uncertainty (±%)

30

Row 2

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

25239999

(7.26.9) Emissions in metric tonnes of CO2e

321.7

Row 3

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

2044339

(7.26.9) Emissions in metric tonnes of CO2e

26.1

Row 4

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

25240000

(7.26.9) Emissions in metric tonnes of CO2e

271

Row 5

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

2044339

(7.26.9) Emissions in metric tonnes of CO2e

22

Row 6

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 15: Investments

☑ Category 2: Capital goods

☑ Category 6: Business travel

☑ Category 7: Employee commuting

☑ Category 11: Use of sold products

☑ Category 9: Downstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

☑ Category 13: Downstream leased assets

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

25240000

(7.26.9) Emissions in metric tonnes of CO2e

4130

Row 7

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 15: Investments

☑ Category 2: Capital goods

☑ Category 6: Business travel

☑ Category 13: Downstream leased assets

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 7: Employee commuting
☑ Category 11: Use of sold products
☑ Category 9: Downstream transportation and distribution
☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
☑ Category 12: End-of-life treatment of sold products
☑ Category 4: Upstream transportation and distribution

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

2044339

(7.26.9) Emissions in metric tonnes of CO2e

335

Row 8

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

271029501

(7.26.9) Emissions in metric tonnes of CO2e

2909

(7.26.10) Uncertainty (±%)

30

Row 9

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 15: Investments

☑ Category 2: Capital goods

☑ Category 6: Business travel

☑ Category 7: Employee commuting

☑ Category 13: Downstream leased assets

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

☑ Category 9: Downstream transportation and distribution

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

271029501

(7.26.9) Emissions in metric tonnes of CO2e

57431

(7.26.10) Uncertainty (±%)

30

Row 10

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

179779540

(7.26.9) Emissions in metric tonnes of CO2e

7158

(7.26.10) Uncertainty (±%)

30

Row 11

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

179779540

(7.26.9) Emissions in metric tonnes of CO2e

1930

(7.26.10) Uncertainty (±%)

30

Row 12

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply
☑ Category 15: Investments
☑ Category 2: Capital goods
☑ Category 6: Business travel
☑ Category 7: Employee commuting
☑ Category 11: Use of sold products
☑ Category 9: Downstream transportation and distribution
☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
☑ Category 13: Downstream leased assets
☑ Category 1: Purchased goods and services
☑ Category 5: Waste generated in operations
☑ Category 12: End-of-life treatment of sold products
☑ Category 4: Upstream transportation and distribution

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

179779540

(7.26.9) Emissions in metric tonnes of CO2e

38095

(7.26.10) Uncertainty (±%)

30

Row 13

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

171491055

(7.26.9) Emissions in metric tonnes of CO2e

6828

(7.26.10) Uncertainty (±%)

30

Row 14

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

171491055

(7.26.9) Emissions in metric tonnes of CO2e

1841

(7.26.10) Uncertainty (±%)

30

Row 15

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 15: Investments
☑ Category 2: Capital goods
☑ Category 6: Business travel
☑ Category 7: Employee commuting
☑ Category 11: Use of sold products
☑ Category 9: Downstream transportation and distribution
☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
☑ Category 13: Downstream leased assets
☑ Category 1: Purchased goods and services
☑ Category 5: Waste generated in operations
☑ Category 12: End-of-life treatment of sold products
☑ Category 4: Upstream transportation and distribution

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

171491055

(7.26.9) Emissions in metric tonnes of CO2e

36339

(7.26.10) Uncertainty (±%)

30

Row 16

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

94363486

(7.26.9) Emissions in metric tonnes of CO2e

1203

(7.26.10) Uncertainty (±%)

30

Row 17

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

94363486

(7.26.9) Emissions in metric tonnes of CO2e

1013

(7.26.10) Uncertainty (±%)

30

Row 18

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 15: Investments

☑ Category 2: Capital goods

☑ Category 6: Business travel

☑ Category 7: Employee commuting

☑ Category 11: Use of sold products

☑ Category 9: Downstream transportation and distribution

☑ Category 13: Downstream leased assets

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

94363486

(7.26.9) Emissions in metric tonnes of CO2e

19996

(7.26.10) Uncertainty (±%)

30

Row 19

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

5440967

(7.26.9) Emissions in metric tonnes of CO2e

69

(7.26.10) Uncertainty (±%)

30

Row 20

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

5440967

(7.26.9) Emissions in metric tonnes of CO2e

58

(7.26.10) Uncertainty (±%)

30

Row 21

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 15: Investments

☑ Category 2: Capital goods

☑ Category 6: Business travel

☑ Category 7: Employee commuting

☑ Category 11: Use of sold products

☑ Category 9: Downstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

☑ Category 13: Downstream leased assets

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

5440967

(7.26.9) Emissions in metric tonnes of CO2e

1153

(7.26.10) Uncertainty (±%)

30

Row 22

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

11935984

(7.26.9) Emissions in metric tonnes of CO2e

152

(7.26.10) Uncertainty (±%)

30

Row 23

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

11935984

(7.26.9) Emissions in metric tonnes of CO2e

128

(7.26.10) Uncertainty (±%)

30

Row 24

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 15: Investments

☑ Category 2: Capital goods

☑ Category 6: Business travel

☑ Category 7: Employee commuting

☑ Category 13: Downstream leased assets

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 11: Use of sold products
☑ Category 4: Upstream transportation and distribution
☑ Category 9: Downstream transportation and distribution
☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

11935984

(7.26.9) Emissions in metric tonnes of CO2e

2529

(7.26.10) Uncertainty (±%)

30

Row 25

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

6034156

(7.26.9) Emissions in metric tonnes of CO2e

240

(7.26.10) Uncertainty (±%)

30

Row 26

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

6034156

(7.26.9) Emissions in metric tonnes of CO2e

65

(7.26.10) Uncertainty (±%)

30

Row 27

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 15: Investments

☑ Category 2: Capital goods

☑ Category 6: Business travel

☑ Category 7: Employee commuting

☑ Category 11: Use of sold products

☑ Category 9: Downstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

☑ Category 13: Downstream leased assets

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

6034156

(7.26.9) Emissions in metric tonnes of CO2e

1279

(7.26.10) Uncertainty (±%)

30

Row 28

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

6167

(7.26.9) Emissions in metric tonnes of CO2e

0.1

(7.26.10) Uncertainty (±%)

30

Row 29

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

6167

(7.26.9) Emissions in metric tonnes of CO2e

0.1

(7.26.10) Uncertainty (±%)

30

Row 30

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 15: Investments

☑ Category 13: Downstream leased assets

☑ Category 2: Capital goods
☑ Category 6: Business travel
☑ Category 7: Employee commuting
☑ Category 11: Use of sold products
☑ Category 9: Downstream transportation and distribution
☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
☑ Category 1: Purchased goods and services
☑ Category 5: Waste generated in operations
☑ Category 12: End-of-life treatment of sold products
☑ Category 4: Upstream transportation and distribution

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

6167

(7.26.9) Emissions in metric tonnes of CO2e

1

(7.26.10) Uncertainty (±%)

30

Row 31

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

859000

(7.26.9) Emissions in metric tonnes of CO2e

11

(7.26.10) Uncertainty (±%)

30

Row 32

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

859000

(7.26.9) Emissions in metric tonnes of CO2e

9

(7.26.10) Uncertainty (±%)

30

Row 33

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 15: Investments

☑ Category 2: Capital goods

☑ Category 6: Business travel

☑ Category 7: Employee commuting

☑ Category 11: Use of sold products

☑ Category 9: Downstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

☑ Category 13: Downstream leased assets

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

858999

(7.26.9) Emissions in metric tonnes of CO2e

141

(7.26.10) Uncertainty (±%)

30

Row 34

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

8307000

(7.26.9) Emissions in metric tonnes of CO2e

106

(7.26.10) Uncertainty (±%)

30

Row 35

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

8307000

(7.26.9) Emissions in metric tonnes of CO2e

89

(7.26.10) Uncertainty (±%)

30

Row 36

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

- ☑ Category 15: Investments
- ☑ Category 2: Capital goods
- ☑ Category 6: Business travel
- ☑ Category 7: Employee commuting
- ☑ Category 11: Use of sold products
- ☑ Category 9: Downstream transportation and distribution
- ☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
- ☑ Category 13: Downstream leased assets
- ☑ Category 1: Purchased goods and services
- ☑ Category 5: Waste generated in operations
- ☑ Category 12: End-of-life treatment of sold products
- ☑ Category 4: Upstream transportation and distribution

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

8307000

(7.26.9) Emissions in metric tonnes of CO2e

1359

(7.26.10) Uncertainty (±%)

30

Row 37

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

2580000

(7.26.9) Emissions in metric tonnes of CO2e

32.9

Row 38

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

2580000

(7.26.9) Emissions in metric tonnes of CO2e

28

Row 39

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 15: Investments

☑ Category 2: Capital goods

☑ Category 6: Business travel

☑ Category 7: Employee commuting

☑ Category 11: Use of sold products

☑ Category 9: Downstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

☑ Category 13: Downstream leased assets

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

2580000

(7.26.9) Emissions in metric tonnes of CO2e

422

Row 40

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

84052952

(7.26.9) Emissions in metric tonnes of CO2e

1217.39

(7.26.10) Uncertainty (±%)

10

Row 41

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

84052952

(7.26.9) Emissions in metric tonnes of CO2e

206.96

(7.26.10) Uncertainty (±%)

10

Row 42

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 1: Purchased goods and services

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

☑ Category 4: Upstream transportation and distribution

☑ Category 11: Use of sold products

☑ Category 12: End-of-life treatment of sold products

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

84052952

(7.26.9) Emissions in metric tonnes of CO2e

13754.3

(7.26.10) Uncertainty (±%)

10

Row 43

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

37184

(7.26.9) Emissions in metric tonnes of CO2e

0.36

(7.26.10) Uncertainty (±%)

10

Row 44

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

37184

(7.26.9) Emissions in metric tonnes of CO2e

0.15

(7.26.10) Uncertainty (±%)

10

Row 45

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

37184

(7.26.9) Emissions in metric tonnes of CO2e

6.1

(7.26.10) Uncertainty (±%)

10

(7.26.11) Major sources of emissions

Row 46

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

81725503

(7.26.9) Emissions in metric tonnes of CO2e

355.23

(7.26.10) Uncertainty (±%)

10

Row 47

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

81725503

(7.26.9) Emissions in metric tonnes of CO2e

51.25

(7.26.10) Uncertainty (±%)

10

Row 48

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

81725723

(7.26.9) Emissions in metric tonnes of CO2e

13373.4

(7.26.10) Uncertainty (±%)

10

Row 49

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

281606

(7.26.9) Emissions in metric tonnes of CO2e

4.01

(7.26.10) Uncertainty (±%)

10

Row 50

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

28606

(7.26.9) Emissions in metric tonnes of CO2e

0.62

(7.26.10) Uncertainty (±%)

10

Row 51

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

281606

(7.26.9) Emissions in metric tonnes of CO2e

46.1

(7.26.10) Uncertainty (±%)

10

Row 52

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

72527723

(7.26.9) Emissions in metric tonnes of CO2e

751.34

(7.26.10) Uncertainty (±%)

10

Row 53

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

72527723

(7.26.9) Emissions in metric tonnes of CO2e

70.96

(7.26.10) Uncertainty (±%)

10

Row 54

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 3

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

72527723

(7.26.9) Emissions in metric tonnes of CO2e

11868.3

(7.26.10) Uncertainty (±%)

10

Row 55

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

605189

(7.26.9) Emissions in metric tonnes of CO2e

2.24

(7.26.10) Uncertainty (±%)

10

Row 56

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

605189

(7.26.9) Emissions in metric tonnes of CO2e

1.71

(7.26.10) Uncertainty (±%)

10

Row 57

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

☑ Category 1: Purchased goods and services
☑ Category 5: Waste generated in operations
☑ Category 12: End-of-life treatment of sold products
☑ Category 4: Upstream transportation and distribution

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

605189

(7.26.9) Emissions in metric tonnes of CO2e

99

(7.26.10) Uncertainty (±%)

10

Row 58

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

194997

(7.26.9) Emissions in metric tonnes of CO2e

3.63

(7.26.10) Uncertainty (±%)

10

Row 59

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

194997

(7.26.9) Emissions in metric tonnes of CO2e

0.93

(7.26.10) Uncertainty (±%)

10

Row 60

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on mass of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

194997

(7.26.9) Emissions in metric tonnes of CO2e

31.9

(7.26.10) Uncertainty (±%)

10

Row 61

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

235382

(7.26.9) Emissions in metric tonnes of CO2e

1.7

(7.26.10) Uncertainty (±%)

10

Row 62

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

235382

(7.26.9) Emissions in metric tonnes of CO2e

0.43

(7.26.10) Uncertainty (±%)

10

Row 63

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

☑ Category 4: Upstream transportation and distribution

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

235382

(7.26.9) Emissions in metric tonnes of CO2e

38.5

(7.26.10) Uncertainty (±%)

10

Row 64

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

1583665

(7.26.9) Emissions in metric tonnes of CO2e

17.9

(7.26.10) Uncertainty (±%)

10

Row 65

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

1583665

(7.26.9) Emissions in metric tonnes of CO2e

10.49

(7.26.10) Uncertainty (±%)

10

Row 66

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

1538665

(7.26.9) Emissions in metric tonnes of CO2e

259.1

(7.26.10) Uncertainty (±%)

10

Row 67

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

12065859

(7.26.9) Emissions in metric tonnes of CO2e

541.27

(7.26.10) Uncertainty (±%)

10

Row 68

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

12065859

(7.26.9) Emissions in metric tonnes of CO2e

35.59

(7.26.10) Uncertainty (±%)

10

Row 69

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

12065859

(7.26.9) Emissions in metric tonnes of CO2e

1974.4

(7.26.10) Uncertainty (±%)

10

Row 70

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

97655

(7.26.9) Emissions in metric tonnes of CO2e

1.5

(7.26.10) Uncertainty (±%)

10

Row 71

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

97655

(7.26.9) Emissions in metric tonnes of CO2e

0.29

(7.26.10) Uncertainty (±%)

10

Row 72

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

97655

(7.26.9) Emissions in metric tonnes of CO2e

16

(7.26.10) Uncertainty (±%)

10

Row 73

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

12457

(7.26.9) Emissions in metric tonnes of CO2e

0.02

(7.26.10) Uncertainty (±%)

10

Row 74

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

12457

(7.26.9) Emissions in metric tonnes of CO2e

0.01

(7.26.10) Uncertainty (±%)

10

Row 75

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply
☑ Category 11: Use of sold products
☑ Category 1: Purchased goods and services
☑ Category 5: Waste generated in operations
☑ Category 12: End-of-life treatment of sold products
☑ Category 4: Upstream transportation and distribution
☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

12457

(7.26.9) Emissions in metric tonnes of CO2e

2

(7.26.10) Uncertainty (±%)

10

Row 76

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

111255590

(7.26.9) Emissions in metric tonnes of CO2e

1607.03

(7.26.10) Uncertainty (±%)

10

Row 77

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

111255590

(7.26.9) Emissions in metric tonnes of CO2e

348.55

(7.26.10) Uncertainty (±%)

10

Row 78

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

11125590

(7.26.9) Emissions in metric tonnes of CO2e

18205.7

(7.26.10) Uncertainty (±%)

10

Row 79

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

716167

(7.26.9) Emissions in metric tonnes of CO2e

5.72

(7.26.10) Uncertainty (±%)

10

Row 80

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

716167

(7.26.9) Emissions in metric tonnes of CO2e

1.17

(7.26.10) Uncertainty (±%)

10

Row 81

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

716167

(7.26.9) Emissions in metric tonnes of CO2e

117.2

(7.26.10) Uncertainty (±%)

10

Row 82

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

193586169

(7.26.9) Emissions in metric tonnes of CO2e

2183.05

(7.26.10) Uncertainty (±%)

10

Row 83

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

193586169

(7.26.9) Emissions in metric tonnes of CO2e

763.15

(7.26.10) Uncertainty (±%)

10

Row 84

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

193586169

(7.26.9) Emissions in metric tonnes of CO2e

31687.1

(7.26.10) Uncertainty (±%)

10

Row 85

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

42158

(7.26.9) Emissions in metric tonnes of CO2e

0.29

(7.26.10) Uncertainty (±%)

10

Row 86

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

42158

(7.26.9) Emissions in metric tonnes of CO2e

0.04

(7.26.10) Uncertainty (±%)

10

Row 87

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

42158

(7.26.9) Emissions in metric tonnes of CO2e

6.9

(7.26.10) Uncertainty (±%)

10

Row 88

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

12015

(7.26.9) Emissions in metric tonnes of CO2e

0.15

(7.26.10) Uncertainty (±%)

10

Row 89

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

12015

(7.26.9) Emissions in metric tonnes of CO2e

0.01

(7.26.10) Uncertainty (±%)

10

Row 90

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products
☑ Category 1: Purchased goods and services
☑ Category 5: Waste generated in operations
☑ Category 12: End-of-life treatment of sold products
☑ Category 4: Upstream transportation and distribution
☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

12015

(7.26.9) Emissions in metric tonnes of CO2e

2

(7.26.10) Uncertainty (±%)

10

Row 91

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

7498

(7.26.9) Emissions in metric tonnes of CO2e

0.09

(7.26.10) Uncertainty (±%)

10

Row 92

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

7498

(7.26.9) Emissions in metric tonnes of CO2e

0.01

(7.26.10) Uncertainty (±%)

10

Row 93

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

7498

(7.26.9) Emissions in metric tonnes of CO2e

1.2

(7.26.10) Uncertainty (±%)

10

Row 94

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

57819

(7.26.9) Emissions in metric tonnes of CO2e

0.65

(7.26.10) Uncertainty (±%)

10

Row 95

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

57819

(7.26.9) Emissions in metric tonnes of CO2e

0.3

(7.26.10) Uncertainty (±%)

10

Row 96

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products
☑ Category 1: Purchased goods and services
☑ Category 5: Waste generated in operations
☑ Category 12: End-of-life treatment of sold products
☑ Category 4: Upstream transportation and distribution
☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

57819

(7.26.9) Emissions in metric tonnes of CO2e

9.5

(7.26.10) Uncertainty (±%)

10

Row 97

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

793526

(7.26.9) Emissions in metric tonnes of CO2e

25.89

(7.26.10) Uncertainty (±%)

10

Row 98

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

793526

(7.26.9) Emissions in metric tonnes of CO2e

6.52

(7.26.10) Uncertainty (±%)

10

Row 99

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

793526

(7.26.9) Emissions in metric tonnes of CO2e

129.9

(7.26.10) Uncertainty (±%)

10

Row 100

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

366792

(7.26.9) Emissions in metric tonnes of CO2e

6.52

(7.26.10) Uncertainty (±%)

10

Row 101

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

366792

(7.26.9) Emissions in metric tonnes of CO2e

0.94

(7.26.10) Uncertainty (±%)

10

Row 102

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

☑ Category 1: Purchased goods and services
☑ Category 5: Waste generated in operations
☑ Category 12: End-of-life treatment of sold products
☑ Category 4: Upstream transportation and distribution

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

366792

(7.26.9) Emissions in metric tonnes of CO2e

60

(7.26.10) Uncertainty (±%)

10

Row 103

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

653592

(7.26.9) Emissions in metric tonnes of CO2e

4.36

(7.26.10) Uncertainty (±%)

10

Row 104

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

653592

(7.26.9) Emissions in metric tonnes of CO2e

2.05

(7.26.10) Uncertainty (±%)

10

Row 105

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

653592

(7.26.9) Emissions in metric tonnes of CO2e

107

(7.26.10) Uncertainty (±%)

10

Row 106

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:
☑ Scope 1

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

19779414

(7.26.9) Emissions in metric tonnes of CO2e

162.91

(7.26.10) Uncertainty (±%)

10

Row 107

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 2: market-based

(7.26.4) Allocation level

Select from:

☑ Company wide

(7.26.6) Allocation method

Select from:

☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

19779414

(7.26.9) Emissions in metric tonnes of CO2e

29.8

(7.26.10) Uncertainty (±%)

10

Row 108

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

☑ Category 4: Upstream transportation and distribution

(7.26.4) Allocation level

Select from:
☑ Company wide

(7.26.6) Allocation method

Select from:
☑ Allocation based on the market value of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:
☑ Currency

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

19779414

(7.26.9) Emissions in metric tonnes of CO2e

3236.7

(7.26.10) Uncertainty (±%)

10
[Add row]

(7.27) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Row 1

(7.27.1) Allocation challenges

Select from:

☑ Diversity of product lines makes accurately accounting for each product/product line cost ineffective

(7.27.2) Please explain what would help you overcome these challenges

Up to now, we haven’t seen an efficient way to allocate GHG emissions to our products and our customers. On the one hand, there is the need to have a simple, generally accepted, methodology to provide a good estimate for these figures. On the other hand side, tools are needed to calculate product portfolio product carbon footprints.At the moment, physical allocation of GHG emissions by breaking down site related emissions into specific product lines is not possible with justifiable efforts because very often a single manufacturing site or even a single plant/factory is engaged in the production of a variety of intermediates, products or product groups from multiple business sectors at any given time. Considering also the fact that Merck offers several 100,000 products, direct allocation of GHG emissions to specific products is very complex and would require an enormous effort and be costly. Also, most customers purchase multiple products that span across various manufacturing sites, making identification of GHG emissions specific to one customer even more complex. For instance, the companies asking us to respond to CDP Supply Chain purchase several hundreds of different products. Merck made huge progress in overall reporting of Scope 3 emissions in the past years and is able to report on all 15 categories. Projects are ongoing to improve data quality (e.g., switch from a spend-based approach to a weight-based approach to calculate scope 3, category 1 and 2 emissions). In 2022 we have started a pilot project to implement an IT tool for calculating portfolio product carbon footprints. In 2023 it was decided to move on with the implementation work for the whole Merck portfolio. This project is still ongoing. To ensure that we work based on industry standards and can rely on comparable data analytics and expert analysis, we collaborate with our peer companies in industry initiatives. For example, we are a member of Together for Sustainability (TfS). Since 2022, we support the development and launch of the TfS Product Carbon Footprint (PCF) Guideline, which harmonizes PCF calculation methodology across the industry, and led the development of decarbonization training materials for TfS member companies and their suppliers. This will be the basis for our way forward with regard to processes and tools for product carbon footprinting.

Row 2

(7.27.1) Allocation challenges

Select from:

☑ Customer base is too large and diverse to accurately track emissions to the customer level

(7.27.2) Please explain what would help you overcome these challenges

Up to now, we haven’t seen an efficient way to allocate GHG emissions to our products and our customers. On the one hand, there is the need to have a simple, generally accepted, methodology to provide a good estimate for these figures. On the other hand side, tools are needed to calculate product portfolio product carbon footprints.At the moment, physical allocation of GHG emissions by breaking down site related emissions into specific product lines is not possible with justifiable efforts because very often a single manufacturing site or even a single plant/factory is engaged in the production of a variety of intermediates, products or product groups from multiple business sectors at any given time. Considering also the fact that Merck offers several 100,000 products, direct allocation of GHG emissions to

specific products is very complex and would require an enormous effort and be costly. Also, most customers purchase multiple products that span across various manufacturing sites, making identification of GHG emissions specific to one customer even more complex. For instance, the companies asking us to respond to CDP Supply Chain purchase several hundreds of different products. Merck made huge progress in overall reporting of Scope 3 emissions in the past years and is able to report on all 15 categories. Projects are ongoing to improve data quality (e.g., switch from a spend-based approach to a weight-based approach to calculate scope 3, category 1 and 2 emissions). In 2022 we have started a pilot project to implement an IT tool for calculating portfolio product carbon footprints. In 2023 it was decided to move on with the implementation work for the whole Merck portfolio. This project is still ongoing. To ensure that we work based on industry standards and can rely on comparable data analytics and expert analysis, we collaborate with our peer companies in industry initiatives. For example, we are a member of Together for Sustainability (TfS). Since 2022, we support the development and launch of the TfS Product Carbon Footprint (PCF) Guideline, which harmonizes PCF calculation methodology across the industry, and led the development of decarbonization training materials for TfS member companies and their suppliers. This will be the basis for our way forward with regard to processes and tools for product carbon footprinting.
[Add row]

(7.28) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

(7.28.1) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Select from:
☑ Yes

(7.28.2) Describe how you plan to develop your capabilities

Merck will continue to refine data collection and GHG calculation methodologies along its value chain and to provide product portfolio related emissions data for our customers. Merck made huge progress in overall reporting of Scope 3 emissions in the past years and is able to report on all 15 categories. Projects are ongoing to improve data quality (e.g., switch from a spend-based approach to a weight-based approach to calculate scope 3, category 1 and 2 emissions). In 2022 we have started a pilot project to implement an IT tool for calculating portfolio product carbon footprints. In 2023 it was decided to move on with the implementation work for the whole Merck portfolio. This project is still ongoing. To ensure that we work based on industry standards and can rely on comparable data analytics and expert analysis, we collaborate with our peer companies in industry initiatives. For example, we are a member of Together for Sustainability (TfS). Since 2022, we support the development and launch of the TfS Product Carbon Footprint (PCF) Guideline, which harmonizes PCF calculation methodology across the industry, and led the development of decarbonization training materials for TfS member companies and their suppliers. This will be the basis for our way forward with regard to processes and tools for product carbon footprinting. Besides these short to mid-term activities our business sectors already work on the sustainability of our products since many years. We are committed to continuously improving and integrating sustainability and circular economy criteria to assess the sustainability performance of our products and portfolio. In our Life Science business sector, we work to reduce the adverse impacts of our products on health and the environment. This applies to the entire life cycle, from manufacture and use to end of life. At the same time, we seek to make our products more efficient and user-friendly, asking ourselves from the start of product development how to best reconcile these requirements. Through our Design for Sustainability (DfS) framework, we follow a comprehensive approach to increasing the sustainability of our Life Science products. The DfS development pillar provides our product developers with a systematic approach that enables

them to analyze product impacts in terms of materials used, energy and emissions, water, packaging, usability, innovation, and circular economy as well as supplier- and manufacturing-related issues. We have developed sustainability criteria that can be used to rank a product's performance in each of these areas. When developing a new product, our aim is to improve on as many of these criteria scores as possible. To understand the potential environmental impacts throughout the product life cycle, we conduct streamlined product life cycle analyses. The findings from these analyses help us to improve our products and are incorporated into subsequent development stages. In our Healthcare business sector, we aim to reduce any adverse impacts our medicines may have on the environment during their development, manufacture, transportation, use, and disposal. We are developing an overarching strategy to make our medicines, our medical devices and their packaging more ecologically sustainable and user-friendly. In 2022, we started to implement the Design for Sustainability framework in our Healthcare R&D approach. We will also establish a governance framework to integrate sustainability and define sustainability criteria for qualitative and quantitative scorecards that can be used to measure sustainability impacts. Our newly launched Green Biotech program helps to integrate sustainable innovation and state-of-the-art technology into our development processes and products along the clinical manufacturing value chain. This program is aligned with our Healthcare sustainability strategy to drive progress for more than one billion people through sustainable science and technology and is linked to other sustainability projects aimed at helping us achieve climate neutrality by 2040. In our Electronics business sector, we aim to reduce any potential adverse environmental impacts caused by the manufacture, packaging, transportation, use, and disposal of our products. According to our new principle, highly hazardous materials are to be avoided in our product development process wherever possible. Therefore, we have also prioritized new green and innovative materials that deliver sustainable value to our customers. Furthermore, the Electronics business sector launched a web-based application to automatically extract process and reaction data from research, development and manufacturing databases to calculate and evaluate carbon footprint of our operations. This allows sustainable decision making to reduce resource consumption as well as direct and indirect CO2 emissions from chemical processes. The app has been launched in September of 2022.
[Fixed row]

(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:*

	Indicate whether your organization undertook this energy-related activity in the reporting year
	☑ 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:* ☑ Yes
Generation of electricity, heat, steam, or cooling	*Select from:* ☑ Yes

[Fixed row]

(7.30.1) Report your organization’s energy consumption totals (excluding feedstocks) in MWh.

Consumption of fuel (excluding feedstock)

(7.30.1.1) Heating value

Select from:

☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

31242

(7.30.1.3) MWh from non-renewable sources

1194809

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

1226051.00

Consumption of purchased or acquired electricity

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

523468

(7.30.1.3) MWh from non-renewable sources

480287

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

1003755.00

Consumption of purchased or acquired heat

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

1205

(7.30.1.3) MWh from non-renewable sources

145901

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

147106.00

Consumption of purchased or acquired cooling

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

1537

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

1537.00

Consumption of self-generated non-fuel renewable energy

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

16271

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

16271.00

Total energy consumption

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

572186

(7.30.1.3) MWh from non-renewable sources

1822534

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

2394720.00
[Fixed row]

(7.30.6) Select the applications of your organization’s consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	*Select from:* ☑ Yes
Consumption of fuel for the generation of heat	*Select from:* ☑ Yes
Consumption of fuel for the generation of steam	*Select from:* ☑ Yes
Consumption of fuel for the generation of cooling	*Select from:* ☑ Yes
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

31242

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

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

31242

(7.30.7.5) MWh fuel consumed for self-generation of steam

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

Locally sourced certified forestry residues. Fuel is mainly used for generating heat/steam. We do not separate between heat and steam in our reporting.

Other biomass

(7.30.7.1) Heating value

Select from:
☑ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

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

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

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 applicable

Other renewable fuels (e.g. renewable hydrogen)

(7.30.7.1) Heating value

Select from:
☑ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

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

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

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 applicable

Coal

(7.30.7.1) Heating value

Select from:
☑ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

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

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

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

no coal usage

Oil

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

24382

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

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

24382

(7.30.7.5) MWh fuel consumed for self-generation of steam

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

Light fuel oil, diesel. Fuel is mainly used for the generation of heat/steam. Partly, light fuel oil/diesel is used to generate electricity in emergency generators as well as for transportation purposes. Data on the share of the fuels used for the different purposes is not available. Same applies for the distinction between heat and steam. Due to the very high level of detail these data are not collected on Merck Group level although available on site level.

Gas

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

1148361

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

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

1148361

(7.30.7.5) MWh fuel consumed for self-generation of steam

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

The major share of natural gas is used to generate heat/steam. At a few sites it used as well to generate electricity and cooling. This is partly done via self-cogeneration and self-trigeneration. Data on the share of the fuels used for the different purposes is not available. Same applies for the distinction between heat and steam. Due to the very high level of detail these data are not collected on Merck Group level although available on site level.

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

22066

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

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

22066

(7.30.7.5) MWh fuel consumed for self-generation of steam

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

Kerosene, LPG, biodiesel, gasoline. Fuels are mainly used to generate heat/steam. Data on the share of the fuels used for the different purposes is not available. Same applies for the distinction between heat and steam. Due to the very high level of detail these data are not collected on Merck Group level although available on site level.

Total fuel

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

1226091

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

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

1226091

(7.30.7.5) MWh fuel consumed for self-generation of steam

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

-
[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)

147363

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

147079

(7.30.9.3) Gross generation from renewable sources (MWh)

16554

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

16271

Heat

(7.30.9.1) Total Gross generation (MWh)

907695

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

907695

(7.30.9.3) Gross generation from renewable sources (MWh)

26556

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

26556

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)

54281

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

54281

(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:
☑ United States of America

(7.30.14.2) Sourcing method

Select from:
☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

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

40000

(7.30.14.6) Tracking instrument used

Select from:

☑ US-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ United States of America

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

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

2023

(7.30.14.10) Comment

Based on one single-source contract from Eiffel Solar, Texas

Row 2

(7.30.14.1) Country/area

Select from:
☑ United States of America

(7.30.14.2) Sourcing method

Select from:
☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Renewable energy mix, please specify **:**Solar, Wind

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

12118

(7.30.14.6) Tracking instrument used

Select from:
☑ US-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:
☑ United States of America

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:
☑ No

(7.30.14.10) Comment

-

Row 3

(7.30.14.1) Country/area

Select from:
☑ United States of America

(7.30.14.2) Sourcing method

Select from:
☑ Financial (virtual) power purchase agreement (VPPA)

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Wind

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

219979

(7.30.14.6) Tracking instrument used

Select from:
☑ Contract

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:
☑ United States of America

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:
☑ Yes

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

2022

(7.30.14.10) Comment

12-year Virtual Power Purchase Agreement (VPPA) with the Azure Sky Wind and Storage project. The project went into commercial operation in May 2022.

Row 4

(7.30.14.1) Country/area

Select from:
☑ United States of America

(7.30.14.2) Sourcing method

Select from:

☑ Financial (virtual) power purchase agreement (VPPA)

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Solar

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

8871

(7.30.14.6) Tracking instrument used

Select from:
☑ Contract

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:
☑ United States of America

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:
☑ Yes

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

2024

(7.30.14.10) Comment

Virtual Power Purchase Agreement (VPPA) with the Liberty County Solar project. The project went into commercial operation in September 2024.

Row 5

(7.30.14.1) Country/area

Select from:
☑ United States of America

(7.30.14.2) Sourcing method

Select from:
☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Renewable energy mix, please specify **:**Wind, Solar

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

12746

(7.30.14.6) Tracking instrument used

Select from:
☑ No instrument used

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ United States of America

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

-

Row 6

(7.30.14.1) Country/area

Select from:

☑ Switzerland

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Large hydropower (>25 MW)

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

63395

(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:

☑ Switzerland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

The Merck Group procures the "Wasser Schweiz" electricity product for its sites in Switzerland. This energy comes exclusively from ewz's own hydropower plants. ewz operates 22 hydropower plants in Switzerland. They were in operation between 1877 and 2021 and are being renovated or renewed on an ongoing basis.

Row 7

(7.30.14.1) Country/area

Select from:

☑ Switzerland

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Large hydropower (>25 MW)

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

220

(7.30.14.6) Tracking instrument used

Select from:

☑ No instrument used

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Switzerland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

-

Row 8

(7.30.14.1) Country/area

Select from:

☑ Switzerland

(7.30.14.2) Sourcing method

Select from:

☑ Purchase from an on-site installation owned by a third party (on-site PPA)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

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

16

(7.30.14.6) Tracking instrument used

Select from:

☑ Other, please specify **:**On-site PPA

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Switzerland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

(7.30.14.10) Comment

Purchase from a solar on-site installation owned by a third party (on-site PPA) in Switzerland.

Row 9

(7.30.14.1) Country/area

Select from:

☑ Italy

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify **:**Solar, Wind

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

20720

(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:
☑ Italy

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:
☑ No

(7.30.14.10) Comment

Solar + Wind from Italy, less than 15 years old assets.

Row 10

(7.30.14.1) Country/area

Select from:
☑ Italy

(7.30.14.2) Sourcing method

Select from:
☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Solar, Wind

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

153

(7.30.14.6) Tracking instrument used

Select from:

☑ No instrument used

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Italy

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

-

Row 11

(7.30.14.1) Country/area

Select from:

☑ Spain

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

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

18860

(7.30.14.6) Tracking instrument used

Select from:

☑ GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Spain

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

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

2017

(7.30.14.10) Comment

-

Row 12

(7.30.14.1) Country/area

Select from:
☑ Ireland

(7.30.14.2) Sourcing method

Select from:
☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Wind

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

31741

(7.30.14.6) Tracking instrument used

Select from:
☑ No instrument used

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Ireland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

-

Row 13

(7.30.14.1) Country/area

Select from:

☑ Netherlands

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

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

2429

(7.30.14.6) Tracking instrument used

Select from:

☑ No instrument used

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Netherlands

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

-

Row 14

(7.30.14.1) Country/area

Select from:

☑ United Kingdom of Great Britain and Northern Ireland

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

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

20024

(7.30.14.6) Tracking instrument used

Select from:

☑ No instrument used

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ United Kingdom of Great Britain and Northern Ireland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

-

Row 15

(7.30.14.1) Country/area

Select from:

☑ Brazil

(7.30.14.2) Sourcing method

Select from:

☑ Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Wind

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

17417

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Brazil

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:
☑ Yes

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

2017

(7.30.14.10) Comment

-

Row 16

(7.30.14.1) Country/area

Select from:
☑ Argentina

(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)

1200

(7.30.14.6) Tracking instrument used

Select from:
☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:
☑ Argentina

(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)

2019

(7.30.14.10) Comment

-

Row 17

(7.30.14.1) Country/area

Select from:
☑ Colombia

(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:
☑ Small hydropower (<25 MW)

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

95

(7.30.14.6) Tracking instrument used

Select from:
☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:
☑ Colombia

(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)

2016

(7.30.14.10) Comment

-

Row 18

(7.30.14.1) Country/area

Select from:
☑ Ecuador

(7.30.14.2) Sourcing method

Select from:
☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Solar

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

6

(7.30.14.6) Tracking instrument used

Select from:
☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Ecuador

(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

-

Row 19

(7.30.14.1) Country/area

Select from:

☑ Australia

(7.30.14.2) Sourcing method

Select from:

☑ Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :Solar, Wind

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

106

(7.30.14.6) Tracking instrument used

Select from:

☑ No instrument used

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Australia

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

-

Row 20

(7.30.14.1) Country/area

Select from:

☑ Chile

(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)

995

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Chile

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

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

2020

(7.30.14.10) Comment

-

Row 21

(7.30.14.1) Country/area

Select from:
☑ China

(7.30.14.2) Sourcing method

Select from:
☑ Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Renewable energy mix, please specify :Solar, Wind

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

36788

(7.30.14.6) Tracking instrument used

Select from:

☑ GEC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:
☑ China

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:
☑ No

(7.30.14.10) Comment

-

Row 22

(7.30.14.1) Country/area

Select from:
☑ Guatemala

(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:

☑ Small hydropower (<25 MW)

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

269

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Guatemala

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

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

2017

(7.30.14.10) Comment

-

Row 23

(7.30.14.1) Country/area

Select from:

☑ Mexico

(7.30.14.2) Sourcing method

Select from:
☑ Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:
☑ Solar

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

13205

(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:
☑ Mexico

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:
☑ Yes

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

2022

(7.30.14.10) Comment

-

Row 24

(7.30.14.1) Country/area

Select from:
☑ Peru

(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:
☑ Small hydropower (<25 MW)

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

118

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Peru

(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)

2012

(7.30.14.10) Comment

-

Row 25

(7.30.14.1) Country/area

Select from:

☑ Uruguay

(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)

953

(7.30.14.6) Tracking instrument used

Select from:
☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:
☑ Argentina

(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)

2019

(7.30.14.10) Comment

-

Row 26

(7.30.14.1) Country/area

Select from:

☑ Japan

(7.30.14.2) Sourcing method

Select from:

☑ Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Solar

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

180

(7.30.14.6) Tracking instrument used

Select from:

☑ NFC – Renewable

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Japan

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ Yes

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

2024

(7.30.14.10) Comment

-

Row 27

(7.30.14.1) Country/area

Select from:

☑ Indonesia

(7.30.14.2) Sourcing method

Select from:

☑ Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Hydropower (capacity unknown)

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

860

(7.30.14.6) Tracking instrument used

Select from:
☑ TIGR

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:
☑ Indonesia

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:
☑ No

(7.30.14.10) Comment

-

Row 28

(7.30.14.1) Country/area

Select from:
☑ Switzerland

(7.30.14.2) Sourcing method

Select from:
☑ Direct line to an off-site generator owned by a third party with no grid transfers (direct line PPA)

(7.30.14.3) Energy carrier

Select from:

☑ Heat

(7.30.14.4) Low-carbon technology type

Select from:

☑ Sustainable biomass

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

1205

(7.30.14.6) Tracking instrument used

Select from:

☑ No instrument used

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Switzerland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

-

[Add row]

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

Algeria

(7.30.16.1) Consumption of purchased electricity (MWh)

61

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

0

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

0

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

0

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

61.00

Argentina

(7.30.16.1) Consumption of purchased electricity (MWh)

1200

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

0

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

0

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

0

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

1200.00

Australia

(7.30.16.1) Consumption of purchased electricity (MWh)

184

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

0

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

0

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

0

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

184.00

Austria

(7.30.16.1) Consumption of purchased electricity (MWh)

71

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

0

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

500

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

0

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

571.00

Belgium

(7.30.16.1) Consumption of purchased electricity (MWh)

40

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

0

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

0

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

0

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

40.00

Brazil

(7.30.16.1) Consumption of purchased electricity (MWh)

17417

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

0

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

0

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

0

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

17417.00

Bulgaria

(7.30.16.1) Consumption of purchased electricity (MWh)

22

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

0

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

38

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

0

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

60.00

Canada

(7.30.16.1) Consumption of purchased electricity (MWh)

1866

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

0

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

0

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

0

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

1866.00

Chile

(7.30.16.1) Consumption of purchased electricity (MWh)

995

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

0

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

0

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

0

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

995.00

China

(7.30.16.1) Consumption of purchased electricity (MWh)

64778

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

0

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

23854

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

0

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

88632.00

Colombia

(7.30.16.1) Consumption of purchased electricity (MWh)

95

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

0

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

0

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

0

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

95.00

Croatia

(7.30.16.1) Consumption of purchased electricity (MWh)

213

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

0

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

0

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

0

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

213.00

Czechia

(7.30.16.1) Consumption of purchased electricity (MWh)

64

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

0

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

129

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

0

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

193.00

Denmark

(7.30.16.1) Consumption of purchased electricity (MWh)

20

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

0

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

20

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

0

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

40.00

Ecuador

(7.30.16.1) Consumption of purchased electricity (MWh)

6

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

0

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

0

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

0

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

6.00

Egypt

(7.30.16.1) Consumption of purchased electricity (MWh)

206

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

0

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

0

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

0

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

206.00

France

(7.30.16.1) Consumption of purchased electricity (MWh)

58473

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

0

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

35448

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

0

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

93921.00

Germany

(7.30.16.1) Consumption of purchased electricity (MWh)

68438

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

0

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

8361

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

0

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

76799.00

Greece

(7.30.16.1) Consumption of purchased electricity (MWh)

69

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

0

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

0

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

0

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

69.00

Guatemala

(7.30.16.1) Consumption of purchased electricity (MWh)

269

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

0

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

0

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

0

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

269.00

Hungary

(7.30.16.1) Consumption of purchased electricity (MWh)

65

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

0

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

0

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

0

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

65.00

India

(7.30.16.1) Consumption of purchased electricity (MWh)

11972

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

0

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

0

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

0

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

11972.00

Indonesia

(7.30.16.1) Consumption of purchased electricity (MWh)

5026

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

0

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

0

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

0

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

5026.00

Ireland

(7.30.16.1) Consumption of purchased electricity (MWh)

31741

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

0

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

0

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

0

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

31741.00

Israel

(7.30.16.1) Consumption of purchased electricity (MWh)

15573

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

0

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

0

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

0

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

15573.00

Italy

(7.30.16.1) Consumption of purchased electricity (MWh)

20928

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

0

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

0

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

0

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

20928.00

Japan

(7.30.16.1) Consumption of purchased electricity (MWh)

27204

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

0

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

0

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

0

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

27204.00

Malaysia

(7.30.16.1) Consumption of purchased electricity (MWh)

338

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

0

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

0

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

0

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

338.00

Mexico

(7.30.16.1) Consumption of purchased electricity (MWh)

13340

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

0

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

0

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

0

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

13340.00

Netherlands

(7.30.16.1) Consumption of purchased electricity (MWh)

2778

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

0

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

0

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

0

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

2778.00

Peru

(7.30.16.1) Consumption of purchased electricity (MWh)

118

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

0

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

0

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

0

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

118.00

Philippines

(7.30.16.1) Consumption of purchased electricity (MWh)

1286

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

0

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

0

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

0

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

1286.00

Poland

(7.30.16.1) Consumption of purchased electricity (MWh)

242

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

0

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

0

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

0

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

242.00

Portugal

(7.30.16.1) Consumption of purchased electricity (MWh)

64

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

0

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

0

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

0

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

64.00

Republic of Korea

(7.30.16.1) Consumption of purchased electricity (MWh)

91227

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

0

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

600

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

0

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

91827.00

Russian Federation

(7.30.16.1) Consumption of purchased electricity (MWh)

503

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

0

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

510

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

0

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

1013.00

Singapore

(7.30.16.1) Consumption of purchased electricity (MWh)

2230

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

0

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

492

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

0

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

2722.00

Slovakia

(7.30.16.1) Consumption of purchased electricity (MWh)

24

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

0

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

0

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

0

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

24.00

Slovenia

(7.30.16.1) Consumption of purchased electricity (MWh)

3

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

0

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

0

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

0

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

3.00

South Africa

(7.30.16.1) Consumption of purchased electricity (MWh)

227

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

0

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

0

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

0

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

227.00

Spain

(7.30.16.1) Consumption of purchased electricity (MWh)

18995

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

0

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

0

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

0

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

18995.00

Switzerland

(7.30.16.1) Consumption of purchased electricity (MWh)

70342

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

0

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

8742

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

0

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

79084.00

Taiwan, China

(7.30.16.1) Consumption of purchased electricity (MWh)

21831

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

0

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

0

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

0

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

21831.00

Thailand

(7.30.16.1) Consumption of purchased electricity (MWh)

943

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

0

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

0

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

0

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

943.00

Tunisia

(7.30.16.1) Consumption of purchased electricity (MWh)

132

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

0

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

0

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

0

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

132.00

Turkey

(7.30.16.1) Consumption of purchased electricity (MWh)

108

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

0

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

178

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

0

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

286.00

United Arab Emirates

(7.30.16.1) Consumption of purchased electricity (MWh)

167

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

0

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

396

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

0

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

563.00

United Kingdom of Great Britain and Northern Ireland

(7.30.16.1) Consumption of purchased electricity (MWh)

20638

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

0

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

0

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

0

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

20638.00

United States of America

(7.30.16.1) Consumption of purchased electricity (MWh)

429110

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

0

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

69376

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

0

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

498486.00

Uruguay

(7.30.16.1) Consumption of purchased electricity (MWh)

953

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

0

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

0

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

0

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

953.00

Viet Nam

(7.30.16.1) Consumption of purchased electricity (MWh)

1160

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

0

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

0

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

0

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

1160.00
[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

0.00005

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

1084617

(7.45.3) Metric denominator

Select from:
☑ unit total revenue

(7.45.4) Metric denominator: Unit total

21156000000

(7.45.5) Scope 2 figure used

Select from:

☑ Market-based

(7.45.6) % change from previous year

29

(7.45.7) Direction of change

Select from:
☑ Decreased

(7.45.8) Reasons for change

Select all that apply
☑ Change in renewable energy consumption
☑ Other emissions reduction activities
☑ Change in revenue

(7.45.9) Please explain

GHG emissions decreased strongly mainly because of emission reduction activities whereas revenue increased slightly.
[Add row]

(7.52) Provide any additional climate-related metrics relevant to your business.

	Description
Row 1	*Select from:* ☑ Other, please specify :n/a

[Add row]

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

Select all that apply

☑ Absolute target

☑ Intensity target

(7.53.1) Provide details of your absolute emissions targets and progress made against those targets.

Row 1

(7.53.1.1) Target reference number

Select from:

☑ Abs 1

(7.53.1.2) Is this a science-based target?

Select from:

☑ Yes, and this target has been approved by the Science Based Targets initiative

(7.53.1.3) Science Based Targets initiative official validation letter

2022-04-27 Merck KGaA Certificate_D02.pdf

(7.53.1.4) Target ambition

Select from:

☑ 1.5°C aligned

(7.53.1.5) Date target was set

05/30/2022

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

☑ Carbon dioxide (CO2)

☑ Perfluorocarbons (PFCs)

☑ Hydrofluorocarbons (HFCs)

☑ Sulphur hexafluoride (SF6)

☑ Nitrogen trifluoride (NF3)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.53.1.9) Scope 2 accounting method

Select from:

☑ Market-based

(7.53.1.11) End date of base year

12/31/2020

(7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

1827123

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

324698

(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)

2151821.000

(7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

(7.53.1.34) Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

(7.53.1.54) End date of target

12/31/2030

(7.53.1.55) Targeted reduction from base year (%)

50

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

1075910.500

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

857547

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

227070

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

1084617.000

(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

99.19

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

This target covers the whole Merck Group (operational control as specified in this questionnaire). In 2020/2021, Merck set itself a new set of climate goals. By 2030, we intend to lower our direct (Scope 1) and indirect (Scope 2) emissions by 50% (2020 baseline). Merck also commits to reduce scope 3 GHG emissions 52% per euro value added within the same timeframe. Both targets have been approved by the SBTi in May 2022. By 2040, we intend to achieve climate neutral operations along our entire value chain. This target covers our Scope 1, 2 and 3 greenhouse gas emissions.

(7.53.1.83) Target objective

By 2030, we intend to reduce our Scope 1&2 emissions by 50% based on the base year 2020.

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

Plan for achieving target: At this time, we see three main levers to reduce our scope 1 and 2 emissions: (1) Reduction of our process-related emissions, (2) Purchase of renewable electricity, (3) Improvements in energy efficiency/energy saving. Progress made: In 2024 we reduced our scope 1 and 2 emissions by almost 50% compared to 2020. The strong decrease in our scope 1 emissions was mainly triggered by improvement projects to reduce our process-related emissions. A higher share of electricity procured from renewable sources (52%, 2020: 27%) caused the decrease of approx. 30% in our scope 2 emissions.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No

Row 2

(7.53.1.1) Target reference number

Select from:

☑ Abs 2

(7.53.1.2) Is this a science-based target?

Select from:

☑ No, but we are reporting another target that is science-based

(7.53.1.5) Date target was set

06/29/2021

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

☑ Sulphur hexafluoride (SF6)

☑ Nitrous oxide (N2O)
☑ Carbon dioxide (CO2)
☑ Perfluorocarbons (PFCs)
☑ Hydrofluorocarbons (HFCs)
☑ Nitrogen trifluoride (NF3)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 1
☑ Scope 2
☑ Scope 3

(7.53.1.9) Scope 2 accounting method

Select from:

☑ Market-based

(7.53.1.10) Scope 3 categories

Select all that apply

☑ Scope 3, Category 15 – Investments
☑ Scope 3, Category 2 – Capital goods
☑ Scope 3, Category 6 – Business travel
☑ Scope 3, Category 7 – Employee commuting
☑ Scope 3, Category 11 – Use of sold products
☑ Scope 3, Category 9 – Downstream transportation and distribution
☑ Scope 3, Category 3 – Fuel- and energy- related activities (not included in Scope 1 or 2)
☑ Scope 3, Category 13 – Downstream leased assets
☑ Scope 3, Category 1 – Purchased goods and services
☑ Scope 3, Category 5 – Waste generated in operations
☑ Scope 3, Category 12 – End-of-life treatment of sold products
☑ Scope 3, Category 4 – Upstream transportation and distribution

(7.53.1.11) End date of base year

12/31/2020

(7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

1827123

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

324698

(7.53.1.14) Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

3040000

(7.53.1.15) Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

293000

(7.53.1.16) Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

102528

(7.53.1.17) Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

264397

(7.53.1.18) Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

85047

(7.53.1.19) Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

32157

(7.53.1.20) Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

89571

(7.53.1.22) Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

8435

(7.53.1.24) Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

1163923

(7.53.1.25) Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

23351

(7.53.1.26) Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

1678

(7.53.1.28) Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

421

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

5104508.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

7256329.000

(7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100.0

(7.53.1.34) Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100.0

(7.53.1.35) Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

100

(7.53.1.36) Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

100

(7.53.1.37) Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

100

(7.53.1.38) Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

100

(7.53.1.39) Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

100

(7.53.1.40) Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

100

(7.53.1.41) Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

100

(7.53.1.43) Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

100

(7.53.1.45) Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

100

(7.53.1.46) Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

100

(7.53.1.47) Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

100

(7.53.1.49) Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

100

(7.53.1.52) Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

100.0

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100.0

(7.53.1.54) End date of target

12/31/2040

(7.53.1.55) Targeted reduction from base year (%)

100

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

0.000

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

857547

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

227070

(7.53.1.59) Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

2470278

(7.53.1.60) Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

371086

(7.53.1.61) Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

112528

(7.53.1.62) Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

231580

(7.53.1.63) Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

26901

(7.53.1.64) Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

106060

(7.53.1.65) Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

77061

(7.53.1.67) Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

7922

(7.53.1.69) Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

1021008

(7.53.1.70) Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

55816

(7.53.1.71) Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

1722

(7.53.1.73) Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

974

(7.53.1.76) Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

4482936.000

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

5567553.000

(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

23.27

(7.53.1.80) Target status in reporting year

Select from:
☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

This target covers the whole Merck Group (operational control as specified in this questionnaire). In 2020/2021, Merck set itself a new set of climate goals. By 2030, we intend to lower our direct (Scope 1) and indirect (Scope 2) emissions by 50% (2020 baseline). Merck also commits to reduce scope 3 GHG emissions 52% per euro value added within the same timeframe. Both targets have been approved by the SBTi in May 2022. By 2040, we intend to achieve climate neutral operations along our entire value chain. This target covers our Scope 1, 2 and 3 greenhouse gas emissions.

(7.53.1.83) Target objective

By 2040, we intend to achieve climate neutral operations along our entire value chain. This target covers our Scope 1, 2 and 3 greenhouse gas emissions.

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

Plan for achieving target: At this time, we see three main levers to reduce our scope 1 and 2 emissions: (1) Reduction of our process-related emissions, (2) Purchase of renewable electricity, (3) Improvements in energy efficiency/energy saving. With regard to our scope 3 emissions we see for instance these levers: (1) Encourage decarbonization of value chain (e.g. Drive top tier 1 suppliers to switch from grid electricity to renewable electricity in production of raw materials), (2) Reduction of emissions in transport sector (e.g. air to ocean freight), (3) New innovative products with renewable raw materials or circularity, (4) Optimize product design to reduce emissions from packaging and raw material, (5) Encourage our customers to reduce their scope 1 emissions related to our products, (6) Reduce share of landfilled and incinerated waste in own operations. Progress made: Merck's overall emissions decreased by approx. 23% in 2024 compared to 2020. While our scope 1 and 2 emissions decreased by almost 50%, our scope 3 emissions decreased by approx. 12%. The decrease in our scope 1 and 2 emissions was mainly triggered by improvement projects to reduce our process-related emissions, by a higher share of electricity from renewable sources and by lower production volumes. The decrease in scope 3 emissions and emissions intensity was mainly caused by methodical reasons (updated EEIO emission factors).

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No

[Add row]

(7.53.2) Provide details of your emissions intensity targets and progress made against those targets.

Row 1

(7.53.2.1) Target reference number

Select from:

☑ Int 1

(7.53.2.2) Is this a science-based target?

Select from:

☑ Yes, and this target has been approved by the Science Based Targets initiative

(7.53.2.3) Science Based Targets initiative official validation letter

Science-Based-Targets-Initiative-SBTi-EN (5).pdf

(7.53.2.4) Target ambition

Select from:

☑ Other, please specify **:**Our Scope 1&2 target is 1.5°C aligned. Overall, our Scope 1,2&3 targets were approved by SBTi in May 2022.

(7.53.2.5) Date target was set

06/30/2022

(7.53.2.6) Target coverage

Select from:

☑ Organization-wide

(7.53.2.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

☑ Carbon dioxide (CO2)

☑ Perfluorocarbons (PFCs)

☑ Hydrofluorocarbons (HFCs)

☑ Nitrogen trifluoride (NF3)

☑ Sulphur hexafluoride (SF6)

(7.53.2.8) Scopes

Select all that apply

☑ Scope 3

(7.53.2.10) Scope 3 categories

Select all that apply

☑ Category 15: Investments

☑ Category 2: Capital goods

☑ Category 6: Business travel

☑ Category 7: Employee commuting

☑ Category 11: Use of sold products

☑ Category 9: Downstream transportation and distribution

☑ Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

☑ Category 13: Downstream leased assets

☑ Category 1: Purchased goods and services

☑ Category 5: Waste generated in operations

☑ Category 12: End-of-life treatment of sold products

☑ Category 4: Upstream transportation and distribution

(7.53.2.11) Intensity metric

Select from:

☑ Other, please specify **:**Metric tons CO2e per EURO value-added

(7.53.2.12) End date of base year

12/30/2020

(7.53.2.15) Intensity figure in base year for Scope 3, Category 1: Purchased goods and services

0.00004

(7.53.2.16) Intensity figure in base year for Scope 3, Category 2: Capital goods

0.00004

(7.53.2.17) Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

0.00004

(7.53.2.18) Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution

0.00004

(7.53.2.19) Intensity figure in base year for Scope 3, Category 5: Waste generated in operations

0.00004

(7.53.2.20) Intensity figure in base year for Scope 3, Category 6: Business travel

0.00004

(7.53.2.21) Intensity figure in base year for Scope 3, Category 7: Employee commuting

0.00004

(7.53.2.23) Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution

0.00004

(7.53.2.25) Intensity figure in base year for Scope 3, Category 11: Use of sold products

0.00004

(7.53.2.26) Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products

0.00004

(7.53.2.27) Intensity figure in base year for Scope 3, Category 13: Downstream leased assets

0.00004

(7.53.2.29) Intensity figure in base year for Scope 3, Category 15: Investments

0.00004

(7.53.2.32) Intensity figure in base year for total Scope 3

0.0004800000

(7.53.2.33) Intensity figure in base year for all selected Scopes

0.0004800000

(7.53.2.36) % of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

100

(7.53.2.37) % of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

100

(7.53.2.38) % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

100

(7.53.2.39) % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

100

(7.53.2.40) % of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

100

(7.53.2.41) % of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure

100

(7.53.2.42) % of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure

100

(7.53.2.44) % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

100

(7.53.2.46) % of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

100

(7.53.2.47) % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

100

(7.53.2.48) % of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure

100

(7.53.2.50) % of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure

100

(7.53.2.53) % of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

100

(7.53.2.54) % of total base year emissions in all selected Scopes covered by this intensity figure

100

(7.53.2.55) End date of target

12/30/2029

(7.53.2.56) Targeted reduction from base year (%)

52

(7.53.2.57) Intensity figure at end date of target for all selected Scopes

0.0002304000

(7.53.2.59) % change anticipated in absolute Scope 3 emissions

-2

(7.53.2.62) Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services

0.00003

(7.53.2.63) Intensity figure in reporting year for Scope 3, Category 2: Capital goods

0.00003

(7.53.2.64) Intensity figure in reporting year for Scope 3, Category 3: Fuel- and energy-related activities

0.00003

(7.53.2.65) Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution

0.00003

(7.53.2.66) Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations

0.00003

(7.53.2.67) Intensity figure in reporting year for Scope 3, Category 6: Business travel

0.00003

(7.53.2.68) Intensity figure in reporting year for Scope 3, Category 7: Employee commuting

0.00003

(7.53.2.70) Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution

0.00003

(7.53.2.72) Intensity figure in reporting year for Scope 3, Category 11: Use of sold products

0.00003

(7.53.2.73) Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products

0.00003

(7.53.2.74) Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets

0.00003

(7.53.2.76) Intensity figure in reporting year for Scope 3, Category 15: Investments

0.00003

(7.53.2.79) Intensity figure in reporting year for total Scope 3

0.0003600000

(7.53.2.80) Intensity figure in reporting year for all selected Scopes

0.0003600000

(7.53.2.81) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.2.82) % of target achieved relative to base year

48.08

(7.53.2.83) Target status in reporting year

Select from:

☑ Underway

(7.53.2.85) Explain target coverage and identify any exclusions

This target covers the whole Merck Group (operational control as specified in this questionnaire). In 2020/2021, Merck set itself a new set of climate goals. By 2030, we intend to lower our direct (Scope 1) and indirect (Scope 2) emissions by 50% (2020 baseline). Merck also commits to reduce scope 3 GHG emissions 52% per euro value added within the same timeframe. Both targets have been approved by the SBTi in May 2022. By 2040, we intend to achieve climate neutral operations along our entire value chain. This target covers our Scope 1, 2 and 3 greenhouse gas emissions.

(7.53.2.86) Target objective

Reducing greenhouse gas emissions along the entire value chain (Scope 3) by 52% per Euro value added by 2030.

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

Plan for achieving target: At this time, we see three main levers to reduce our scope 1 and 2 emissions: (1) Reduction of our process-related emissions, (2) Purchase of renewable electricity, (3) Improvements in energy efficiency/energy saving. With regard to our scope 3 emissions we see for instance these levers: (1) Encourage decarbonization of value chain (e.g. Drive top tier 1 suppliers to switch from grid electricity to renewable electricity in production of raw materials), (2) Reduction of emissions in transport sector (e.g. air to ocean freight), (3) New innovative products with renewable raw materials or circularity, (4) Optimize product design to reduce emissions from packaging and raw material, (5) Encourage our customers to reduce their scope 1 emissions related to our products, (6) Reduce share of landfilled and incinerated waste in own operations. Progress made: Merck's overall emissions decreased by approx. 23% in 2024 compared to 2020. While our scope 1 and 2 emissions decreased by almost 50%, our scope 3 emissions decreased by approx. 12%. The decrease in our scope 1 and 2 emissions was mainly triggered by improvement projects to reduce our process-related emissions, by a higher share of electricity from renewable sources and by lower production volumes. The decrease in scope 3 emissions and emissions intensity was mainly caused by methodical reasons (updated EEIO emission factors).

(7.53.2.88) 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

☑ Targets to increase or maintain low-carbon energy consumption or production

☑ Other climate-related targets

(7.54.1) Provide details of your targets to increase or maintain low-carbon energy consumption or production.

Row 1

(7.54.1.1) Target reference number

Select from:

☑ Low 1

(7.54.1.2) Date target was set

06/29/2021

(7.54.1.3) Target coverage

Select from:

☑ Organization-wide

(7.54.1.4) Target type: energy carrier

Select from:

☑ Electricity

(7.54.1.5) Target type: activity

Select from:

☑ Consumption

(7.54.1.6) Target type: energy source

Select from:

☑ Renewable energy source(s) only

(7.54.1.7) End date of base year

12/31/2020

(7.54.1.8) Consumption or production of selected energy carrier in base year (MWh)

950099

(7.54.1.9) % share of low-carbon or renewable energy in base year

27

(7.54.1.10) End date of target

12/31/2030

(7.54.1.11) % share of low-carbon or renewable energy at end date of target

80

(7.54.1.12) % share of low-carbon or renewable energy in reporting year

52

(7.54.1.13) % of target achieved relative to base year

47.17

(7.54.1.14) Target status in reporting year

Select from:

☑ Underway

(7.54.1.16) Is this target part of an emissions target?

This target is part of a set of emission targets. By 2030, we intend to lower our direct (Scope 1) and indirect (Scope 2) emissions by 50% (2020 baseline). This target was approved as a Science-Based Target by the SBTi in May 2022. [Abs1] By 2040, we intend to achieve climate neutral operations along our entire value chain. This target covers our Scope 1, 2 and 3 greenhouse gas emissions. [Abs2]

(7.54.1.17) Is this target part of an overarching initiative?

Select all that apply

☑ No, it's not part of an overarching initiative

(7.54.1.19) Explain target coverage and identify any exclusions

This target covers the whole Merck Group (operational control as specified in this questionnaire).

(7.54.1.20) Target objective

Increase share of purchased renewable electricity.

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

Plan for achieving target: Merck's renewable electricity strategy is to go continent-wise. After signing a 12-year Virtual Power Purchase Agreement (VPPA) with the Azure Sky Wind and Storage project in the US, the project went into commercial operation in May 2022. Furthermore, in 2022, we expanded our renewable energy commitment in the US through another VPPA (Liberty County Solar project, 40 MW) with a 16-year term. With these two deals, we cover 90% of the company's electricity consumption in the United States and 55% globally. We are covering the power needs of multiple South American sites (for example Argentina, Chile, Guatemala) through renewable energy certificates. The same applies to several of our sites in China. In 2023, we signed virtual power purchase agreements (VPPAs) in Europe for a total of around 300 gigawatt hours (GWh) of renewable energy per year. This means that 100% of our electricity currently purchased in the European Union (EU) and Switzerland will be covered with renewable energy certificates as of 2025. Besides this, we are actively investigating in possible solutions for the APAC market. Progress made: In 2024, we sourced approx. 52% of our purchased electricity from renewable energies, meaning direct supply contracts and energy attribute certificates.
[Add row]

(7.54.2) Provide details of any other climate-related targets, including methane reduction targets.

Row 1

(7.54.2.1) Target reference number

Select from:
☑ Oth 1

(7.54.2.2) Date target was set

06/29/2023

(7.54.2.3) Target coverage

Select from:
☑ Organization-wide

(7.54.2.4) Target type: absolute or intensity

Select from:
☑ Absolute

(7.54.2.5) Target type: category & metric (target numerator if reporting an intensity target)

Waste management

☑ Other waste management, please specify :Our circularity rate is calculated as waste and avoided waste divided by total waste and avoidance in metric tons. All production waste from all our sites is included in the calculation.

(7.54.2.7) End date of base year

12/30/2022

(7.54.2.8) Figure or percentage in base year

64.1

(7.54.2.9) End date of target

12/30/2030

(7.54.2.10) Figure or percentage at end of date of target

70

(7.54.2.11) Figure or percentage in reporting year

69.2

(7.54.2.12) % of target achieved relative to base year

86.4406779661

(7.54.2.13) Target status in reporting year

Select from:

☑ Underway

(7.54.2.15) Is this target part of an emissions target?

No, but it supports our activities with regard to GHG emission reduction. We use the Circularity Rate to systematically track the environmental footprint of our waste disposal activities. We aim to achieve a circularity rate of 70% throughout the company as part of our waste target 2030. By reducing the overall waste quantities and by disposing of existing waste in more environmentally friendly ways (more recycling, less landfilling etc.), this waste target helps to reduce our Scope 3, category 5 GHG emissions.

(7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ No, it's not part of an overarching initiative

(7.54.2.18) Please explain target coverage and identify any exclusions

This target covers the whole Merck Group (operational control as specified in this questionnaire). Our circularity rate is calculated as waste and avoided waste divided by total waste and avoidance in metric tons. All production waste from all our sites is included in the calculation. Waste-to-energy is excluded from this calculation as it is not considered as recycling. The scope of measurement includes production waste but excludes one-time effects from specific waste streams such as sludge from wastewater treatment facilities (subject to disposal restrictions by regulators), construction and demolition waste, and soil waste, which can rarely be avoided and must be disposed of in accordance with clearly prescribed methods. These targets are set based on conclusive scientific evidence.

(7.54.2.19) Target objective

We aim to achieve a circularity rate of 70% throughout the company as part of our waste target 2030. Our circularity rate is calculated as waste and avoided waste divided by total waste and avoidance in metric tons.

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

Our waste target for 2030 requires the reuse and material recycling of waste, which can then be reused as nonvirgin materials. The avoidance of waste is tracked through the reduced use of raw materials and contributes to our ambitions. In addition, recycling of waste for reuse reduces the use of virgin materials. We adhere to the waste hierarchy for our waste treatment options. The term waste hierarchy refers to a framework that prioritizes waste management strategies according to their environmental impact. We follow the order below: prevention (reducing waste generation at the source), minimization (reducing the amount of waste produced), reuse (finding ways to use items more than once before disposal), recycling (processing waste materials to create new products), recovery (extracting energy or material from waste), disposal (Safely disposing of waste that cannot be managed through the above methods). This means prioritizing treatment options that are higher up the waste hierarchy. Our top priority is the prevention of waste. This hierarchy guides our sustainability efforts and emphasizes the importance of minimizing waste and maximizing resource efficiency. Our Waste Goal 2030 relates to prevention, reuse, and recycling.
[Add row]

(7.55) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Select from:
☑ Yes

(7.55.1) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e
Under investigation	*0*	*`Numeric input*
To be implemented	*66*	*213448*
Implementation commenced	*0*	*0*
Implemented	*26*	*402238*
Not to be implemented	*0*	*`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

Non-energy industrial process emissions reductions
☑ Other, please specify **:**Reduction of process-related emissions (NF3, PFC-116)

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

398398

(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 1.2)

0

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

40000000

(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

In our business sector Electronics we were implementing abatement projects at our Ulsan, South Korea, and Hometown, USA, sites to reduce NF3 emissions. In our business sector Life Science we continued our process gas reduction initiative to reduce our reliance on high-GWP fluorinated carbons (PFC-116)

Row 2

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

☑ Heating, Ventilation and Air Conditioning (HVAC)

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

1504

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

Select all that apply

☑ Scope 1

☑ 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 1.2)

250000

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

2200000

(7.55.2.7) Payback period

Select from:
☑ 11-15 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:
☑ 6-10 years

(7.55.2.9) Comment

Various projects on HVAC optimizations with mixed paybacks

Row 3

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings
☑ Lighting

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

63

(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 1.2)

86000

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

480000

(7.55.2.7) Payback period

Select from:
☑ 4-10 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:
☑ 6-10 years

(7.55.2.9) Comment

Various projects on lighting optimizations with mixed paybacks

Row 4

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes
☑ Other, please specify **:**Various projects on motor and drives, machine/equipment replacement etc.

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

2273

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

Select all that apply

☑ Scope 1
☑ 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 1.2)

425000

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

1700000

(7.55.2.7) Payback period

Select from:
☑ 4-10 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:
☑ 6-10 years

(7.55.2.9) Comment

Various optimization projects with mixed paybacks
[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:

☑ Compliance with regulatory requirements/standards

(7.55.3.2) Comment

Merck regularly checks on company and asset level regulatory requirements/standards on energy/energy efficiency or greenhouse gas emissions to be compliant.

Row 2

(7.55.3.1) Method

Select from:

☑ Dedicated budget for energy efficiency

(7.55.3.2) Comment

Our LS and HC business sectors use dedicated budgets to support energy efficiency projects.

Row 3

(7.55.3.1) Method

Select from:

☑ Employee engagement

(7.55.3.2) Comment

Our commitment to climate change mitigation is not restricted to the workplace - we encourage our employees to do their part to preserve the climate by providing helpful information and tips on our intranet. We consistently provide updates on company-wide climate protection initiatives within our internal sustainable network, which serves as a dedicated platform where employees who are passionate about sustainability convene regularly to exchange ideas and deepen their understanding of pertinent topics. German employees are also eligible to receive a Deutschland-ticket subsidy of 10 € per month to travel using regional and local public transportation. Additionally, we also make available an online tool that helps our people arrange carpools. The mobility plans of our Healthcare sites Aubonne and Vevey include financial incentives for employees who commute by public transport, do car-sharing and use other environment-friendly options.

Row 4

(7.55.3.1) Method

Select from:

☑ Internal incentives/recognition programs

(7.55.3.2) Comment

We encourage our employees to do their part to preserve the climate by providing helpful information and tips on our intranet. We consistently provide updates on company-wide climate protection initiatives within our internal sustainable network, which serves as a dedicated platform where employees who are passionate about sustainability convene regularly to exchange ideas and deepen their understanding of pertinent topics. Moreover, we support members of our workforce who are seeking greener modes of living. At our German subsidiaries, we offer a subsidy of 150€ towards monthly lease payments to employees who opt for an electric company car. For those on the road, we offer the "Laden@road" program, which enables our employees to charge their company or private cars at approximately 100,000 stations across Europe. Our approach includes helping employees switch to electric vehicles by providing charging facilities at various sites, for instance in Germany, France, Switzerland, the United Kingdom, and the United States. At our German sites, we also encourage employees to use climate-friendly forms of transportation through "bike4me", a program enabling them to lease a bike at discounted rates with payments being deducted from their pre-tax income. German employees are also eligible to receive a Deutschland-ticket subsidy of 10 € per month to travel using regional and local public transportation. In the United States, our Life Science employees can choose from several subsidies including up to US$ 3,500 towards the purchase or lease of qualifying hybrid or electric vehicles, US$ 1,000 towards the installation of solar photovoltaic systems or solar thermal collectors at their homes and US$ 100 towards the cost of a home energy assessment. [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:

☑ The EU Taxonomy for environmentally sustainable economic activities

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

Power

☑ Other, please specify **:**Energy Efficiency Equipment for Buildings

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

Manufacture of Energy Efficiency Equipment for Buildings

(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

0.03
[Add row]

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

Select from:

☑ No

C9. Environmental performance - Water security

(9.1) Are there any exclusions from your disclosure of water-related data?

Select from:
☑ No

(9.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

Water withdrawals – total volumes

(9.2.1) % of sites/facilities/operations

Select from:
☑ 100%

(9.2.2) Frequency of measurement

Select from:
☑ Quarterly

(9.2.3) Method of measurement

Measuring is done continuously by technical devices, discontinuously by reading meters or by assessing bills from water suppliers depending on the local situation. The measuring equipment is regularly monitored and maintained.

(9.2.4) Please explain

Total water withdrawal volumes by source are measured and monitored in each facility and site according to local requirements, but at least QUARTERLY due to Merck internal requirements. Facilities and sites encompass production, R&D, and distribution sites of the Merck KGaA, its fully consolidated subsidiaries, and proportionally consolidated joint operations. Office locations are commercial in nature and therefore are deemed immaterial because they contribute to less than 0,01% of the total water intake. Facilities and sites report data QUARTERLY via predefined workflows to ensure data quality into our central data mgmt. system "CR360" (company-wide MONITORING system). Data entry and maintenance have globally standardized reporting requirements. Water-related KPIs are measured,

monitored, and reported QUARTELY BECAUSE we consider them important to determine the level of risk exposure and ecological impact as well as to track target achievement at sites level.

Water withdrawals – volumes by source

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Quarterly

(9.2.3) Method of measurement

Measuring is done continuously by technical devices, discontinuously by reading meters or by assessing bills from water suppliers depending on the local situation. The measuring equipment is regularly monitored and maintained.

(9.2.4) Please explain

Total water withdrawal volumes by source are measured and monitored in each facility and site according to local requirements, but at least QUARTERLY due to Merck internal requirements. Facilities and sites encompass production, R&D, and distribution sites of the Merck KGaA, its fully consolidated subsidiaries, and proportionally consolidated joint operations. Office locations are commercial in nature and therefore are deemed immaterial because they contribute to less than 0,01% of the total water intake. Facilities and sites report data QUARTERLY via predefined workflows to ensure data quality into our central data mgmt. system "CR360" (company-wide MONITORING system). Data entry and maintenance have globally standardized reporting requirements. Water-related KPIs are measured, monitored, and reported QUARTELY BECAUSE we consider them important to determine the level of risk exposure and ecological impact as well as to track target achievement at sites level.

Water withdrawals quality

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

Standardized measuring continuous and offline methods are used (e.g., OECD methods). Parameters depend on the quality of withdrawn water and the specific e.g., water hardness, turbidity, total suspended solids, acidity, chlorine content). The measuring process is quality assured. Measuring devices are regularly maintained.

(9.2.4) Please explain

Total water quality is measured and monitored in 100 % of the production and R&D-sites of the Merck KGaA, its fully consolidated subsidiaries, and proportionally consolidated joint operations. Water quality is crucial to production and thus product quality. Distribution centers and offices use municipal tap water of pre-defined quality ensured by the supplier. Therefore, we assume a coverage of 100%. Depending on the water use, pre-processing (e.g., reverse osmosis) to derive the required high quality may be needed e.g., for Pharma relevant processes or the manufacturing of electronic products.

Water discharges – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Quarterly

(9.2.3) Method of measurement

Measuring is done continuously by technical devices, discontinuously by reading meters or by assessing bills from water suppliers depending on the local situation. The measuring equipment is regularly monitored and maintained.

(9.2.4) Please explain

Water discharges volumes are measured and monitored in each facility and site according to local requirements, but at least QUARTERLY due to Merck internal requirements. Facilities and sites encompass production, R&D, and distribution sites of the Merck KGaA, its fully consolidated subsidiaries, and proportionally consolidated joint operations. Office locations are commercial in nature and therefore are deemed immaterial because they contribute to less than 0,01% of the total water intake. Facilities and sites report the data QUARTERLY via predefined workflows to ensure data quality into our central data mgmt. system "CR360" (company-wide MONITORING and REPORTING TOOL). Data entry and maintenance have globally standardized reporting requirements. Water-related key performance indicators are measured, monitored, and reported QUARTELY BECAUSE we consider them important to determine the level of risk exposure and ecological impact as well as to track target achievement at sites level.

Water discharges – volumes by destination

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Quarterly

(9.2.3) Method of measurement

Measuring is done continuously by technical devices, discontinuously by reading meters or by assessing bills from water suppliers depending on the local situation. The measuring equipment is regularly monitored and maintained.

(9.2.4) Please explain

Water discharge volumes by destination are measured and monitored in each facility/site according to local requirements, but at least QUARTERLY due to Merck internal requirements. Facilities/sites encompass production, R&D, and distribution sites of the Merck KGaA, its fully consolidated subsidiaries, and proportionally consolidated joint operations. Office locations are commercial in nature and therefore are deemed immaterial because they contribute to less than 0,01% of the total water intake. Facilities/sites report the data QUARTERLY via predefined workflows to ensure data quality into our central data mgmt. system "CR360" (company-wide MONITORING and REPORTING TOOL). Data entry and maintenance have globally standardized reporting requirements. Water-related key performance indicators are measured, monitored, and reported QUARTELY BECAUSE we consider them important to determine the level of risk exposure and ecological impact as well as to track target achievement at sites level.

Water discharges – volumes by treatment method

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Quarterly

(9.2.3) Method of measurement

Measuring is done continuously by technical devices, discontinuously by reading meters or by assessing bills from water suppliers depending on the local situation. The measuring equipment is regularly monitored and maintained.

(9.2.4) Please explain

Water discharges volumes by treatment methods are measured/monitored in each facility/site acc. to local requirements, but at least QUARTERLY due to Merck internal requirements. Facilities/sites encompass production, R&D, and distribution sites of the Merck KGaA, its fully consolidated subsidiaries, and proportionally consolidated joint operations, while office location are deemed immaterial because they contribute to less than 0,01% of the total water discharge. Facilities/sites are obliged by the relevant MERCK SOP to investigate/report the type of treatment even when discharging into a municipal wastewater treatment plant. All non-cooling wastewater is treated ONSITE or OFFSITE in biological treatment plants. DEDICATED pre-treatment systems are applied if needed for persistent substances. Water-related KPIs are measured, monitored, and reported QUARTELY BECAUSE we consider them important to determine the level of risk exposure and ecological impact.

Water discharge quality – by standard effluent parameters

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

Standard effluent parameters for production sites comprise Chemical Oxygen Demand (COD)/Total organic carbon (TOC), Nitrogen (N), Phosphorous (P), and pH-Value. The measuring processes are quality assured. Measuring devices are regularly maintained.

(9.2.4) Please explain

Water discharges quality parameters are measured/monitored in each facility/site acc. to local requirements and local SOPs to ensure legal compliance and avoid unintended environmental impact. The frequency can vary from daily to twice a year depending on the parameter and the nature of the production, but at least ANNUALLY due to Merck internal requirements. Facilities/sites encompass production, R&D, and distribution sites of the Merck KGaA, its fully consolidated subsidiaries, and proportionally consolidated joint operations, while office location are deemed immaterial because they contribute to less than 0,01% of the total water discharge. Effluent related quality KPIs are considered relevant to ensure compliance. Wastewater quality data are reported ANNUALLY via our central data management system “CR360” (company reporting tool) BECAUSE we consider them important to determine the level of risk exposure and ecological impact.

Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Quarterly

(9.2.3) Method of measurement

Continuous measuring of Nitrates and Phosphorous is mandatory for all our production sites in China and voluntarily used by an increasing number of sites outside China. At other sites, non-standard effluent parameters are usually measured off-line in on-site or off-site laboratories using standardized methods (e.g., OECD methods). Depending on the nature of the production further parameters like priority substances like persistent chemicals are included in the measuring and monitoring program.

(9.2.4) Please explain

Water discharges quality parameters are measured/monitored in each facility/site acc. to local requirements and local SOPs to ensure legal compliance and avoid unintended environmental impact. The frequency can vary from daily to twice a year depending on the parameter and the nature of the production, but at least ANNUALLY due to Merck internal requirements. Facilities/sites encompass production, R&D, and distribution sites of the Merck KGaA, its fully consolidated subsidiaries, and proportionally consolidated joint operations, while office location are deemed immaterial because they contribute to less than 0,01% of the total water discharge. Effluent related quality KPIs are considered relevant to ensure compliance and to determine the level of risk exposure and ecological impact. Wastewater quality data are reported ANNUALLY via our central data mgmt. system "CR360" (company reporting tool).

Water discharge quality – temperature

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

In general, the effluent temperature of wastewater and cooling water is monitored online with temperature sensors and the results are recorded in local databases. Time interval may vary depending on local requirements, but usually continuous measuring devices are applied.

(9.2.4) Please explain

Discharge temperature data are measured/monitored in each facility/site acc. to local requirements and local SOPs to ensure legal compliance. It is not part of Merck's internal monitoring program because of the small size of Merck's facilities/sites compared to the volume of the receiving waters. Although our heat input into the aquatic environment is neglectable, temperature is globally a standard parameter in all licenses to discharge. Therefore, we assume coverage of 100% of relevant sites (i.e., all sites with discharges of cooling water).

Water consumption – total volume

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

At Merck, water consumption is defined as water withdrawal minus water discharge (Ceres definition). Water consumption is calculated ANNUALLY on-site level via a water balance using measured water withdrawals and discharge volumes. Measuring devices are regularly maintained.

(9.2.4) Please explain

For the Merck KGaA, its fully consolidated subsidiaries, and proportionally consolidated joint operations, water consumption is defined as water withdrawal minus water discharge (Ceres definition). Total water withdrawals and total discharge volumes are collected in the central data monitoring and reporting tool CR360. Water consumption is calculated ANNUALLY using total water withdrawals and total discharge volumes of the Merck KGaA, its fully consolidated subsidiaries, and proportionally consolidated joint operations. Intended water consumption by evaporation via cooling towers is neglectable DUE TO the small number of sites with cooling towers and the small size of our cooling systems. Intended water consumption by incorporation into product is conducted at three manufacturing sites in France and USA. The volume is mainly fed by water in raw materials and thus neglectable compared to the overall water intake at each site.

Water recycled/reused

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Quarterly

(9.2.3) Method of measurement

Measuring is done by continuously technical devices, discontinuously or by reading meters depending on the local situation. Common measurement is done by continuous devices. Measuring devices are regularly maintained.

(9.2.4) Please explain

At Merck, recycled water volumes are measured and monitored locally in each facility and site according to local requirements, but at least QUARTERLY due to Merck internal requirements. Facilities and sites encompass production, R&D, and distribution sites of the Merck KGaA, its fully consolidated subsidiaries, and proportionally consolidated joint operations. Office locations are commercial in nature and therefore are deemed immaterial because they contribute to less than 0,01% of the total water intake. Therefore, we assume a coverage of 100%. Water-related KPIs are measured, monitored, and reported ANNUALLY via our central data mgmt. system "CR360" BECAUSE we consider them important to determine the level of risk exposure and ecological impact as well as to track target achievement at sites level. Data entry and maintenance have globally standardized reporting requirements.

The provision of fully-functioning, safely managed WASH services to all workers

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Yearly

(9.2.3) Method of measurement

Wash water quality is regularly measured and monitored by local teams. Local procedures are checked by Corp. audits. Applicable local and GMP requirements determine details of the MEASURING / MONITORING METHODs and their FREQUENCIES. E.g., the frequency of measuring the water hygiene parameter Legionella colony forming units is locally determined by applying a risk assessment as required by the Merck Group SOP "Controlling Legionella in Water Systems".

(9.2.4) Please explain

Water quality for WASH services is essential for health of employees as well as for product quality e.g., in regulated GMP-contexts, where hygiene is included in manufacturing requirements. Therefore, provision of high-quality water for wash services is naturally included in the design of our facilities BECAUSE health and safety of employees is key for productivity. Furthermore, any deviation in WASH water quality may cause product quality issues. The Corp. EHS department is responsible for the management of general and occupational health topics of our employees, and the coordination and auditing of occupational medicine in 100% of

Merck’s production sites worldwide. Site refers to all worldwide production sites of the Merck KGaA, its fully consolidated subsidiaries, and proportionally consolidated joint operations. Part of this responsibility is the topic of sanitation and hygiene in the workplace
[Fixed row]

(9.2.2) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?

Total withdrawals

(9.2.2.1) Volume (megaliters/year)

12337.4

(9.2.2.2) Comparison with previous reporting year

Select from:
☑ About the same

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:
☑ Increase/decrease in efficiency

(9.2.2.4) Five-year forecast

Select from:
☑ Lower

(9.2.2.5) Primary reason for forecast

Select from:
☑ Increase/decrease in efficiency

(9.2.2.6) Please explain

The total amount of water withdrawn was increased of about 1.4 %, compared to last year (2023: 12,167,9 megaliters). We define changes below 5% as “about the same”, changes between 5 % and 10% as “higher”/”lower” and changes of more than 10% as “much higher”/”much lower”. Water withdrawn for production was reduced, while groundwater withdrawals for securing subsurface contamination at the Gernsheim site increased.

Total discharges

(9.2.2.1) Volume (megaliters/year)

11630.4

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.2.4) Five-year forecast

Select from:

☑ Lower

(9.2.2.5) Primary reason for forecast

Select from:

☑ Increase/decrease in business activity

(9.2.2.6) Please explain

The total amount of water discharged was increased of about 4.6% compared to last year (2023: 11,116.7 megaliters). We define changes below 5% as “about the same”, changes between 5 % and 10% as “higher”/”lower” and changes of more than 10% as “much higher”/”much lower”. Water discharge for production was reduced, while groundwater discharge for securing subsurface contamination at the Gernsheim site increased.

Total consumption

(9.2.2.1) Volume (megaliters/year)

706.9

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Much lower

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.2.4) Five-year forecast

Select from:

☑ About the same

(9.2.2.5) Primary reason for forecast

Select from:

☑ Increase/decrease in business activity

(9.2.2.6) Please explain

Water consumption is the difference between withdrawals and discharges (using the formula C = W – D, we calculate consumption as 706.9 = 12,337.4 - 11,630.4 megaliters/year in 2024 versus 1.051.3 megaliters/year in 2023). The difference in the withdrawal and discharge values is due to a.) measurement accuracy and to a lower extend to b.) highly contaminated residues with high water content disposed as waste in incineration processes, c.) incorporation in products (not measured). The decrease in water consumption figures 2024 versus 2023 is mainly explained by accuracy of the measurement equipment. A total volume as low as 706.9 megaliters is within the range of accuracy. The applied kind of equipment has an inherent measurement uncertainty of 10%. Volume of products, that contain incorporated water remained stable. Volume of water containing residues for incineration decreased (2024: 26,7 megaliters vs 2023: 40.3 megaliters). We expect the water consumption to remain constant, BECAUSE we do not expect the upgrade in the applied measurement technology to proceed slowly. Furthermore, we do not expect an increase in water incorporated products or innovation in residue disposal methods.

[Fixed row]

(9.2.4) Indicate whether water is withdrawn from areas with water stress, provide the volume, how it compares with the previous reporting year, and how it is forecasted to change.

(9.2.4.1) Withdrawals are from areas with water stress

Select from:
☑ Yes

(9.2.4.2) Volume withdrawn from areas with water stress (megaliters)

847.2

(9.2.4.3) Comparison with previous reporting year

Select from:
☑ Higher

(9.2.4.4) Primary reason for comparison with previous reporting year

Select from:
☑ Increase/decrease in business activity

(9.2.4.5) Five-year forecast

Select from:
☑ Lower

(9.2.4.6) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.4.7) % of total withdrawals that are withdrawn from areas with water stress

6.87

(9.2.4.8) Identification tool

Select all that apply

☑ WRI Aqueduct

(9.2.4.9) Please explain

Our tool to water stress of water stress is the WRI Aqueduct Water Risk Atlas. The parameter of choice is the “baseline water stress”. The parameter fits to the definition of CDP. Water stress is given, if the value of this parameter is equal or greater than ‘High’: 40-80%. By applying this criterium, we identified 39 reporting entities to be situated in such areas. The disclosed volumes are 4 % higher compared to 2023 (811.9 megaliters). We define changes below 5% as “about the same”, changes between 5 % and 10% as “higher”/”lower” and changes of more than 10% as “much higher”/”much lower”.
[Fixed row]

(9.2.7) Provide total water withdrawal data by source.

Fresh surface water, including rainwater, water from wetlands, rivers, and lakes

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

1492.2

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.7.5) Please explain

Water withdrawal from FRESH SURFACE WATER IS RELEVANT as it is IMPORTANT for cooling purposes and/or, production processes. Clean water is a limiting factor for our production and THUS considered important. E.g., water with high salt concentration is inappropriate for cooling purposes due to its corrosive characteristics to pipes. In 2024, total water withdrawal from FRESH SURFACE WATER was about the same (+5.9 megaliters +0.4%) versus 2023 (1,486.9 mega ltrs/y) DUE TO decline in certain businesses. All volumes are measured. We define changes below 5% as "about the same", between 5% and 10% as "higher"/"lower" and more than 10% as "much higher"/"much lower". We expect an increase in 2025/2026 due to business development. However, due to our goal to improve water efficiency until 2030 the withdrawal will remain below 2022 level. Main fresh surface water sources are rivers & lakes. The sources are monitored by WRI Aqueduct Water Risk indicator. Rainwater harvesting is of no relevance.

Brackish surface water/Seawater

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

As in previous years, brackish surface water was NOT RELEVANT in 2024 BECAUSE we did not use brackish surface water in our operations. As described above, brackish water is not suitable for our production. E.g., if the water has a high concentration of salts, it will not be appropriate for cooling purposes due to its corrosive characteristics to pipes. This is also the reason WHY (non-) usage is consistent with the previous year and is expected to stay the same for our operations IN THE FUTURE.

Groundwater – renewable

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

6222

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.7.5) Please explain

Groundwater is RELEVANT BECAUSE we have own wells in many sites for our own water supply. Several sites use a mix of different sources due to the availability of water in appropriate quality. Groundwater is still the highest fraction of water resource. In 2024, total water withdrawal from GROUNDWATER was higher (plus386,8 megaliters /plus 6.6 %) versus 2023 (5,835.9 mega ltrs/y) due to decline in certain businesses. All volumes are measured. We define changes below 5% as "about the same", between 5 % and 10% as "higher"/"lower" and more than 10% as "much higher"/"much lower". We expect an increase in 2025/2026 with normalization of business, however groundwater demand will be below 2022 level due to our goal on water efficiency until 2030. All sources are monitored by WRI Aqueduct Water Risk indicator.

Groundwater – non-renewable

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

As in previous years, non-renewable groundwater was NOT RELEVANT in 2024 BECAUSE we do not use non-renewable groundwater in our operations. We do not have any site in regions with non-renewable groundwater aquifers. This is also the reason WHY (non-) usage is consistent with the previous year and is expected to stay the same for our operations IN THE FUTURE.

Produced/Entrained water

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

As in previous years, produced water was NOT RELEVANT in 2024 BECAUSE we did not use produced water in our operations. We only extract very small volumes of produced water from our raw materials. The volumes are therefore not significant enough to be used for production. This is also the reason WHY (non-) usage is consistent with the previous year and is expected to stay the same for our operations IN THE FUTURE.

Third party sources

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

4623.2

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.7.5) Please explain

Water from third party sources is RELEVANT BECAUSE we withdraw water from municipal water suppliers in most sites. In addition, water from third party sources is sourced in two sites (Martin, USA and Troisly Breuil (France)) from industrial park infrastructure service providers for production. In 2024, total water withdrawal from THRID PARTY SOURCES was lower (-222.6 megaliters -4.6%) versus 2023 (4,845.8 mega ltrs/y). We define changes below 5% as “about the same”, between 5% and 10% as “higher”/”lower” and more than 10% as “much higher”/”much lower”. We expect a decrease as a result of the water efficiency goal until 2030.
[Fixed row]

(9.2.8) Provide total water discharge data by destination.

Fresh surface water

(9.2.8.1) Relevance

Select from:
☑ Relevant

(9.2.8.2) Volume (megaliters/year)

6952.8

(9.2.8.3) Comparison with previous reporting year

Select from:
☑ About the same

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:
☑ Increase/decrease in business activity

(9.2.8.5) Please explain

Water discharges to fresh surface water are RELEVANT in few sites where water can be directly returned to the natural water cycle after or without treatment. 2,069.6 megaliters thereof is cooling water being only heated without any contact to products. This fraction is being tested prior to release into the receiving water in line with relevant official permits. The remaining 4,152.5 megaliters is wastewater from production which is treated on-site and analyzed prior to release into the receiving water in line with relevant official permits. In 2024, total discharges to fresh surface water was ABOUT THE SAME (+135.2mega ltrs +2%) versus 2023 (6,817.6 mega ltrs/y) due to business developments. All volumes are measured. We define changes below 5% as "about the same", between 5% and 10% as "higher"/"lower" and more than 10% as "much higher"/"much lower". IN THE FUTURE we expect a further decrease as a result of the water efficiency goal until 2030.

Brackish surface water/seawater

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

834.7

(9.2.8.3) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.8.5) Please explain

Water discharges to seawater is RELEVANT, BECAUSE our site in Onahama/Japan discharges its treated wastewater directly into the sea. Onahama represents 7.2 % of the total water dscharge of the Merck group. In 2024, total discharges into sea water was about the same (-30 megaliters -3 %) versus 2023 (865.3 mega ltrs/y). All volumes are measured. We define changes below 5% as "about the same", between 5% and 10% as "higher"/"lower" and more than 10% as "much higher"/"much lower". IN THE FUTURE we expect an increase as a result of market development.

Groundwater

(9.2.8.1) Relevance

Select from:

☑ Not relevant

(9.2.8.5) Please explain

Water discharges to groundwater is NOT RELEVANT, BECAUSE only small sites in certain regions in India discharge their wastewater directly into the ground to enrich the groundwater body. This group represents 0.16 % (17 megaliter) of the total water intake of the Merck group, which is insignificant. IN THE FUTURE we expect the value to be about the same because expected production increase will be compensated by water improvements in water efficiency.

Third-party destinations

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

3842.9

(9.2.8.3) Comparison with previous reporting year

Select from:

☑ Much higher

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.8.5) Please explain

Water discharges to third parties are RELEVANT for the majority of our sites where not sufficient onsite wastewater treatment is available and enough treatment capacity is available in municipal wastewater treatment plants (without further re-use). In 2024, total discharges to third parties was MUCH HIGHER (+409 megaliters +11.9%) versus 2023 (3,433 mega ltrs/y). All volumes are measured. We define changes below 5% as "about the same", between 5% and 10% as "higher"/"lower" and more than 10% as "much higher"/"much lower". IN THE FUTURE we expect the value to decrease, BECAUSE expected production increase will be overcompensated by water re-use.
[Fixed row]

(9.2.9) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

Tertiary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:
☑ Relevant

(9.2.9.2) Volume (megaliters/year)

3414.3

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:
☑ About the same

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:
☑ Increase/decrease in business activity

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:
☑ 1-10

(9.2.9.6) Please explain

Tertiary treatment is relevant to MERCK, BECAUSE the sites in Darmstadt (1,882.9 megaliters in 2024 vs 2,058 in 2023) and Gernsheim (1,530.1 megaliters vs 1,291 megaliters in 2023) eliminate nitrogen by biological nitrification-denitrification. The site in Rio de Janeiro (1.2 in 2024 vs 6.8 megaliters in 2023) applies advanced osmosis technology to remove persistent organic substances. All volumes are measured. The total volume is ABOUT THE SAME as in 2023 because of no business change. We define changes below 3% as "about the same", between 3% and 10% as "higher"/"lower" and more than 10% as "much higher"/"much lower". At all sites substances that cannot be eliminated in a secondary treatment step are identified in a risk assessment. This wastewater is treated separately (pre-treatment) before secondary treatment to keep the required energy and treatment agents as low as possible. The applied technology is dedicated to the type of pollutant. Several sites (Gernsheim (Germany), Vevey (Switzerland) and Altdorf (Switzerland)) use advanced oxidation processes (Hydrogenperoxide plus UV-light) to convert persistent substances into biodegradable forms, that can easily be treated in the biological treatment plant as a following step. Semoy (France) deactivates antibiotics by applying oxidization with Sodiumhypochloride to a separated wastewater stream. Gernsheim (Germany) removes heavy metals by flocculation and precipitation with pH-shift before the so treated water is released into the biological wastewater treatment plant. IN THE FUTURE, we expect several sites to install tertiary treatment within the next 10 years (increase in volume), BECAUSE we aim to assess and eliminate residual risks to the environment after secondary treatment.

Secondary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

1468.9

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ Much lower

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 31-40

(9.2.9.6) Please explain

Secondary treatment is relevant, because manufacturing sites in all three business sectors (Healthcare, Life Science and Electronics) produce wastewater with organic pollutants, that need to be removed below given thresholds before the water is discharged into the environment. Hazardous properties of the dissolved pollutants range from euthrophication, via toxicity to eco-toxicity. A group of sites hold permits allowing the discharge of wastewater directly into the environment (direct discharge). In order to keep the given thresholds (limits) these sites treat their own wastewater in on-site industrial wastewater treatment plant with a biological treatment step. Typical limit parameters are Chemical Oxygen Demand, Total Organic Carbon, Total Nitrogen, Phosphorous, Algae/Daphne/Fish toxicity. In 2024, the volumes were MUCH LOWER than in 2023 (-15%; 2023: 1,726.6 megaliters). We define changes below 3% as “about the same”, between 3% and 10% as “higher”/”lower” and more than 10% as “much higher”/”much lower”. IN THE FUTURE we expect the value to be about the same because expected production increase will be compensated by water improvements in water efficiency.

Primary treatment only

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

Primary treatment is NOT RELEVANT, BECAUSE due to the nature of our business our wastewater is either non-polluted cooling water that can be discharged directly into the environment without treatment or contains chemical pollutants that need to be treated on a higher level. We do not produce wastewater with content, that can be removed by pure physical means. In the future, we expect the “primary treatment” to remain “not relevant”, BECAUSE the nature of our business will not change significantly.

Discharge to the natural environment without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

2904.2

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ Much higher

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 21-30

(9.2.9.6) Please explain

Discharge to the natural environment without treatment is relevant because our business activities require a significant volume of cooling water, that can be DISCHARGED INTO THE ENVIRONMENT WITHOUT TREATMENT. Cooling water is clean water with slightly elevated temperature but without any change in its chemical properties and thus does represent any hazards to the environment. Cooling water is being tested (e.g., temperature, conductivity, pH-value) prior to release into the receiving water in line with relevant official permits. 17 % of all water used by Merck is cooling water being only heated without any contact to products. All volumes are measured. The volumes increased in 2024 by 16 %, BECAUSE of business increase. We define changes below 3% as “about the same”, between 3% and 10% as “higher”/”lower” and more than 10% as “much higher”/”much lower”. We expect the level of water discharged to the natural environment without treatment to increase if business goes back to normal, but not to the 2022’s level (internal reference year) again BECAUSE of water saving measures.

Discharge to a third party without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

3842.9

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ Much higher

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 31-40

(9.2.9.6) Please explain

Discharge to a third party without treatment is relevant, because Merck operates a broad variety of small and medium size manufacturing and R&D sites, that hold the permit to discharge their wastewater into a nearby municipal wastewater treatment plant. This is either because the wastewater does not contain hazardous chemicals due to the nature of the local business (e.g., wastewater from our biotechnological production in Aubonne (Switzerland) only contains easily degradable organic material or the volumes are neglectable compared to the size of the municipal wastewater treatment plant. E.g. in 2024, our production plant in Hamburg (Germany) discharged 1.0 megaliters into a municipal wastewater treatment plant Köhlbrandthöft with a capacity of 150,000 megaliters). Three sites (Martin (USA), Trosly Breuil (France) and Wiesbaden (Germany)) are located in Industrial Parks and discharge their wastewater into the park-owned industrial wastewater treatment plant. Other facilities like distribution and office sites only produce sanitary wastewater that can be discharged into municipal wastewater treatment systems with biological treatment. In 2024, the volume was MUCH HIGHER (+12%; 2023: 3,433) BECAUSE business increase (back to normal). We define changes below 3% as "about the same", between 3% and 10% as "higher"/"lower" and more than 10% as "much higher"/"much lower". We expect the level of water discharged to the natural environment without treatment to increase again when business goes back to normal but not on 2022's level again because of water saving measures.

Other

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

Other treatment is NOT RELEVANT, BECAUSE due to the nature of our businesses our wastewater is either non-polluted cooling water without contact to products that can be discharged directly into the environment without treatment or contains chemical pollutants that need to be treated on secondary or tertiary level. In the future, we expect the "OTHER" to remain "not relevant", BECAUSE the nature of our business will not change significantly.
[Fixed row]

(9.2.10) Provide details of your organization's emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.

(9.2.10.1) Emissions to water in the reporting year (metric tons)

422.72

(9.2.10.2) Categories of substances included

Select all that apply

☑ Nitrates

☑ Phosphates

☑ Priority substances listed under the EU Water Framework Directive

(9.2.10.3) List the specific substances included

Nitrate, Phosphate, Nickel, Chromium, Copper, Lead, Arsenic, Cadmium, Mercury, Nonylphenol, Benzene, Methylenechloride.

(9.2.10.4) Please explain

Nitrates and phosphate from our chemical synthesis processes in our Electronics and Life Science businesses contribute to 99.95% of our overall emissions to water. Worldwide loads of all other parameters are in a low kilogram-range. This underlines our efforts to effectively clean water prior to discharge. Nitrates released from our plant in Savanah discharged in the Savannah River is irrelevant to the environment due to the size of the receiving water. Phosphates emissions in Cork (Ireland)

and Onahama (Japan) are irrelevant to the environment due to discharge into the sea. The small amounts of Lead and Mercury emissions in Gernsheim (Germany) are caused by the municipal wastewater that is treated in our wastewater treatment plant. Nickel in Gernsheim (Germany) and Darmstadt (Germany) is leached out of stainless steel when it gets into contact with acidic water. All pollutants are regularly measured, monitored, and reported in our central data reporting system CR360. Analytical processes follow acknowledged standard (usually OECD standard unless local authorities require different standards). None of the emissions affect a vulnerable community or are within a water stress area. All our emissions are within the boundaries of our discharge licenses.
[Fixed row]

(9.3) In your direct operations and upstream value chain, what is the number of facilities where you have identified substantive water-related dependencies, impacts, risks, and opportunities?

Direct operations

(9.3.1) Identification of facilities in the value chain stage

Select from:

☑ No, we have assessed this value chain stage but did not identify any facilities with water-related dependencies, impacts, risks, and opportunities

(9.3.4) Please explain

DEFINITION: In our internal risk reporting, risks are defined as potential future events or developments that could result in unfavorable deviations from our financial and non-financial targets. Risk parameter in this context are the probability of financial (quantitative) impact (EBITDA pre / operating cash flow) or non-financial (qualitative) impact (reputation/bran; Strategy, operations and environment, social and governance in relation to workforce, ethics and other factors. Opportunities imply favorable deviations from targets. The significance of a risk is evaluated based on its potential unfavorable deviation in conjunction with the probability of the occurrence of the respective risk. A negative impact on EBIDTA pre / operating cash flow is defined as SUBSTANTIVE above a threshold of 100 m Euro. EXAMPLE: In 2024, we identified 39 sites being as being situated in areas with high or very high-water stress (according to WRI aqueduct). Water stress is an inherent risk which might lead in its extreme form to interruption of production. However, no SUBSTANTIVE water-related dependencies, impacts, risks, or opportunities were identified.

Upstream value chain

(9.3.1) Identification of facilities in the value chain stage

Select from:

☑ No, we have not assessed this value chain stage for facilities with water-related dependencies, impacts, risks, and opportunities, but we are planning to do so in the next 2 years

(9.3.4) Please explain

We plan to launch a water related target in the supply chain called "Water Risk Management Mechanisms established at critical suppliers". Our Supplier Code of Conduct expects suppliers already to use water resources in a responsible way. The new target will be next subsequent step towards engaging with suppliers in a more interactive and collaborative way. Starting in 2022, we defined (1) criteria to select critical suppliers with water relevance and (2) appropriate requirements related to their water management. We expect to complete the planning phase in 2025 and to roll-out the program in 2026.
[Fixed row]

(9.4) Could any of your facilities reported in 9.3.1 have an impact on a requesting CDP supply chain member?

Select from:
☑ No, CDP supply chain members do not buy goods or services from facilities listed in 9.3.1

(9.5) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue (currency)	Total water withdrawal efficiency	Anticipated forward trend
	21156000000	*1714785.94*	*Water efficiency will improve due to company-wide water efficiency target*

[Fixed row]

(9.13) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances
	Select from:

	Products contain hazardous substances
	☑ Yes

[Fixed row]

(9.13.1) What percentage of your company's revenue is associated with products containing substances classified as hazardous by a regulatory authority?

Row 1

(9.13.1.1) Regulatory classification of hazardous substances

Select from:

☑ Other, please specify **:**We launched a portfolio sustainability assessment project assessing products in several different sustainability dimensions, including chemical risks & regulatory trends acc. to the World Business Council for Sustainable Development (WBCSD) standard.

(9.13.1.2) % of revenue associated with products containing substances in this list

Select from:

☑ Don't know

(9.13.1.3) Please explain

We do have hazardous substances such as SVHCs or Reach Annex XIV Candidate list substances in our portfolio and they make up a relevant ratio of our revenue. At the current stage we are in an evaluation process as part of our activities related to the preparation for regulatory requirements changes mostly coming from the EU Chemicals Strategy for Sustainability and prepare internal processes and data analytics solutions to account for the needs. We believe that there is more to sustainability than rating chemical products only according to their hazardous profiles. To steer our portfolio towards a higher sustainability performance, we launched a portfolio sustainability assessment (PSA) project assessing products in several different sustainability dimensions, including chemical risks and regulatory trends (according to the WBCSD standard). Particularly, with the regulatory trends assessments, we broaden our perspective towards the future and substances which are not yet listed on one of the pertinent regulatory lists. ChemSec's so-called SIN list is also used in the regulatory trends module of our PSA assessment framework. We are convinced that, in contrast to a simple "revenue with hazardous materials"-KPI, our PSA approach, with its holistic perspective on several sustainability

dimensions, will provide us much more transparency to identify the opportunities to improve our sustainability performance, including potential impacts on the environment and water compartments.
[Add row]

(9.14) Do you classify any of your current products and/or services as low water impact?

(9.14.1) Products and/or services classified as low water impact

Select from:
☑ Yes

(9.14.2) Definition used to classify low water impact

We are proactively engaged in reducing the environmental footprint of our products by applying the "Design for Sustainability" (DfS) tool kit to our Life Science products. This includes life cycle assessments (LCA) according to ISO 14040. Design decisions are made based on data like:-decreasing water and energy consumption -minimizing plastic and eliminating chemical waste. BECAUSE water and electricity consumption have the largest environmental impact, we prioritize improvement in these areas. Our water purification systems are being actively designed to reduce their ecological footprint and to better support the sustainability goals of our customers by saving water.

(9.14.4) Please explain

EXAMPLE for greener alternative water systems (Merck product group):As part of Merck's Design for Sustainability (DfS) approach to product development, the most recent generation of our Milli-Q® systems were developed to have a reduced environmental impact in key areas such as water, energy, and waste. As a result of these efforts, Milli-Q® IQ 7000, IQ 7003 and IQ 7010 systems are officially labelled Greener Alternative Products thanks to their sustainability characteristics. By including the E.R.A.® (evolutive reject adjustment) technology in these systems, water from the reverse osmosis (RO) membrane recovery is optimized. This results in reducing water use by up to 50% compared to our previous generation of RO systems. Equates to ~1200l per day water savings results in 3.000.000l for an estimate product lifetime of 7 years.
[Fixed row]

(9.15) Do you have any water-related targets?

Select from:
☑ Yes

(9.15.1) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

Water pollution

(9.15.1.1) Target set in this category

Select from:

☑ Yes

Water withdrawals

(9.15.1.1) Target set in this category

Select from:

☑ Yes

Water, Sanitation, and Hygiene (WASH) services

(9.15.1.1) Target set in this category

Select from:

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

(9.15.1.2) Please explain

Schistosomiasis, also known as bilharzia, is a tropical disease caused by parasitic worms. The disease affects almost 240 million people worldwide and kills an estimated 200,000 people every year. More than 90% of cases are in sub-Saharan Africa, significantly burdening public health systems and local economies. We are donating up to 250 million tablets of praziquantel to endemic countries every year in partnership with WHO. In this context we might expand our efforts to WASH programs and make that respective targets. Decision is yet not made.

Other

(9.15.1.1) Target set in this category

Select from:

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

(9.15.1.2) Please explain

We plan to launch a water related target in the supply chain called “Water Risk Management Mechanisms established at critical suppliers”. Our Supplier Code of Conduct expects suppliers already to use water resources in a responsible way. The new target will be next subsequent step towards engaging with suppliers in a more interactive and collaborative way. Starting in 2022, we define (1) criteria to select critical suppliers with water relevance and (2) appropriate requirements related to their water management. We expect to complete the planning phase in 2023 and to roll-out the program in 2024.
[Fixed row]

(9.15.2) Provide details of your water-related targets and the progress made.

Row 1

(9.15.2.1) Target reference number

Select from:

☑ Target 1

(9.15.2.2) Target coverage

Select from:

☑ Other, please specify **:**The target refers to all manufacturing sites at Merck, which covers all three business sectors Electronics, Life Science and Healthcare

(9.15.2.3) Category of target & Quantitative metric

Water pollution

☑ Reduction in concentration of pollutants

(9.15.2.4) Date target was set

06/30/2021

(9.15.2.5) End date of base year

12/31/2020

(9.15.2.6) Base year figure

0

(9.15.2.7) End date of target year

12/31/2030

(9.15.2.8) Target year figure

100

(9.15.2.9) Reporting year figure

53

(9.15.2.10) Target status in reporting year

Select from:

☑ Underway

(9.15.2.11) % of target achieved relative to base year

53

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

☑ Sustainable Development Goal 6

☑ Zero Discharge of Hazardous Chemicals (ZDHC)

(9.15.2.13) Explain target coverage and identify any exclusions

The target refers to all manufacturing sites at Merck, which covers all three business sectors Electronics, Life Science and Healthcare (no exclusions). Coverage: The target covers all manufacturing sites, since R&D-, distribution-, and office sites do not discharge trace substances in relevant amounts.

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

We created a set of subsequent activities (roadmap) to reach the target. For the reporting year, milestones to be reached were the identification of wastewater relevance for each substance handled in production, the conduction of risk assessments, and implementation and verification of mitigation actions for substances above no-effect concentrations.

(9.15.2.16) Further details of target

The target is to reach no-effect concentration for all relevant substances. We created a set of subsequent activities (roadmap) to reach the target. It is relevant, since our effluents contain trace substances with the potential to negatively impact the aquatic environment. KPI: We measure progress as degree of tasks completed (0-100%) from a list of subsequent tasks for a site to identify relevant pollutants, determine each concentration, evaluate the eco-toxicological relevance against a reference level, and if necessary: actions to reduce the concentration. Coverage: The target covers all manufacturing sites, since R&D-, distribution-, and office sites do not discharge trace substances in relevant amounts. Motivation: The target is relevant, since our effluents contain trace substances with the potential to negatively impact the aquatic environment. Progress expectation: The level of 38% target achievement matches with our expectation, since the speed of progress will increase. Additional information: The target contributes to (1) SDG 6 Clean Water (target 6.3: "By 2030, improve water quality by reducing pollution, …, and minimizing release of hazardous chemicals …", (2) Zero Discharge of Hazardous Chemicals (ZDHC), (3) EFPIA's commitment to build a more environmentally sustainable future by "responsible manufacturing effluent management" (Merck is EFPIA member), and (4) Merck's commitment to the UN Global Compact principles (#8 "…greater environmental responsibility").

Row 2

(9.15.2.1) Target reference number

Select from:

☑ Target 2

(9.15.2.2) Target coverage

Select from:

☑ Other, please specify **:**All manufacturing sites in the all business sectors - Electronics, Life Science, and Healthcare

(9.15.2.3) Category of target & Quantitative metric

Water withdrawals

☑ Other water withdrawals, please specify **:**(Water Intensity Score, a KPI consisting of three factors (1) water intake weighted by (2) water stress factor referenced to (3) working hours

(9.15.2.4) Date target was set

12/31/2020

(9.15.2.5) End date of base year

12/31/2020

(9.15.2.6) Base year figure

792

(9.15.2.7) End date of target year

12/30/2030

(9.15.2.8) Target year figure

396

(9.15.2.9) Reporting year figure

588

(9.15.2.10) Target status in reporting year

Select from:

☑ Underway

(9.15.2.11) % of target achieved relative to base year

52

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

☑ Sustainable Development Goal 6

(9.15.2.13) Explain target coverage and identify any exclusions

The target refers to the complete water intake of Merck Group worldwide. Meaning, it covers all employees and all processes.

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

Water and consequently water saving measures are local topics. We requested from our sites to identify and implemented several actions to help achieving the water efficiency target. These included water conservation projects, the optimization of purified water as well as reclaim and reuse water measures. The later was supported by a water circularity guideline. The execution of this actions was overlooked by the EHS/sustainability departments of the business sectors. We plan to set annual targets starting in 2025.

(9.15.2.16) Further details of target

We aim to achieve a 50% reduction in our water efficiency ratio, calculated as total water withdrawal per net sales. The target covers the complete water withdrawal of our company. The Water Use policy supports the achievement of this target by providing detailed requirements for water use. We developed the target based on a key figure that is recognized and widely used in various industries and in external reporting. The ratio to our net sales reflects the growth of the company. We chose 2020 as our base year to align this target with other existing environmental targets. The application of scientific principles was not necessary to set the target. No external stakeholders were involved in the creation of the target. Our Sustainability Board and business sectors are involved in setting targets, with final approval granted by the Executive Board. We continuously monitor the degree of target achievement through quarterly reviews, analogous to the controls described for our Water Use policy.
[Add row]

C13. Further information & sign off

(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by a third party?

	Other environmental information included in your CDP response is verified and/or assured by a third party
	Select from: ☑ Yes

[Fixed row]

(13.1.1) Which data points within your CDP response are verified and/or assured by a third party, and which standards were used?

Row 1

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

☑ Climate change

☑ Water

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

Environmental performance – Water security

☑ Emissions to water in the reporting year

☑ Volume withdrawn from areas with water stress (megaliters)

☑ Water discharges– total volumes
☑ Water withdrawals– total volumes

(13.1.1.3) Verification/assurance standard

General standards
☑ ISAE 3000

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

DeLoitte: We were engaged by Merck KGaA to provide limited assurance on whether the qualitative and quantitative sustainability disclosures in the Combined Sustainability Statement for the fiscal year 2024 of Merck KGaA, Darmstadt, in the enclosed Merck Annual Report 2024 (in German). You can find a translation of our assurance report on page 508, published online in the annual report under section "(Group) Sustainability Statement" on Merck's website at https://www.merckgroup.com/en/annualreport/2024/_assets/downloads/entire-merck ar24.pdf. We conducted our engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised) "Assurance Engagements other than Audits or Reviews of Historical Financial Information", issued by the International Auditing and Assurance Standards Board (IAASB). These standards require, amongst others, that the assurance team possesses the specific knowledge, skills and professional competencies needed to provide assurance on sustainability information, and that we comply with the requirements of the Code of Ethics for Professional Accountants of the International Federation of Accountants to ensure our independence.

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

CDP_Letter_2024_Merck_Deloitte.pdf
[Add row]

(13.2) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

	Additional information	Attachment (optional)
	----	*Principles-Sustainable-Water-Management-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

Head of Sustainability, Quality & Trade Compliance

(13.3.2) Corresponding job category

Select from:

☑ Chief Sustainability Officer (CSO)

[Fixed row]

(13.4) Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

Select from:

☑ No